## Arizona State University Academic Catalog Archive 2008-2009

This document provides an archival record of the academic programs offered during the 2008-09 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 2008-09 Academic Catalog, 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. For inquiries or questions please contact academic.catalog@asu.edu.


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## Accreditations

Arizona State University is accredited by the Higher Learning Commission, a Commission of the North Central Association of Colleges and Schools. For more information, call 312/263-0456, access the Web site at www.ncahigherlearningcommission.org, or write

HIGHER LEARNING COMMISSION
30 N LA SALLE ST
SUITE 2400
CHICAGO IL 60602-2504
Programs in the various colleges, schools, divisions, and departments are accredited by, affiliated with, or members of national bodies as described in the

> Academic Accreditation at the Downtown Phoenix Campus table;
> Academic Accreditation at the Polytechnic Campus table;
> Academic Accreditation at the Tempe Campus table;
> Academic Accreditation at the West Campus table;
> Academic Affiliation and Membership at the Downtown Phoenix Campus table;
> Academic Affiliation and Membership at the Polytechnic Campus table;
> Academic Affiliation and Membership at the Tempe Campus table; and
> Academic Affiliation and Membership at the West Campus table.

Academic Accreditation at the Downtown Phoenix Campus

## Unit or Program

$\qquad$

## College of Nursing \& Healthcare Innovation

BSN, MS, Nursing; Master of Healthcare Innovation

| College of Public Programs | Commission on Collegiate Nursing Education |
| :--- | :--- |
| BS, Recreation | National Recreation and Park <br> Association/American Association for Leisure <br> and Recreation Council on Accreditation |
| BSW, MSW, School of Social Work | Council on Social Work Education |
| MPA | National Association of Schools of Public |

## Affairs and Administration

Academic Accreditation at the Polytechnic Campus
Unit or Program Accredited By

## College of Science and Technology

BS, Aeronautical Management Technology, Aviation Accreditation Board International with concentrations in air transportation management and professional flight

BS, Electronics Engineering Technology;
Manufacturing Engineering Technology;
Mechanical Engineering Technology

Technology Accreditation Commission of the Accreditation Board for Engineering and Technology, Inc.

BS, Environmental Technology Management, National Association of Industrial Technology Graphic Information Technology, and Operations Management Technology

## Morrison School of Agribusiness and Resource Management

BS, Agribusiness, with a concentration in
professional golf management professional golf management
School of Applied Arts and Sciences
BS, Nutrition (didactic program in dietetics); American Dietetic Association MS, Nutrition (dietetic internship)

Academic Accreditation at the Tempe Campus

## Unit or Program

Accredited By

## College of Design

BSD, Interior Design

Council for Interior Design Accreditation

BSD, Graphic Design, Industrial Design
MSD, Design, with concentrations in graphic design and industrial design

BSP, MUEP
MArch

National Association of Schools of Art and Design

Mary Lou Fulton College of Education

| MC, Counseling | Council for Accreditation of Counseling and <br> Related Educational Programs |
| :--- | :--- |
| PhD, Counseling Psychology; Educational <br> Psychology with a concentration in school <br> psychology | American Psychological Association |

## Sandra Day O'Connor College of Law

JD
American Bar Association
College of Liberal Arts and Sciences
BS, Clinical Laboratory Sciences

MS, Communication Disorders, AuD

PhD, Psychology, with a concentration in clinical psychology

National Accrediting Agency for Clinical Laboratory Sciences
American Speech-Language-Hearing Association
American Psychological Association

Ira A. Fulton School of Engineering
BS, Computer Science

BS, Construction
BSE, Aerospace Engineering; Bioengineering; Chemical Engineering; Civil Engineering; Computer Systems Engineering; Electrical
Engineering; Industrial Engineering; Materials
Science and Engineering; Mechanical
Engineering

## Katherine K. Herberger College of the Arts

School of Music
National Association of Schools of Music
W. P. Carey School of Business

All programs

MHSM, School of Health Management and

AACSB International-The Association to Advance Collegiate Schools of Business
Accrediting Commission on Education for

Policy
School of Accountancy

Health Services Administration
AACSB International-The Association to Advance Collegiate Schools of Business

Walter Cronkite School of Journalism and Mass Communication

## All programs

Accrediting Council on Education in Journalism and Mass Communications

Academic Accreditation at the West Campus

Unit or Program
$\qquad$

## College of Human Services

BS, Recreation and Tourism Management

BSW, MSW
School of Global Management and Leadership

Accredited By

National Recreation and Park
Association/American Association of Physical Activity and Recreation Council on Accreditation

Council on Social Work Education

AACSB International-The Association to Advance Collegiate Schools of Business

February 18, 2008
March 3, 2008
March 3, 2008

August 5, 2008
August 18-19, 25-26 \& September 2-3, 2008
August 19, 2008

August 25, 2008
August 25-29, 2008
August 25-31, 2008

August 29, 2008
September 1, 2008
September 5, 2008

September 7, 2008

September 15, 2008
September 15, 2008

September 29, 2008
September 22-29, 2008
October 6, 2008
October 15, 2008
October 22-29, 2008
October 31, 2008
November 2, 2008
November 11, 2008
November 27-28, 2008
December 9, 2008

December 9, 2008
December 10, 2008
December 11-14 \& 15-17,2008
December 18, 2008
December 15-22, 2008
December 23-30, 2008

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
Extended Hours (Tempe and West Registration Sites Only)
Tuition/Fee Payment Deadline - for registration from March 2, 2008 - August 12, 2008 Students with unpaid tuition charges automatically enrolled in tuition installment plan on 8/20/08.
First Day of Classes
Late Registration \& Drop/Add Deadline - In Person

## \$50.00 Late Registration Fee Begins

Late Registration \& Drop/Add Deadline - Online \$50.00 Late Registration Fee Begins
Residency Classification Petition Deadline
Labor Day Observed
Tuition \& Fees 100\% Refund Deadline
Tuition and certain registration fees are subject to $100 \%$ refund through September 5th - (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 5 th. Certain registration fees are nonrefundable on or after the first day of the semester.
Visit www.asu.edu/sbs for additional information.
Tuition/Fee Payment Deadline - for registration from August 13, 2008 - September 7, 2008 Students with unpaid tuition charges automatically enrolled in tuition installment plan on 9/16/08.
University 21st Day
Tuition/Fee Payment Deadline - for registration from September 8-15, 2008
Students with unpaid tuition charges automatically enrolled in tuition installment plan on 9/16/08.
University 35th Day
Academic Status Report \#1
Deadline for Appealing Residency Classification Decision
Graduation Filing Deadline
Academic Status Report \#2
Course Withdrawal Deadline - In Person
Course Withdrawal Deadline - Online
Veterans Day Observed
Thanksgiving Holiday Observed
Complete Withdrawal Deadline - Online \& In Person
(Beginning the First Day of Classes, Undergraduate Students Must Request a Complete Withdrawal InPerson)
Last Day of Classes and Last Day to Process Transaction
Reading Day
Final Exams
Commencement
Final Grades Due
End of Semester Processing

Arizona State University Registration Sites:

| Downtown Phoenix | Enrollment Services, University Center Bldg., Suite 116 | $602-496-4372$ |
| :--- | :--- | :--- |
| Polytechnic | Registration Services QUAD 2 Bldg. 350 | $480-727-3278$ |
| Tempe | Records Information Office SSV Room 140 | $480-965-3124$ |
| West | Registration Services University Center Bldg. Rm 120 | $602-543-8203$ |

## Winter Term 2008

University Registrar's Office

September 19, 2008
October 1, 2008 - December 30, 2008
October 15, 2008
December 8, 2008
Dec. 25-26, 2008 \& Jan 1, 2009
December 25, 2008
December 30, 2008

December 31, 2008
December 31, 2008 - January 7, 2009
December 31, 2008 - January 16, 2009
January 2, 2009
January 16, 2009
January 16, 2009
January 16, 2009
January 16-22, 2009
January 25, 2009
February 4, 2009

Class Schedules Available<br>Open Registration and Drop/Add<br>Graduation Filing Deadline<br>Suggested Postmark to Meet Tuition/Fee Payment Deadline<br>Registration Sites are closed; Holiday's Observed<br>Tuition/Fee Payment Deadline - for registration from October 1 - December 18, 2008<br>First Day of Classes<br>\$50.00 Late Registration Fee Begins<br>Residency Classification Petition Deadline<br>Course Withdrawal<br>Complete Withdrawal<br>Tuition \& Fees 100\% Refund Deadline<br>Last Day to Process Transactions<br>Last Day of Classes<br>Degree Conferral Date<br>Final Grades Due<br>Tuition/Fee Payment Deadline - for registration from December 19, 2008 - January 20, 2009<br>Deadline for Appealing Residency Classification Decision

## Arizona State University Registration Sites:

Downtown Phoenix
Polytechnic
Tempe
West

Enrollment Services, University Center Bldg., Suite 116
Registration Services QUAD 2 Bldg. 350
Records Information Office SSV Room 140
Registration Services University Center Bldg. Rm 120

602-496-4372
480-727-3278
480-965-3124
602-543-8203

October 31, 2008
November 3, 2008
November 3 -December 5, 2008

November 11, 2008
November 27-28, 2008
December 6, 2008
December 30, 2008
January 1, 2009
January 12-13, 20-21 \& 26-27, 2009
January 13, 2009

January 19, 2009
January 20, 2009
January 19-23, 2009

January 19-25, 2009

January 23, 2009
January 30, 2009
January 31, 2009

February 1, 2009

February 9, 2009
February 9, 2009

February 16-23, 2009
February 23, 2009
February 27, 2009
March 8-15, 2009
March 23-30, 2009
April 3, 2009
April 5, 2009
March 31, 2009
May 5, 2009

May 5, 2009
May 6, 2009
May 7-10, 11-13, 2009
May 14, 2009
May 11-18, 2009
May 19, 2009

Schedule of Classes Available - Online (tentative)
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.
Veterans Day Holiday Observed
Thanksgiving Holiday Observed
Open Enrollment Begins
Suggested Postmark to Meet Tuition/Fee Payment
New Year's Day Holiday Observed
Extended Hours: 8am to 6pm (Registration Sites Only)
Tuition/Fee Payment Deadline - for registration from November 3, 2008 - January 6, 2009
Students with unpaid tuition charges automatically enrolled in tuition installment plan on 01/14/09.
Martin Luther King, Jr. Holiday Observed
First Day of Classes
Late Registration \& Drop/Add Deadline - In Person
\$50.00 Late Registration Fee Begins
Late Registration \& Drop/Add Deadline- Online
\$50.00 Late Registration Fee Begins
Residency Classification Petition Deadline
Tuition \& Fees 100\% Refund Deadline - In Person
Tuition/Fee Payment Deadline - for registration from January 7-31, 2009
Students with unpaid tuition charges automatically enrolled in tuition installment plan on 02/10/09.
Tuition \& Fees 100\% Refund Deadline - Online
Tuition and certain registration fees are subject to $100 \%$ refund through February 1, 2009 -
(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 February 1, 2009. Certain registration fees are nonrefundable
on or after the first day of the semester. Visit http://students.asu.edu/tuitiondatesanddeadlines for additional information.
University 21st Day
Tuition/Fee Payment Deadline - for registration from February 1-9, 2009
Students with unpaid tuition charges automatically enrolled in tuition installment plan on 02/10/09.
Academic Status Report \# 1
University 35th Day
Deadline for Appealing Residency Classification Decision
Spring Break
Academic Status Report \# 2
Course Withdrawal Deadline - In Person
Course Withdrawal Deadline - Online
Graduation Filing Deadline
Complete Withdrawal Deadline - Online \& In Person
(Beginning the First Day of Classes, Undergraduate Students Must Request a Complete Withdrawal InPerson)
Last Day of Classes and Last Day to Process Transaction
Reading Day
Final Exams
Commencement
Final Grades Due
End of Semester Processing

Arizona State University Registration Sites:

| Downtown Phoenix | Enrollment Services, University Center Bldg., Suite 116 | $602-496-4372$ |
| :--- | :--- | :--- |
| Polytechnic | Registration Services, QUAD 2 Bldg. 350 | $480-727-3278$ |
| Tempe | Records Information Office, SSV Room 140 | $480-965-3124$ |
| West | Registration Services, University Center Bldg. Room 120 | $602-543-8203$ |

Update: 1/20/2009
Dates in yellow indicate changes or updates since the last published date of the semester calendar. All dates are tentative and subject to change without notice.

Summer 2009: June 1 - August 6, 2009

February 11, 2009
February 18, 2009
May 21, 2009

June 2, 2009
June 25, 2009

July 1, 2009
July 7, 2009
July 25, 2009
August 6, 2009
August 13-17, 2009

Schedule of Classes Available - Online (tentative)
Registration Begins (tentative)
Tuition/Fee Payment Deadline - for registration from February 18 - May 17, 2009
Students with unpaid tuition charges automatically enrolled in tuition installment plan on 5/22/09.
Residency Classification Petition Deadline
Tuition/Fee Payment Deadline - for registration from May 18 - June 18, 2009
Students with unpaid tuition charges automatically enrolled in tuition installment plan on 6/25/09.
Graduation Filing Deadline
Deadline for Appealing Residency Classification Decision
Tuition/Fee Payment Deadline - for registration from June 19 - July 18, 2009
Degree Conferral Date
End of Semester Processing

1st Summer Session
(5 week session: June 1 - July 2, 2009) (8 week session: June 1 - July 23, 2009)

February 18 - June 2, 2009
Open Registration \& Drop/Add
June 1, 2009
June 1-2, 2009

June 5, 2009
June 19, 2009
July 2, 2009
July 2, 2009
July 2, 2009
July 3, 2009
July 6, 2009
July 23, 2009
July 23, 2009
July 23, 2009
July 27, 2009

## First Day of Classes

Late Registration \& Drop Add Deadline
$\$ 50$ Late Registration Fee Begins
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
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 6 - August 6, 2009)

February 18 - July 7, 2009
July 6, 2009
July 6-7, 2009

July 10, 2009
July 7, 2009

July 24, 2009
August 6, 2009
August 6, 2009
August 6, 2009
August 10, 2009
August 11, 2009

Open Registration \& Drop/Add
First Day of Classes
Late Registration \& Drop Add Deadline

## \$50 Late Registration Fee Begins

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
Final Grades Due
Deadline for Appealing Residency Classification Decision
(For students only registered \& that petition for the 2nd summer session )

## Summer 2009 Semester Calendar

University Registrar's Office

| Arizona State University Registration Sites: |  |  |
| :--- | :--- | :--- |
| Downtown Phoenix | Enrollment Services, University Center Bldg., Suite 116 | $602-496-4372$ |
| Polytechnic | Registration Services QUAD 2 Bldg. 350 | $480-727-3278$ |
| Tempe | Records Information Office SSV Room 140 | $480-965-3124$ |
| West | Registration Services University Center Bldg. Rm 120 | $602-543-8203$ |

Update: January 20, 2009
Dates in yellow indicate changes or updates since the last published date of the semester calendar. All dates are tentative and subject to change without notice.

## University Policies

## UNDERGRADUATE

## Admission Requirements

## Freshmen Admission Requirements

Students applying for freshman admission must meet graduation, aptitude and competency requirements. 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.

## Graduation Requirement

Must be a high school graduate.
Home School students, upon completion of secondary school education, should complete the Affidavit of Completion of Secondary School Education, http://students.asu.edu/node/1072. Affidavit must be completed by parent/guardian and notarized. Laboratory sciences must be conducted in real labs. (Lab questions? - contact 480-965-7788) Home School students with a GED score of 500 or above may be admissible without transcripts.

## Aptitude Requirement

Students must meet one of the following aptitude requirements:
3.0 GPA in competency courses (2.5-2.99 considered)

Top 25\% (top 26-50\% considered)
ACT 22 (24 nonresidents)*

SAT Reasoning 1040 (1110 nonresidents)*
*ASU does not require the writing portion of these tests.

## Competency Requirement

Admission may be granted with one deficiency in no more than two competency areas. Deficiencies in both math and laboratory science are not acceptable. 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, http://students.asu.edu/asu-competency-requirements for more information.

English - 4 years (composition/literature based)
Math - 4 years - Algebra 1, 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

## 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. http://www.asu.edu/degreesearch. You should select a second major on your application if your first choice has higher requirements.

## 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, submit your official transcripts, test scores and supporting credentials concurrently.

## Fall Semester 2009

We strongly recommend that you apply well in advance of the deadline, as early as possible in your senior year in high school. ASU's preferential application deadline for Fall Semester is February 1. Freshman applications received after February 1 will be considered on a space-available basis. Preference will be given to well-prepared students with high aptitude. Space is limited in some programs and admission to these programs is more competitive.

Please be aware that your application for admission serves as your application for merit scholarships. Students who apply before December 1 will be automatically reviewed for merit scholarships. Students who apply after December 1, including National Scholars, will be awarded merit scholarships based on academic profile and availability of scholarship funds.

## Winter Session 2008

Preferential deadline is December 26, 2008

## Spring Semester 2009

Preferential deadline is December 1, 2008

## Fall Semester 2009

Preferential deadline is February 1, 2009

## Application Steps

Complete the Undergraduate Admission Application. ASU prefers that you apply online, http://www.asu.edu/ugapp.
Submit the nonrefundable application fee
Arizona Residents - \$25
Non-residents - Fall 2008, Winter 2008, Spring 2009 and Summer 2009 the application fee is $\$ 50$. Starting Fall 2009 the application fee is $\$ 55$.

Have your ACT or SAT scores (TOEFL score for international students) sent directly to ASU. ACT or SAT scores are required for merit scholarship consideration and for ASU course placement.

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.

Mailing Address (All materials, all campuses)

Undergraduate Admissions
Arizona State University
PO Box 870112
Tempe, AZ 85287-0112
Source URL: http://students.asu.edu/freshman/requirements.

## Transfer Admission Requirements

Transfer students must meet graduation, aptitude and competency requirements for admission to ASU.

## Graduation Requirement

Transfer applicants must meet one of the following:
A high school graduate
Completed an Arizona General Education Curriculum (AGEC)
Completed an associate's or higher degree

## Aptitude Requirement

Transfer applicants must meet the following GPA ( $\mathrm{A}=4.0$ ):
2.0 resident
2.5 nonresidents (2.0-2.49 considered)

If transferring fewer than 24 transferable hours, transfer applicants must also meet freshman aptitude requirements, http://students.asu.edu/freshman-admission.

## Higher Requirements for Some ASU Schools/Colleges

Some programs have higher admission standards, which include:
Higher admission requirements in addition to ASU's general admission requirements. Applications are reviewed for admission to these programs during the general ASU admission process.

Application for admission to the program's professional status. These programs typically offer students admission to a preprofessional status upon admission to ASU. Students must complete courses, provide additional documentation and/or submit a separate application for consideration of professional status. Students should contact their department for more information.

See Degree Search, http://www.asu.edu/degreesearch for major-specific information.

## Preferential Application Deadlines

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

## Fall Semester 2009

ASU's preferential transfer application deadline for Fall Semester is June 1. Transfer 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.

Winter Session 2008

Preferential deadline is December 26, 2008
Spring Semester 2009
Preferential deadline is December 1, 2008

## Application Procedures

Complete the Undergraduate Admission Application. ASU prefers that you apply online, http://www.asu.edu/ugapp.
Submit the nonrefundable application fee.
Arizona Residents - \$25

Non-residents - Fall 2008, Winter 2008, Spring 2009 and Summer 2009 the application fee is \$50. Starting Fall 2009 the application fee is $\$ 55$.

Have your ACT or SAT scores sent directly to ASU.
Request official transcript(s) be sent directly from your school(s) to Undergraduate Admissions.
If you have completed an associates degree or higher please request official transcripts from all institutions you have attended (post-high school coursework). Once ASU receives proof of completion of an associates degree or higher a high school transcript will not be required.

If you have not completed an associates degree or higher, please request your official high school transcript showing proof of graduation in addition to all other transcripts from institutions you have or currently are attending (post-high school coursework).

Upon graduation or completion of the semester, request that a final transcript be sent directly to ASU to determine final admission status. Receipt of your final transcript impacts financial aid disbursement and eligibility to register for future classes.

## Mailing Address (All materials, all campuses)

## Undergraduate Admissions

Arizona State University
PO Box 870112
Tempe, AZ 85287-0112
Source URL: http://students.asu.edu/transfer-admissions-information

## International Admission Requirements

## Application Requirements

An international student is a student who is not a citizen of, or a permanent resident of, or a refugee in the United States of America (F \& J Visas).

## Aptitude Requirement

Freshmen must have a 3.0 grade point average (GPA) (a B or better where A=4.0) from a secondary school.
Transfer students must have a minimum 2.5 GPA (a C+ or better where A=4.0) from a college or university.
International students do not need to take the ACT or SAT tests for admission, however, they may be required for entrances into some ASU schools/colleges.

## English Language Proficiency Requirement

Applicants whose native language is not English (identified by the U.S. Department of Stat 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 500 (paper-based), 173 (computer-based), or 61 (internet-based) on the Test of English as a Foreign Language (TOEFL)

Minimum overall band of 6.0 with no band below 5.5 on the International English Language Testing System (IELTS)

## 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 6 credits of freshman English composition at a U.S. college or university with a cumulative GPA of 2.5 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.

## Competency Requirement

International students who attended 4 years of high school in the United States are required to meet the competency requirements.
English - 4 years (composition/literature based)
Math - 4 years - Algebra 1, 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

## Higher Requirements for Some ASU Schools/Colleges

Some colleges/schools have higher standards for admission. International applicants must meet general international admission requirements as well as the appropriate freshman or transfer college/school requirements of their major. See degree search, http://www.asu.edu/degreesearch, for details for the major of interest.

## Financial Guarantee

All international applicants on F1 or J1 visas must provide a Financial Guarantee, http://students.asu.edu/node/1300, to show evidence of sufficient funds available for their studies before the application can be processed. In addition, the US Bureau of Citizenship and Immigration Services (BCIS) requires ASU to obtain additional information prior to processing your visa application. You must go to www.asu.edu/interactive and login, and then select Immigration (INS) Records Entry for F1 and J1 VISAS. Failure to complete the required immigration procedure may cause you to lose student visa status. Contact the International Student Office at ASU for immigration information at 480-965-7451 or ISO@asu.edu.

## 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 2009

ASU's preferential international application deadline for fall semester is May 1, 2009. International 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.

International students who have been admitted for the fall semester may begin attending classes as early as summer session.

## Spring Semester 2009

Preferential application deadline is October 1, 2008.

## Application Procedures

1. Complete the Undergraduate Admission Application. ASU prefers students to apply online, http://www.asu.edu/ugapp. If a paper application is completed, it must be mailed to the mailing address below or listed at http://students.asu.edu/internationaladmission\#mail.
2. Submit the nonrefundable application fee. Fall 2008, Winter 2008, Spring 2009 and Summer 2009 the application fee is $\$ 50$ (U.S. dollars.) Starting Fall 2009 the application fee is $\$ 55$ (U. S. dollars.) You may pay with a credit card with the online application or submit a non-refundable application fee 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.
4. Submit evidence of English language proficiency.

Have your ACT, SAT, 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.
5. 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 file). ASU requires a bank statement or a bank letterhead that has been cosigned by a banking official. Review estimated expenses, http://students.asu.edu/international-student-estimated-expenses.
*To complete a paper application:
Make an online request for an application to be sent to you via mail or fax. Write to the address below to request an application.

Download the application, http://students.asu.edu/node/1025, and send the completed application and all supporting documents (application fee, transcripts, test scores and the financial guarantee) to the address listed below. Complete and sign the application (incomplete, unsigned applications cannot be processed).

## Mailing Address

Undergraduate Admissions
Arizona State University
PO Box 870112
Tempe, AZ 85287-0112
USA
For more information, call: 480-965-2688.

## After You Have Been Admitted to ASU Visa, Immigration Procedures

Admission to ASU cannot be determined until your file is complete and all of your credentials are evaluated.
Your SEVIS I-20 (Certificate of Eligibility for Non-Immigrant Student Status), essential for securing an F-1 student visa, will be forwarded to you if you are admitted to ASU. Keep your SEVIS I-20 in a secure place; ASU will not issue a second SEVIS I-20.

Take your SEVIS I-20 and letter of admission to the nearest U.S. Embassy to apply for a student visa.
Arrive at ASU no later than one week before classes begin according to the information on the SEVIS I-20. ASU cannot authorize you to arrive later or change the information on your SEVIS I-20. Report immediately to the International Student Office on the Tempe campus Student Services Bldg. 265 with your immigration documents for SEVIS registration.

When arriving in the United States, show your SEVIS I-20 and your letter of admission to the U.S. customs/immigration officials at the airport.

If you are an international student currently in the United States, you must inform your school's international student advisor of your plan to transfer your SEVIS information to ASU. This must be done in order to receive a new ASU I-20. Meet with an advisor at your current school and complete a SEVIS Transfer Form to determine an appropriate date to transfer to ASU. ASU's school code is PH0214F00127000. When you are admitted to ASU, your SEVIS I-20 will be issued after the release date indicated by your school. When you arrive at ASU, pick up your new SEVIS I-20 from Undergraduate Admissions, then report to the International Student Office. See SEVIS Transfer Request form, http://students.asu.edu/files/international sevis info form.pdf. (PDF)

Students holding F-2 visas cannot attend ASU on a full-time basis.
Measles immunization: You must complete the measles immunization verification form you receive with your letter of admission before you can register for classes. Proof of two Measles (Rubeola), Mumps and Rubella (MMR) vaccinations, at least one of which you received after 1979, is required.

You must enroll full-time each semester.
Source URL: http://students.asu.edu/international-admission\#aptituderequirements

## Nondegree Admission Requirements

## Nondegree Student Admission

Requirements, http://students.asu.edu/taxonomy/term/58
Non-degree, http://students.asu.edu/taxonomy/term/66

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, nine semester hours for the 8-week summer session, and three semester hours for winter intersession.

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, http://students.asu.edu/non-degree-student-admission\#requirements, Application Deadlines, http://students.asu.edu/non-degree-student-admission\#deadlines, [ and Application Procedures, http://students.asu.edu/non-degree-student-admission\#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, https://sec.was.asu.edu/ugapp/mainmenulogic.

## 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 2009

ASU's preferential nondegree application deadline for fall semester is June 1. Nondegree 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.

## Application Procedures

Complete the Undergraduate Admission Application. ASU prefers that you apply online, http://www.asu.edu/ugapp.
Submit the nonrefundable application fee
Arizona Residents - \$25
Non-residents - \$55
If needed, have your ACT or SAT scores sent directly to ASU.

Mailing Address (All materials, all campuses)
Undergraduate Admissions
Arizona State University
PO Box 870112
Tempe, AZ 85287-0112
Source URL: http://students.asu.edu/non-degree-student-admission

## Undergraduate Readmission

## Requirements

If you have previously attended ASU but have not been enrolled at ASU for one semester or more you must apply for readmission. 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.

Students who are disqualified and students whose GPA is below a 2.0 and are applying for a major in a different college than the one last attended must submit an Application for Reinstatement. If you were not in good academic standing when you left ASU, call 480.965.7550 (Downtown Phoenix, Polytechnic and Tempe) or 602.543.8160 (West).

If you have attended another school since you attended ASU, see a brief FAQ, http://students.asu.edu/transferring-credit-asu about transferring college credit to ASU.

## Preferential Application Deadlines

## Fall Semester 2009

ASU's preferential readmission application deadline for Fall Semester is June 1, 2009. 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.

## Summer Semester 2009

Preferential deadline is May 1, 2009

## 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 previously attended ASU. Am I a readmission student or a transfer student?

If you have previously attended ASU as a degree-seeking student, you will be considered a readmission student.
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, http://students.asu.edu/freshman/requirements, or a transfer student, http://students.asu.edu/transfer-admissions-information.

## Application Procedures

Complete the Undergraduate Admission Application. ASU prefers that you apply online.

Submit the nonrefundable application fee
Arizona Residents - \$25

Non-residents - \$55

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.

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, http://my.asu.edu/, 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.

Submit an Application for Reinstatement, if required. Mailing Address (Transcripts, all campuses)
Undergraduate Admissions
Arizona State University
PO Box 870112
Tempe, AZ 85287-0112
Mailing Address (All other materials; Downtown Phoenix, Polytechnic and Tempe campuses)
Recording/Readmissions Section
University Registrar's Office
PO Box 870312
Tempe, AZ 85287-0312

Mailing Address (All other materials, West campus)
Registration Services
PO Box 37100
Phoenix, AZ 85069-3050

## 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.

## Academic Renewal

Academic renewal is a university policy administered for the purpose of recalculating the ASU cumulative GPA of undergraduate students who have been readmitted to a degree program after an absence of at least five continuous calendar years, including summer sessions, and who have completed in good standing a minimum of 12 college-approved additional hours in residence within three semesters after reentry. Students may have the former academic record before the five-year absence (including transfer credits) accepted in the same manner as if the credits were transfer credits. That is, earned hours are carried
forward for up to 60 hours of credit in which a grade of " C " (2.00) or higher was earned. The cumulative GPA is based only on credits earned subsequent to the student's reentry. All graduation residency, academic recognition residency, and GPA requirements must be fulfilled after academic renewal. A request for academic renewal follows this procedure:

Students interested in academic renewal must request the Application for Academic Renewal from the Recording/readmission Section of the University registrar's Office or the dean of the college offering the major.

The Application for Academic Renewal may be submitted immediately upon readmission but no later than the start of the third semester after readmission.

The Application for Academic Renewal is submitted by the student to the dean of the college offering the major.
The dean specifies in advance a minimum of 12 semester hours.
When the approve 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 forwards the Application for Academic Renewal to the University Registrar's Office for processing

Only 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 ASU GPAs below 2.00 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. Eligibility for graduation is based on ASU cumulative GPA after academic renewal. However, a student's complete record-before and after academic renewal-remains on the transcript and may be taken into consideration when a student applies for undergraduate professional or graduate programs

Undergraduate Readmissions Contact Information and Office Locations:
Downtown Phoenix, Polytechnic and Tempe campuses
Phone: 480.965.7550
Fax: 480.965.2295
Location: Student Services Building, Room 140
West campus
Phone: 602.543.8203
Fax: 602.543.8312
Location: University Center Building, Room 120
Source URL: http://students.asu.edu/readmission

## ASU Competency Requirements

Competencies may be met with high school work, college work, and/or test scores. Competencies must be met regardless of your major or the number of transferable hours you have earned. Students must earn a minimum of a 2.0 GPA in each competency area.

Admission may be granted with one deficiency in no more than two competency areas. Deficiencies in both math and laboratory science are not acceptable.

You might not need to meet Competency Requirements. Refer to Exceptions.
English Competency Requirements
Meet one of the following:
Four years of high school English (composition/literature based).

Minimum test score of 21 on ACT English or 530 on SAT Critical Reading.
One transferable three-semester-hour college English composition course.
English Composition Placement:
All freshman and college students who have not earned a "C" or better in a transferable freshman English composition course or who have not received a score of 4 or 5 on the Advanced Placement Examination in English offered by the College Entrance Examination Board (See Related Sites) must submit ACT or SAT scores before registration to be placed in an appropriate English course.

Mathematics Competency Requirements
Meet one of the following:
Four years of high school courses: one year each of Algebra I, Geometry, Algebra II, and an advanced math class for which Algebra II is a prerequisite.

Minimum test score of 24 on ACT Math or 540 on SAT Math.
One transferable three-semester-hour college math course for which at least intermediate algebra is a prerequisite.
Laboratory Science Competency Requirements
Meet one of the following:
Three years of high school laboratory science, one year each from three of the following: Biology, Chemistry, Earth Science, or Physics (an integrated science or an advanced science may be substituted for one required course).

Two years of high school laboratory science (Biology, Chemistry, Earth Science, or Physics) plus minimum SAT II subject test score on one of the following: Chemistry-600, Biology-590, Physics-620, or ACT Science-20 (subject test score may not be from the same subject as either high school credit earned and may be used to satisfy only one laboratory science unit).

Three transferable four-semester-hour college laboratory science courses including one semester each from three of the following: Biology, Chemistry, Earth Science, Physics. An integrated laboratory science or advanced level science may be substituted for one required course.

Social Science Competency Requirement
Meet one of the following from Section A and one from Section B:

## Section A

One year of high school American History.
Minimum SAT II subject test score of 560 on American History/Social Studies.
One transferable three-semester-hour college American History course.

## Section B

One year of high school social science (e.g. European History, World History, Economics, Sociology, Geography, Government, Psychology, or Anthropology).

Minimum SAT II subject test score of 580 on World History.
One transferable three-semester-hour college social science course.

Foreign Language Competency Requirement
Meet one of the following:
Two units of the same high school foreign language.
Attainment of minimum score on a national standardized foreign language test or placement into a third semester college foreign language class based on university placement exam results.

Two transferable 3- or 4-semester-hour, college-level courses in the same foreign language.
Fine Arts Competency Requirement
Meet one of the following:
One year of high school fine arts or a combination of two semesters of high school fine arts.
One transferable three-credit college fine arts course.

Exceptions
You do not need to meet competencies if:
If you have completed an associate's or higher level degree from a regionally accredited post-secondary institution with a minimum 2.0 GPA $(\mathrm{A}=4.0)$ if you are an Arizona resident. If you are a nonresident, you must have a minimum 2.5 GPA $(\mathrm{A}=4.0)$.
or if you have completed the Arizona General Education Curriculum (AGEC) with a minimum $2.0 \mathrm{GPA}(\mathrm{A}=4.0)$ if you are an Arizona resident and 2.5 GPA ( $\mathrm{A}=4.0$ ) if you are a nonresident.

Source URL: http://students.asu.edu/asu-competency-requirements

## Enrollment Verification

Arizona State University is frequently required to certify a student's enrollment as to full-time, part-time, etc. The following general guidelines are used primarily to verify enrollment for the purpose of loan deferments and eligibility. The Registrar is responsible for such verifications.

Enrollment Verification Guidelines

| Regular Semester | Full-Time | Three <br> Quarter- <br> Time | Half-Time | Less Than Half-Time |
| :--- | :--- | :--- | :--- | :--- |
| Undergraduate | 12 or more <br> hours | $9-11$ hours | $6-9$ hours | 5 or fewer hours |
| Graduate | 9 or more <br> hours | $7-8$ hours | $5-6$ hours | 4 or fewer hours |
| Research/Teaching Assistant | 6 or more <br> hours |  |  |  |


| Five Week Summer Session | Full-Time | Half-Time | Less Than Half-Time |
| :--- | :--- | :--- | :--- |
| Undergraduate | 4 or more hours | 2 hours | 1 hour |
| Graduate | 3 or more hours | 2 hours | 1 hour |
| Research/Teaching Assistant | 2 or more hours | 1 hour | -- |


| Eight Week Summer Session | Full-Time | Half-Time | Less Than Half-Time |
| :--- | :--- | :--- | :--- |
| Undergraduate | 6 or more hours | $3-5$ hours | 2 or fewer hours |
| Graduate | 5 or more hours | $3-5$ hours | 2 or fewer hours |

Note that classes taken for audit are included in total enrolled hours. Independent learning courses are not considered for enrollment verification purposes.

## Requesting an Enrollment verification

Enrollment Verification can certify your registration, GPA information, dates of attendance and/or degrees conferred at ASU. This information is primarily used for bank loan deferments and insurance renewals including good student discounts.

Students may verify their enrollment online using the National Student Clearinghouse, https://sec.was.asu.edu/intsite/StudentClearinghouse?step=notice, or students may also request Enrollment Verification letters in person (bring your photo ID) at any registrar location, http://students.asu.edu/contact/office-university-registrar:

Students may order Enrollment Verifications by mail or fax by submitting a signed letter including the following:

- Student's Signature
- Student's Name
- ASU ID Number
- Date of Birth
- Student's Return Address and Phone Number
- Specific Mailing Address/Fax Number

The following information is verified on ALL enrollment verifications:

- Status (for example: full time, half time, less than half time)
- Current Semester Attending or All Semesters Attended
- Semester Name/begin \& End Date
- Semester Hours
- Academic Career (for example: Graduate or Undergraduate)
- Degree, College and Major Pursuing
- ASU ID\#

By request only, the following information may also be verified:

- Degrees Conferred
- Academic Level, http://students.asu.edu/glossary/term/2
- Good Standing
- Semester/Cumulative GPA
- Student Address
- Date Of Birth

Note: Requests by mail or fax MUST include the student's verifiable signature. Allow one week for processing. Send your request to:

Enrollment Verification
University Registrar's Office
Arizona State University
PO Box 870312
Tempe, AZ 85287-0312
Fax: 480.965.7722
If you have questions or need additional information, please contact the University Registrar's Office, Records Information Department at 480.965.3124.

Source URL: http://students.asu.edu/enrollment-verification.

## Attendance

The instructor has full authority to decide whether class attendance is required

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

## 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 www.az.transfer.org/cas/atass/student/agec.html [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.az.transfer.org/cas/atass/student/agec.html

## Course Load and Concurrent Enrollment

## Course

A minimum full-time course load for an undergraduate student is 12 semester hours. The maximum course load for which a student may register is 18 semester hours (with the exception of a 19-hour maximum for students enrolled in the College of Design or Ira A. Fulton School of Engineering). 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 semester hour load limit is seven semester hours for each five-week session and nine semester hours for the eight-week session. The student may not exceed a total of 14 semester hours for any combination of sessions.

## Reserving of Course Credit by Undergraduates

ASU undergraduate students who have achieved senior status (cannot be post-baccalaureate) with a cumulative GPA of 3.00 or higher may reserve up to nine semester hours of graduate level course work. Only reserved courses with a grade of "B" (3.00) or higher may be included on a graduate plan of study. Reserved courses cannot be used to meet any baccalaureate graduation requirements. Before registering for these courses, the student must submit a Graduate College petition form that is signed by the student's undergraduate advisor, the head of the academic unit offering the class and the Graduate College dean. Permission to reserve a course does not guarantee admission to a graduate degree program or that the course may be used toward graduate degree requirements.

## 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].

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Source URL: http://catalog.asu.edu/course_load
Links:
[1] http://students.asu.edu/enrollment-verification
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## Credit by Examination

No more than 60 hours of credit are awarded for any or all programs, including ASU comprehensive and proficiency examinations. 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 educational 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. In these categories, only credit earned by comprehensive examination will count toward the resident credit requirement for graduation.

## 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

| Examination* | Score | Semester Hours | Equivalency |
| :---: | :---: | :---: | :---: |
| Art-History | $\begin{aligned} & 5 \text { or } 4 \\ & 3 \end{aligned}$ | $\begin{aligned} & 6 \\ & 3 \end{aligned}$ | ARS 101, 102 <br> ARS 101 or 102 |
| Art—Studio: Drawing | $\begin{aligned} & 5 \\ & 4 \end{aligned}$ | $\begin{aligned} & 6 \\ & 3 \end{aligned}$ | ART 111, 112 <br> ART 111 |
| Art—Studio: 2-D | $\begin{aligned} & 5 \\ & 4 \end{aligned}$ | $\begin{aligned} & 6 \\ & 3 \end{aligned}$ | ART 112, 194 ST: 2-D Design ART 112 |
| Art-Studio: 3-D | $\begin{aligned} & 5 \\ & 4 \end{aligned}$ | $\begin{aligned} & 6 \\ & 3 \end{aligned}$ | ART 115, 194 ST: 3-D Design ART 115 |
| Biology | $\begin{aligned} & 5 \text { or } 4 \\ & 3 \end{aligned}$ | $\begin{aligned} & 8 \\ & 4 \end{aligned}$ | $\begin{aligned} & \text { BIO 187, } 188 \\ & \text { BIO } 100 \end{aligned}$ |
| Chemistry | $\begin{aligned} & 5 \text { or } 4 \\ & 3 \end{aligned}$ | $\begin{aligned} & 9 \\ & 4 \end{aligned}$ | CHM 113, 115 <br> CHM 113 |
| Computer Science A | 5 or 4 | 3 | CSE 110 |
| Computer Science AB | 5 or 4 | 6 | CSE 110, 205 |
| Economics-Introductory Macroeconomics | 5 or 4 | 3 | ECN 211 |
| Economics-Introductory Microeconomics | 5 or 4 | 3 | ECN 212 |
| English—Language and Composition | 5 or 4 | 6 | ENG 101, 114 |
| English-Literature and Composition | 5 or 4 | 6 | ENG 101, 204 |
| Environmental Science | 5 or 4 | 3 | PLB 322 |
| French-Language | $\begin{aligned} & 5 \\ & 4 \\ & 3 \end{aligned}$ | $\begin{aligned} & 14 \\ & 11 \\ & 8 \end{aligned}$ | 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 |
| Geography-Human | 5, 4, or 3 | 3 | GCU 102 |


| German—Language | 5 | 14 | GER 201, 202, 311, 312 |
| :--- | :--- | :--- | :--- |
|  | 4 | 11 |  |
|  | 3 | 8 | GER 201, 202, 311 |

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


## 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 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 Training [CBT] scale) or higher. To obtain credit for English Composition with Essay, 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, call University Testing Services at 480/965-7146, or visit EDB 301.

## CLEP Credit

| Examinations* | Semester |  |
| :---: | :---: | :---: |
|  | Hours | Equivalency |
| American Government | 3 | POS 110 |
| American Literature | 3 | Elective credit |
| Analyzing and Interpreting Literature | 3 | Elective credit |
| Biology | 8 | BIO 187, 188 |
| Calculus | 3 | MAT 265 |
|  | 4 | MAT 270 |
| Chemistry | 8 | CHM 113, 116 |
| College Algebra | 3 | MAT 117 |
| College Mathematics | 3 | MAT 142 |
| English Composition | 0 | No credit |
| English Composition with Essay | 0 | Qualifies for ENG 105 |
| English Literature | 3 | Elective credit |
| French Language | $\begin{aligned} & 4 \\ & 8 \\ & 12 \\ & 16 \end{aligned}$ | FRE 101 (Students must score 50-54.) <br> FRE 101, 102 (Students must score 55-61.) <br> FRE 101, 102, 201 (Students must score 62-65.) FRE 101, 102, 201, 202 (Students must score 66 or higher.) |
| Freshman College Composition | 0 | No credit |
| German Language | $\begin{aligned} & 4 \\ & 8 \\ & 12 \\ & 16 \end{aligned}$ | GER 101 (Students must score 39-45.) 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 | 0 | No credit |
| 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 | 0 | No credit |
| Principles of Microeconomics | 3 | ECN 212 |
| Social Sciences and History | 6 | Elective credit |
| Spanish Language | 4 | SPA 101 (Students must score 50-54.) <br> SPA 101, 102 (Students must score 55-65.) |
|  | 8 | SPA 101, 102, 201 (Students must score 66-67.) <br>  <br> SPA 101, 102, 201, 202 (Students must score 68 or <br> higher.) |
| Western Civilization I—Ancient Near East to 1648 | 16 | HST 102 or 103 |
| Western Civilization II—1648 to the Present | 3 | HST 104 |

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


## 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.

## 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

| Examination | Score | Semester Hours Equivalency |  |
| :--- | :--- | :--- | :--- |
| Art/Design | 7,6 or 5 | 6 | ART 111, 112 |
| Biology | 4 | 3 | ART 112 |
| Chemistry | 7,6 or 5 | 8 | BIO 187, 188 |
|  | 4 | 4 | BIO 187 |
| Economics | 7,6 or 5 | 9 | CHM 113, 115 |


|  | 4 | 3 | ECN 211 |
| :---: | :---: | :---: | :---: |
| English A | $\begin{aligned} & 7,6 \text { or } 5 \\ & 4 \end{aligned}$ | 6 3 | ENG 101, 114 <br> ENG 114 |
| English B | No credit | 0 | None |
| Foreign Language A or B* | $\begin{aligned} & 7,6 \text { or } 5 \\ & 4 \end{aligned}$ |  | Foreign language 101, 102 <br> Foreign language 101 |
| Geography | 7, 6, 5 or 4 | 3 | GCU 102 |
| History-American | $\begin{aligned} & 7,6 \text { or } 5 \\ & 4 \end{aligned}$ | 6 3 | $\begin{aligned} & \text { HST 109, } 110 \\ & \text { HST } 109 \end{aligned}$ |
| History-East and Southeast and Oceania | $\begin{aligned} & 7,6 \text { or } 5 \\ & 4 \end{aligned}$ | 6 3 | $\begin{aligned} & \text { HST 107, } 240 \\ & \text { HST } 107 \end{aligned}$ |
| History-European | $\begin{aligned} & 7,6 \text { or } 5 \\ & 4 \end{aligned}$ | 6 3 | $\begin{aligned} & \text { HST 103, } 104 \\ & \text { HST } 103 \end{aligned}$ |
| Mathematics | 7,65 , or 4 | 4 | MAT 270 |
| Music | 7, 65 , or 4 | 3 | MTC 125 |
| Physics | $\begin{aligned} & 7,6 \text { or } 5 \\ & 4 \end{aligned}$ | $\begin{aligned} & 8 \\ & 4 \end{aligned}$ | PHY 111, 112, 113, 114 <br> PHY 111, 113 |
| Psychology | 7, 6, 5 or 4 | 3 | PGS 101 |
| Social and Cultural Anthropology | 7, 6, 5 or 4 | 3 | ASB 102 |
| Theatre-Introduction | 7, 6, 5 or 4 | 3 | THE 100 |
| Visual Arts | $\begin{aligned} & 7,6 \text { or } 5 \\ & 4 \end{aligned}$ | 6 3 | 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. The student must be enrolled at ASU with no more than 100 semester hours of credit earned (includes credits earned at ASU, credits transferred to ASU from another institution, and all credits earned by examination). The examinations must be taken during the first two semesters in residence in a degree program at the university.

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 "A+," "A," "A-," "B+," "B," "B-," "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; and
3. to determine a student's ability in a field where competence is an important consideration.
4. 

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

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

## Placement and Testing Requirements

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:

1. Take the ACT English or SAT verbal examination, and have scores submitted to ASU.
2. 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.
3. Take the CLEP general examination in English Composition with Essay, earning a score that qualifies for placement in ENG 105, and have scores submitted to ASU.
4. Have previously taken ENG 101, 102, 105, 107, or 108 at ASU; or have previously earned a grade of "Y"; 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.
5. 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 community college or university in Arizona, the equivalency is automatically posted, and the student need not take further action. A student transferring a composition course from any other college or university must have the course evaluated for equivalency. The student must take 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).
6. 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.

## 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.


## Academic Good Standing

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

## Academic Good Standing



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+," "С," "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 cancelled. 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.

## 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.

The highest standards of academic integrity are expected of all students. The failure of any student to meet these standards may result in suspension or expulsion from the university or other sanctions as specified in the University Student Academic Integrity Policy. Violations of academic integrity include, but are not limited to, cheating, fabrication, tampering, plagiarism, or facilitating such activities. The University Student Academic Integrity Policy is available from the Office of the Executive Vice President and Provost of the University and from the deans of the individual colleges.

## Suspension or Expulsion for Academic Dishonesty

All decisions relating to expulsion or suspension that are concerned with academic dishonesty are the sole prerogative of the dean of the school or college into which the student has been admitted. These decisions of suspension or expulsion can be appealed in accordance with established university procedures. Application for reinstatement may be made to any of the academic units within the university after the specified period of suspension. Merely having remained in a suspended status for a period of time does not, in itself, constitute a basis for reinstatement.

## 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 Requirements

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.

General Studies requirements are 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 schedule [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 Schedule of Classes [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 Semester 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 semester hours from courses designated as L , at least three semester 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 Semester 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 semester hours must be selected from courses designated MA, and at least three semester 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 <br> SB: Social and Behavioral Sciences (Combined 15 Semester 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 semester 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 semester 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 semester hours must be at the upper-division level.

## SQ and SG: Natural Sciences (Combined Eight Semester 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).

1. Natural Science-Quantitative (SQ)

These laboratory courses include a substantial introduction to the fundamental behavior of matter and energy in physical and biological systems.
2. Natural Science-General (SG)

These laboratory courses cover aspects of scientific inquiry that lend themselves to more qualitative or descriptive discussions of science.

Eight semester hours of courses designated SQ or SG must be selected. Of these, at least four semester 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 each of these requirements concurrently, up to a maximum of two of the awareness area(s) listed for that course. The three awareness areas promote appreciation of cultural diversity within the contemporary United States, the development of an international perspective, and an understanding of current human events through study of the past.

## 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 United States. The objective is accomplished through the study of the cultural, social, or scientific contributions of women and minority groups, examination of their experiences in the United States, 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.

## 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 that of the United States. The global awareness area includes courses that recognize the nature of other contemporary cultures and the relationship of the American cultural system to generic human goals and welfare.

## 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 semester 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:

1. A single course may be used to satisfy one core area and a maximum of two awareness area requirements;
2. A single course may be used to satisfy a maximum of two awareness area requirements;
3. 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 semester hours of lower-division 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 upperdivision semester 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 (AGEC) [3].

## College or School and Major Requirements

In addition to General Studies requirements, 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/node/624
[3] http://www.az.transfer.org/cas/atass/student/agec.html

## 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 semester hours is required for graduation with a baccalaureate degree. A minimum of 45 semester hours in upper-division courses is required for graduation. Some programs may require more than 120 semester hours and 45 upperdivision semester hours for graduation; check the program's major map for graduation requirements.
No more than 60 semester 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 semester 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 az.transfer.org/cas/atass/student/agec.html [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.

## New or Transfer Students

Before new students or transfer students can register for the first time at ASU, they must determine what courses to take to complete the university First-Year Composition requirement; the students must then enroll immediately in composition courses and continue to do so every term until composition requirements are met. Colleges may grant waivers to the immediate and continual enrollment requirement when there are scheduling conflicts detrimental to the student's academic progress. Transfer students from Arizona community colleges or public universities can determine the acceptability of their composition courses by referring to the Course Applicability System in consultation with an academic advisor. Composition courses transferred from out-of-state institutions must be evaluated and approved by the Composition Office.

The transfer student must file an application in the student's college for Equivalency of First-Year Composition Requirements, along with a transcript and catalog descriptions of the composition courses to be transferred. The application, available in each college, should be filed immediately upon transfer of course work to ASU so that the student is able to enroll in an additional composition course, if required to do so.

For more information, visit LL 314 on Tempe campus or FAB N220 on West campus.

## Resident Credit Requirement

Resident credit refers to a course that is offered in a regular semester, winter session, 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 semester 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 degree-granting institution.

1. 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.
2. Students who do not meet the minimum enrollment standard stipulated in number 1 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.
3. 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.
4. In areas of study in which the subject matter changes rapidly, material in courses taken long before graduation may become obsolete or irrelevant.
5. 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.
6. 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.
7. 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.
8. 

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

## Continuous Enrollment

| Student's Activity | Semester/Year Status |  |
| :--- | :--- | :--- |
| Example A <br> Admitted and earned course credit at an Arizona <br> community college | Fall 2001 | Active |
| Continued at an Arizona community college | Spring 2002 <br> Fall 2002 <br> Spring 2003 | Active |
| Transferred to an Arizona university | Student enrolled under 2001-2002 or any |  |
| subsequent catalog |  |  |$|$| Example B | Fall 2003 | Active |
| :--- | :--- | :--- |
| Admitted and earned course credit at an Arizona <br> community college | Spring 2004 | Inactive |
| Enrolled but earned all "Ws" or "Es" (0.00) | Fall 2004 | Inactive |
| Enrolled in audit courses only |  |  |


| 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 <br> Fall 2000 <br> Spring 2001 | Inactive |
| 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 <br> Spring 2002 | Inactive |
| 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 <br> Spring 2005 | Active |
| 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 university | Fall 2005 | Active |
| Continued at an Arizona community college | Spring 2006 | Student enrolled under 2004-2005 or any subsequent catalog |

## Declaration of Graduation

Students must file a Declaration of Graduation (DOG) using the Degree Audit Reporting System (DARS). DARS is an
automated process that matches courses a student has completed with the requirements of a particular academic degree program, resulting in a report that shows the student which requirements are satisfied and which remain to be fulfilled, thus providing a guide for efficient selection of courses toward graduation. For example, a student majoring in Biology would request a degree audit report that would show how his or her completed ASU and transfer course work would apply to the Biology degree program.

Each student must submit a DOG form no later than the semester in which he or she earns the 87th semester hour. The DOG process confirms the degree requirements under which the student is enrolled, as indicated on the degree audit report for that academic program and catalog year. The student should review his or her degree audit with an academic advisor to assure an accurate interpretation. Some departments may require the DOG earlier than the 87th hour. Students failing to submit the DOG are prevented from further registration.

## Application for Graduation Requirements

The following steps are required to complete the graduation process:

1. Register for the final semester.
2. Pay the graduation fee at Cashiering Services.
3. Submit the fee receipt and application for graduation to any Registrar site. The Degree Audit Report or Program of Study will be reviewed and eligibility to graduate verified.
4. Complete all course work listed on the Degree Audit Report or Program of Study by the graduation date.

For more information about the steps 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 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 normal department, division, school, and college forms and procedures are used. Petitions that have been denied at the college level are forwarded to the University Undergraduate Standards Committee.

## 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.

## 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 semester hours needed to graduate are represented by the largest circle. The university minimum is 120 semester hours. Some majors, however, require more than 120 semester 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 semester 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 semester hours of course work. Although every student must eventually declare a major, minor and certificates are not required. Some courses, while providing semester 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 semester hours required to graduate.

## Graduation with Academic Recognition

An undergraduate student must have completed at least 56 semester 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 semester 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 semester hours earned subsequent to the posting of the first degree. If fewer than 56 semester 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 semester 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 semester 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

1. learning more about graduation requirements for their major;
2. discerning what critical courses and grades are required to stay on track to successfully complete their degree;
3. planning for and scheduling appropriate courses in the correct sequence to maximize success;
4. monitoring progress toward their degree; and
5. 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 requirements 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://az.transfer.org/cas/atass/student/agec.html
[3] http://students.asu.edu/graduation

Arizona State University Graduate Policies and Procedures*

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## Introduction

The Graduate College admits students into programs leading to both professional and researchoriented 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. For a list of ASU graduate degrees, see graduate degree listings at: www.asu.edu/aad/catalogs/graduate/grad-degs.html.

## Academic Integrity

The highest standards of academic integrity are expected of all graduate students, both in the academic coursework and in their related research activities. The failure of any graduate student to meet 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 each student must take personal responsibility in their work. In addition, graduate students are expected to follow university guidelines related to the Student Code of Conduct. University policies related to academic integrity and code of conduct are available in the Office of Student Life, or at www.asu.edu/studentaffairs/studentlife/judicial.

## Graduate Student Responsibilities

Graduate students are responsible for familiarizing themselves with all graduate policies and procedures. Each student should also communicate directly with her/his degree program department to be clear on its expectations for degree completion.

## Admissions

## Applications

## Submission of an Application and Deadlines

For admission information and procedures, see graduate.asu.edu/admissions. Students are encouraged to apply via the website to expedite processing time. The application deadlines are set by the degree programs so applicants are urged to contact the programs directly. For fall enrollment, international applicants must submit application materials by the previous December. For spring enrollment (when allowed by the academic unit) international applicants must submit application materials by the previous August. Not all programs accept applications for both fall and spring semesters. Applicants are advised to contact the specific degree program departments for this information.

## Application Fee

Each application to an ASU graduate program must be accompanied by a nonrefundable application fee. For current fees please see the Graduate Admission website.

## Application Requirements

All applicants must submit official transcripts to the Graduate College from all post-secondary institutions previously attended (see graduate.asu.edu/admissions). Degree programs, departments, or colleges, 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, and/or a statement of goals.

Applicants should contact the degree program for specific additional requirements. Degree programs will make 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 (e.g., program capacity, mentor availability, program match).

## Additional International Requirements

## International Applicants: Additional Requirements

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. Insurance must be maintained throughout the student's enrollment at the university.
3. Must submit additional materials as stated on the Graduate College's website at graduate.asu.edu/admissions.
4. 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.

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 and supporting documents have arrived. 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 Office (ISO), www.asu.edu/studentaffairs/ed/iso.

## English Language Requirement

Applicants from a country whose native language is not English must provide evidence of English proficiency as indicated by acceptable scores on the Test of English as a Foreign Language (TOEFL), or the International English Language Testing System (IELTS), as follows:

1. The minimum TOEFL requirement for entry into any graduate program is 550 (paperbased) or 83 internet based TOEFL (iBT).
2. The minimum IELTS requirement for entry into any graduate program is an overall band score of 6.5 with no individual band score below 6.0.
3. Individual degree programs may have higher TOEFL or IELTS requirements for their various programs. Consult the individual department websites for more information.

The following exceptions apply to the English proficiency requirement:

1. Applicants who have completed at least 90 semester credit hours (or equivalent) with a cumulative grade point average of 3.00 or higher (on a 4.00 scale) at a regionally accredited institution in the United States are exempt from the English proficiency requirement.
2. Applicants who have earned a bachelor's degree or higher from a regionally accredited university in the United States are exempt from the English proficiency requirement. This study must have been done within the United States.
3. Applicants who have completed a minimum of 12 semester hours of graduate level study at a regionally accredited college or university in the United States with a GPA of 3.00 or higher are exempt from the English proficiency requirement.
4. Applicants who have completed the ASU American English and Culture Program Advanced 2 Level (with grades of "B" or higher) are exempt from the English proficiency requirement.

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 Test of Spoken English (TSE), which may be taken in the student's home country, or the Speaking Proficiency English Assessment Kit (SPEAK) test, which is administered at ASU. Some degree programs also require TSE or SPEAK scores of applicants whose native language is not English. For specific information about TSE requirements, contact the head of the program.

## Admission

## Graduate College Admission Requirements

An individual who holds a bachelor's degree (or equivalent) or a graduate degree from a regionally-accredited college or university of recognized standing is eligible to apply for admission to the Graduate College. Remedies for undergraduate deficiencies may be assigned by
academic units if the undergraduate degree is based on credits not accepted by ASU, such as life experience, or noncredit workshops and seminars.

Generally, an applicant must have a GPA of 3.00 (scale: $4.00=\mathrm{A}$ ), or the equivalent, in the last two years of work leading to the bachelor's degree. A student who enters a graduate degree program is expected to have undergraduate educational experiences, including general education studies, that are similar to those required for the baccalaureate degree at ASU. The Graduate College evaluates the equivalency of the student's bachelor's degree to determine if the degree is acceptable for a graduate program at ASU.

## Admission Decisions

Only the Graduate College dean can make formal offers of admission. The Graduate College notifies all applicants in writing of the admission decision. Applicants are admitted into the university for the semester and year indicated on their admission letter and must initiate their program by registering for courses in that semester.

All academic credentials and supporting materials received by the university in connection with an application for admission become the property of ASU.

## Deferral of Admission Decisions

A student may, with the recommendation of the degree program, defer his/her initial semester and year of admission to the next semester in which the program is admitting students. No further deferrals are allowed.

## Admission Status

There are several admission status levels which can be applied to a student's application:

## Regular Admission Status:

Regular admission status is assigned to an applicant who fulfills all requirements for admission and is academically acceptable to both the degree program and the Graduate College.

## Regular Admission with Deficiencies Status:

Regular admission with deficiencies status is assigned to an applicant whose grades and test scores are at an acceptable level but who does not have the undergraduate background expected by the degree program and the university. Deficiency courses may not be applied toward the minimum hours required for the degree program.

Provisional Admission Status:
Provisional admission status is assigned to a student who does not meet minimum academic standards but has additional evidence to suggest the potential for success. This status provides the degree program with an opportunity to better evaluate the student's academic potential. Students who do not meet the provisions of their admission will be withdrawn from their program. When students have completed their provisional requirements, they should check with their advisors to make sure that change of status has been recommended. A
provisional student may also be assigned deficiency courses. Students with Provisional Admission are not eligible to submit their Plan of Study.

## Post-baccalaureate Non-degree Admission Status:

Students not immediately intending to earn a degree may enroll as post-baccalaureate nondegree students. The application process does not require submission of test scores or transcripts unless the student is applying to a graduate certificate program as well. For postbaccalaureate non-degree admission information and procedures, access the website at graduate.asu.edu/admissions/nondegree. See the Pre-Admission Credits paragraph in the Graduate Degree Requirements section of these policies for maximum credit hours that can be applied to a degree program. Please note that courses in some academic units are open only to degree-seeking students.

## Registration and Enrollment

Graduate students register during terms indicated in the Registration and Tuition Payment Guide issued by the University Registrar’s Office. Details regarding registration and course drop/add procedures are also provided in the Registration and Tuition Payment Guide. Day and evening graduate classes, offered on or off-campus during the academic year (fall and spring semesters) and the summer sessions, are considered part of the regular program. Students may register at MyASU.

## Enrollment Verification Guidelines

The Registrar's Office will verify students’ enrollment each semester according to the general guidelines below.

Enrollment Verification Guidelines for Graduate Students

|  | Full Time* | Half Time | Less Than Half Time |
| :--- | :--- | :--- | :--- |
| Regular semester <br> Graduate | 9 or more hours | $5-8$ hours | 4 or fewer hours |
| Graduate assistant** | 6 or more hours | - | - |
| Five-week summer session <br> Graduate | 3 or more hours | 2 hours | 1 hour |
| Graduate assistant** | 2 or more hours | 1 hour | - |
| Eight-week summer session <br> Graduate | 5 or more hours | $3-4$ hours | 2 or fewer hours |
| * An audited course does not count for full-time enrollment. |  |  |  |

** For enrollment verification purposes, "graduate assistant" is a generic term that includes teaching assistants, research assistants, teaching associates and research associates.

International students are required to maintain full-time enrollment status to maintain their U.S. visa.

## 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.

## Maximum Employment Hours for International Students

Employment for international students on F-1 or J-1 visas must be limited to 20 hours per week while school is in session (summer sessions are voluntary and are not limited.) This is a federal regulation and the individual degree program is responsible for enforcement.

## Continuous Enrollment and Leave of Absence Policies

Once admitted to a graduate degree program, master's and doctoral students must be registered for a minimum of one credit hour (not audit) during all phases of their graduate education. This includes periods when they are engaged in research, working on or defending theses or dissertations, taking comprehensive exams, taking Graduate Foreign Language exams or in any other way using university facilities or faculty time including the term in which they graduate. This credit must appear on the Plan of Study or must be an appropriate graduate-level course (e.g. 595, 695, or 795, Continuing Registration). Courses with grades of "W" and "X" are not considered valid registration for continuous enrollment purposes.

Students planning to discontinue enrollment for a semester or more must request approval for a leave of absence. Student 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. This request must be filed and approved before the anticipated absence.

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. Student 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.

## Enrollment Policy for the Teaching and Research Assistantships/Associateships

All teaching and research assistants and associates (i.e., TAs and RAs) must enroll for a minimum of six semester hours of appropriate credit during each semester of their appointment. The six hours cannot include audit enrollment.

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).

See the TA/RA Handbook for application procedures for assistantships and associateships.

## Graduate Degree Requirements

## Plan of Study

## Determination of Academic Requirements

A student graduates under the degree requirements and policies in effect at the semester and year of admission to a graduate degree program.

## The Plan of Study (POS)

The Plan of Study specifies the requirements that students must complete for their degree and is submitted and revised electronically via the interactive POS system (iPOS). In order to facilitate degree completion and shorten time to degree, graduate students with regular status must submit their POS by the time they have enrolled for 50 percent of the minimum credit hours required towards their degree program.

The POS must be approved by a student's committee, the head of the academic unit, and the Graduate College dean. The POS becomes a contract between the University and the student that guides the student in completing degree requirements.

Courses numbered 500 or higher are graduate level courses. Core courses required by a graduate degree program must be 500-level or above. A maximum of six credit hours of 400 level coursework may be used on an approved POS (400 level courses taken for a grade of Pass/Fail cannot be included on a POS). Courses with grades of "D" (1.00) and "E" (0.00) cannot be included on a POS.

Students may not include on their Plan of Study any credit hours that have been applied towards a previously awarded degree.

## Grading Exceptions

## Special Graduate Grade Considerations

Graduate coursework (i.e. 500, 600, and 700 level) reported as incomplete ("I") must be completed within one calendar year of the end of the scheduled course. If the course has not been completed and a regular grade assigned, it will become a permanent incomplete. The student will need to re-register for the course to receive credit.

Thesis and dissertation credit may only be assigned a grade of "Y" or "Z."
A grade of "W" is given whenever a student officially withdraws from a course after the drop/add period.

## Audit Enrollment

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 towards the minimum number of credits required for international students with visa restrictions, students employed as TA/RAs, or students receiving financial assistance.

## 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 nine credit hours of pre-admission credits may be included on the POS for a master's degree and a maximum of 12 credit hours for a doctoral degree.

## Transfer Credit

Transfer credits are those accepted from another institution for inclusion on an ASU Plan of Study. Official transcripts of any potential transfer credit for a POS must be sent directly to the Graduate Admissions Office from the Office of the Registrar at the institution where the credit was 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) may be transferred. Transfer credits may not be applied toward the minimum degree requirements for an ASU degree if they have been counted toward the minimum requirements for a previously-awarded degree.

Certain types of graduate credits cannot be transferred to ASU, including credits awarded (as follows):

1. By post-secondary institutions that lack candidate status or accreditation by a regional accrediting association.
2. For life experience.
3. For courses taken at non-collegiate institutions (e.g., government agencies, corporations, and industrial firms).
4. For courses, workshops, and seminars offered by other postsecondary institutions as part of continuing education programs.
5. For extension courses.
6. Prior to the posting of a bachelor's degree.

Academic credits earned at other institutions 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, but all grades remain on the student transcript as well as in all GPA calculations.

## Reserving Course Credits by Undergraduates for Graduate Degree Use

ASU undergraduate students who have achieved senior status with a 3.0 cumulative GPA or higher may reserve up to nine credit hours of graduate level coursework. Only reserved courses with a grade of "B" (3.00) or higher may be included on a Plan of Study. Reserved courses cannot be used to meet any baccalaureate graduation requirements. Before the student's bachelor's degree is conferred the student must submit a Request for Graduate Credit form which is signed by the student's undergraduate advisor and the head of the academic unit, to the Graduate College for approval. Students are not eligible to reserve credit after the bachelor’s degree has been awarded.

## Graduate Foreign Language Examination

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.

## Maintaining Academic Progress toward Degree Completion

## Grade Point Averages (GPA) and Restricted Grades

There are two GPA requirements that govern academic progress in and graduation from a graduate degree program. The POS GPA is based on all courses that appear on the student's final POS. The Graduate GPA is based on all courses numbered 500 or higher that appear on the transcript, with the exception of:

1. Courses counted toward an undergraduate degree at ASU (unless shared with a master's degree in an approved bachelor's/master's degree program).
2. Courses noted as deficiencies in the original letter of admission.

Transfer credits and courses taken in the Sandra Day O’Connor College of Law are not counted in calculations of the POS or Graduate GPA. Courses with grades of "D" (1.00) and "E" (0.00) cannot appear on the POS but will be used to compute the Graduate GPA.

To be eligible for graduation, students must achieve a POS GPA and a Graduate GPA of 3.00 or higher.

## Satisfactory Progress towards the Degree and Time Limits on Degree Completion

All graduate students are expected to make systematic progress towards completion of their degree. This progress includes meeting 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. If students fail to meet the requirements of their degree program and/or the benchmarks outlined below, the degree program may recommend withdrawal of the student to the Graduate College dean. The Graduate College dean makes the final determination.

1. Maintain a minimum of 3.0 GPA both on POS and Graduate GPA. If either GPA falls below 3.0, the student must develop, with their advisor, an academic performance improvement plan that includes the conditions and timeframes for making satisfactory academic progress in her/his degree program. The student is considered to be on academic probation until the conditions specified in the academic performance improvement plan are met and both GPA's are raised above 3.0.
2. Meet all requirements of the graduate degree program.
3. Meet the maximum time limit for graduation from the student's graduate degree program (six years for master's, ten years for doctoral).
4. Doctoral students must meet the five year time limit for graduation after passing the comprehensive examinations.
5. Successfully pass comprehensive exams, qualifying exams, foreign language exams, and the oral defense of the proposal/prospectus for the thesis or dissertation.
6. Successful completion of the oral defense required in the culminating experience.

Students should verify any additional satisfactory progress policies as required by their degree program.

## Thesis and Dissertation 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.

## Graduate 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.

See the Master's Degree Requirements and the Doctoral Degree Requirements sections below for the composition of supervisory committees.

## Thesis or Dissertation 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 University Human Subjects IRB for approval before data collection or recruitment of subjects is initiated at researchadmin.asu.edu/compliance/irb.

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 the Institutional Animal Care and Use Committee for approval at researchadmin.asu.edu/compliance/iacuc.

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

## Completing the Degree

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. Dissertations are deposited with University Microfilms International (UMI) 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.

## Thesis and Dissertation Format Review

Prior to the defense, students must prepare their thesis or dissertation for submission to the university. This requires that the document meet format guidelines, as outlined in the Formal Manual, for readability, consistency, and binding. Copies of the Format Manual are available in the Graduate College and at graduate.asu.edu/formatmanual on the web.

To help ensure these guidelines are met, students are required to submit a complete copy of the thesis or dissertation to the Graduate College for format review at least 10 working days before the proposed date of the oral defense. It is very important that students familiarize themselves with format requirements before beginning the thesis/dissertation process. They should check
with their degree program to make sure they have no specific additional requirements on formatting.

Doctoral students are responsible for the University Microfilms International (UMI) microfilming fee, which covers the expense of having the document sent to UMI, where it is microfilmed and cataloged.

## Thesis and 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.

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. Contact the Student Academic Services (SAS) office in the Graduate College for additional information. The forms to schedule the defense are found at graduate.asu.edu/forms/index.html and must be submitted when the thesis/dissertation is presented for format review to the Graduate College.

## Graduation

Students must apply for graduation 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 graduate.asu.edu/graddeadlines.html. 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.

## Master's Degree Requirements

## Master's Students' Plan of Study

## Master's Students' Plan of Study

As noted previously, master's students must file their Plan of Study (POS) by the time they enroll in 50 percent of the credit hours required towards their degree program. A student is not eligible to apply for the comprehensive or final examination until a POS has been approved.

## Minimum Credit Hour Requirements

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

## 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.

## Completing the Master's Degree

## The Master's Supervisory Committee

A master's student'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. It is composed of a minimum of three members, including a chair or co-chairs.

For master's committees, tenured/tenure-track faculty may serve as members of a 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. Members of the Graduate Faculty may serve as members or co-chairs of a master’s committee. Graduate Faculty endorsed to chair doctoral committees may also chair master's committees. ASU academic professionals or non-tenure accruing faculty with appropriate academic credentials may serve as a member or co-chair on master's committees.

## Thesis and Thesis Defense

To satisfy the research requirement for most master's degrees, a student is expected to present a thesis which 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 verify requirements. An oral defense of the thesis is required and must be completed to the satisfaction of the supervisory committee. Students must be enrolled for at least one semester hour of credit that appears on the Plan of Study or one hour of
appropriate graduate-level credit (such as 595 Continuing Registration) during the semester (including summer session) in which the student defends the thesis.

Revisions to the thesis are normal and must be completed in a timely manner. If the student is unable to complete revisions to the thesis and meet the ASU Bookstore deadline for the semester in which the defense is held, the student must complete the revisions, remain registered, and present the finished document to the ASU Bookstore 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 redefense of the thesis to ensure currency of the work.

## Other Master's Culminating Experiences

A comprehensive examination, capstone course or an applied project is required as a culminating experience in master's programs that do not have a thesis requirement. Students must have an approved Plan of Study 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.

## Comprehensive Examinations Procedures

The student must schedule the comprehensive examination with their academic unit. The results of this 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 a 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 reexamination. 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 a student from his/her degree program.

Foreign language requirements, if applicable, must be fulfilled before taking the comprehensive examinations. Students are required to register for at least one semester hour of credit that appears on the POS or one hour of appropriate graduate-level credit (such as 595 Continuing Registration) during the semester or summer session in which they take their comprehensive examinations.

## Doctoral Degree Requirements

## Doctoral Plan of Study

## The Doctoral Plan of Study

As noted previously, doctoral students must file their Plan of Study (POS) by the time they enroll in 50 percent of the credit hours required towards their degree program. The doctoral Plan of

Study must be approved by the student's supervisory committee, head of the academic unit, and the Graduate College dean.

## Minimum Credit Hour Requirements

A minimum of 84 credit hours of graduate work is required for the doctoral degree at ASU; 12 (and only 12) of these hours must be 799 Dissertation course credits if the student is completing a dissertation. Students may apply up to 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.

## Maximum Time Limit

Doctoral students must complete all program requirements within a ten-year period. The ten-year period starts with the semester and year of admission to the doctoral 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 (previously awarded master's degrees used on the Plan of Study are exempt).

In addition, 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:

1. Time period since initial enrollment (10 year time limit).
2. Time after passing the comprehensive exams (5 year time limit).

Any exceptions must be approved by the supervisory committee and the Graduate College dean and ordinarily involves repeating 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.

## Completing the Doctoral Degree

## Dissertation 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 composed 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. Generally, 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 College maintains a web page (graduate.asu.edu/gradfaculty) of faculty approved to serve as Ph.D. committee members. 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. Ph.D. students are urged to communicate with their Ph.D. program to be clear on eligibility of faculty to chair committees.

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

## Comprehensive Examinations

When students have essentially completed the course work in an approved Plan of Study, they should request permission to take the comprehensive examinations. These written and oral examinations are designed to test the student's mastery of the field of specialization. Doctoral comprehensive examinations are administered by a committee consisting of a minimum of three members.

Foreign language requirements, if applicable, must be fulfilled before taking the comprehensive examinations. Students are required to register for at least one semester hour of credit that appears on the POS or one hour of appropriate graduate-level credit (such as 795 Continuing Registration) during the semester or summer session in which they take their comprehensive examinations.

Failure in the comprehensive examinations is considered final unless the supervisory committee and the head of the academic unit recommend, and the Graduate College dean approves a reexamination. Only one re-examination is permitted. 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 second examination. Reexamination 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 his/her 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 exam.

## 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 defense is considered final unless the supervisory committee and the head of the academic unit recommend, and the Graduate College dean approves 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 start 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.

## Candidacy

Doctoral students (with specific degree program exceptions approved by the Graduate College dean) achieve candidacy status in a letter from the University Registrar dean upon:

1. Passing the foreign language examination, if applicable.
2. Passing the comprehensive examinations.
3. 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 graduated. See Continuous Enrollment.

## Doctoral Dissertations and the Doctoral 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. Each student must be enrolled for at least one semester hour of credit 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 session) in which the student defends the dissertation.

Revisions to the dissertation are normal and must be completed in a timely manner. If the student is unable to complete revisions to the dissertation and meet the ASU Bookstore deadline for the semester in which the defense is held, the student must complete the revisions, remain registered, and present the finished document to the ASU Bookstore 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 redefense of the dissertation to ensure currency of the work.

## 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.

## Admission

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

## Certificate Requirements

A minimum of 15 semester hours of graduate work are 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 course work 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 the 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 complete, sign and submit to their specific graduate certificate program the Application for Awarding of a Graduate Certificate form to be verified first by the certificate program and then by the Graduate College, thus ensuring that all requirements have been met before the graduate certificate will be officially posted.

## Concurrent Master's Degree

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.

Course work common to both programs must constitute a well-planned and meaningful part of each of the programs and may only include course work completed after admission to both degree programs. In all cases, these guidelines 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.
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 Degree

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, these guidelines 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.

## Withdrawals from Graduate Degree Programs or the University

## Voluntary Withdrawal from the University

If a student wishes to withdraw from all graduate degree programs and the university, they must complete the Voluntary Withdrawal form found at graduate.asu.edu/forms. Students must still complete the appropriate forms with the University Registrar to withdraw from their courses. International students should contact the International Student Office (ISO) 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 found at graduate.asu.edu/forms. The students should not take this action until they have been admitted to the other graduate degree program.

## Procedures for Other Types of Withdrawals

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: www.asu.edu/aad/manuals/usi/usi201-09.html. For course withdrawals contact the University Registrar's Office.

A grade of "W" is given whenever a student officially withdraws from a course after the drop/add period.

## Involuntary Withdrawal of a Student from a Graduate Program by the Graduate College

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

In addition, a department 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 need to 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.

## Graduate Student Appeals

## The Graduate Council Appeals Board: Policies and Procedures

The Graduate Council Appeals Board (GCAB) acts 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, department, or college. 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:

1. Retention in graduate programs (with the limitations described below).
2. Procedural matters in graduate student programs (e.g., procedures related to Plans of Study, theses, dissertations, and preliminary, qualifying or comprehensive exams).
3. Other academic issues that are not covered by other university policies or processes.
4. 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.
5. The GCAB does not review appeals pertaining to the following areas because these appeals are heard by other university bodies (see parenthesis below):

- Course grades (subject to review by the academic unit and college).
- Results of capstone experiences, comprehensive and qualifying examinations and defenses (subject to review by the academic unit and college).
- Allegations of academic dishonesty (subject to review under the ASU Student Academic Integrity Policy).
- 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).
- 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 graduate.asu.edu/files/gradappeals/GradAppeals.

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 www.eoaa.asu.edu/aa_policies.asp. Some deadlines for filing complaints are as short as thirty days.

## College Policies

# SCHOOL OF APPLIED ARTS AND SCIENCES POLICIES 

Please contact the college for more information, http://www.poly.asu.edu/ecollege/html/ [1].

Source URL: http://catalog.asu.edu/policies/applied_arts_sci
Links:
[1] http://www.poly.asu.edu/ecollege/html/

## KATHERINE K. HERBERGER COLLEGE OF THE ARTS POLICIES

## Undergraduate Policies

## Advising

Undergraduate academic advising is handled as a centralized activity within the college. To offer personalized attention, each academic unit establishes its own graduate advising procedures. Students are encouraged to make appointments through the Herberger Student Academic Services central office. For more information, call 480/965-4495.

## Academic Standards and Retention

## Good Standing

Students in the Katherine K. Herberger College of the Arts are considered 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. However, to gain admission into certain undergraduate degree programs in the college, students must maintain a minimum GPA within their major and/or a minimum cumulative GPA. These minimum GPAs vary according to the given program.

## 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. Students are encouraged to seek advising from their major academic advisor, in an effort to improve academic standing. All Herberger College of the Arts students who are placed on academic probation and continuing probation are required to submit completed student progress reports to the office of the assistant dean for enrollment management and student success for the college. The student progress report is a means to monitor the academic performance that a probation/continuing probation student is achieving in each of his or her courses, during the semester. Completed student progress reports must be returned to the Herberger College of the Arts Office, GHALL 116. The assistant dean will then review each report. Progress reports are required until the student earns a cumulative GPA of 2.00 or higher.

## Disqualification

A student who is on probation becomes disqualified if the student (1) has not returned to good standing, or (2) 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 and/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.

## Reinstatement

Students seeking reinstatement after disqualification should contact the Katherine K. Herberger College of the Arts 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 Office of the Registrar.

All academic disciplinary action is a function of the Katherine K. Herberger College of the Arts Student Services Office, GHALL 116, under the direction of the assistant dean for enrollment management and student success for the college. Students having academic problems should call this office for advising at 480/965-4495.

## Graduate Policies

## Advising

Advising is handled as a decentralized activity within the college. 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.

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

## W. P. CAREY SCHOOL OF BUSINESS POLICIES

## Undergraduate Policies

## Academic Standards

## Critical Requirements

All business 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 is not permitted. For more information, access the Web site at wpcarey.asu.edu/up [1].

## Probation

All business students, freshman through senior, must maintain a minimum GPA of 2.00 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" (2.00). If a student on probation meets this requirement, but the cumulative GPA remains below 2.00 , the student is given an additional semester on continued probation. At the end of continued probation, the student must return to good standing (a minimum 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 and winter sessions; however, they are not eligible to enroll in upper-division business courses.

## Reinstatement and Readmission

Students seeking reinstatement (after disqualification) or readmission (after an absence from the university) should contact the undergraduate programs office, in BA 109, regarding procedures and guidance for returning to good standing.

## 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.

## 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.

## Graduate Policies

All graduate students in the W. P. Carey School of Business are required to maintain a cumulative GPA of 3.00. See individual graduate degree programs for specific requirements on satisfactory academic progress, probation, and disqualification. Information sessions are held weekly throughout the year in the MBA Program Office, BA 160. MBA brochures may be obtained at the office, call 480/965-3332.

Links:
[1] http://wpcarey.asu.edu/up

## COLLEGE OF DESIGN POLICIES

## Undergraduate Policies

## Critical Requirements and Milestones

For more information about critical requirements, including the milestone, access design.asu.edu/students [1].

## Critical Requirements

A new or transfer student who has been admitted to the university and has selected a college major is admitted to the program of his or her choice. Each student must meet all critical requirements including the milestone at the end of the third semester. For international students whose native language is not English, a TOEFL is required.


#### Abstract

Milestone

Passing the milestone at the end of the third semester is competitive. Consult the requirements of each major for details. Students who are interested in more than one program must meet the milestone requirements for both and must submit separate portfolios, if required. Transfers requested past the third 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.


## Transfer Credits

While the university accepts credits transferred from other accredited institutions, transfer credits are not applied to specific degree programs until reviewed and accepted by the appropriate academic units. Transfer course work must be equivalent in both content and level of offering. In addition, a review of samples of work (portfolio format) from previous studio classes is required to receive credit for studios. Students who change majors to transfer into the college or one of its program areas must have a minimum cumulative GPA of 2.50 .

## Change of Major

Current ASU students who wish to change majors to one of the college's degrees must have a cumulative ASU GPA of 2.50 or higher.

## Academic Advising

While the college provides academic advising, it is ultimately the responsibility of each student to fulfill academic and program requirements. Advising and record keeping for students majoring in Architecture and Landscape Architecture, Graphic Design, Housing and Community Development, Industrial Design, Interior Design, Urban Planning, and the BA in Design Studies are the responsibility of a college academic advisor, located in CDS 115. General career advising is available from all faculty members. Administration of program requirements is the responsibility of the head of the academic unit and the dean.

## Appeals Procedures

Academic appeals and requests for variances are typically made to the student's advisor and then, if necessary, to the head of the appropriate academic unit, the College Standards and Appeals 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 may contact a college academic advisor or may take the grievance to the college ombudsperson.

## Academic Standards

A student in any of the college'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 college imposes on their probation as a condition of retention. If, after one semester on probation, the overall GPA is not at least 2.00 and the conditions of probation have not been met, the student is disqualified for a minimum of two full academic semesters; however, students whose cumulative GPA is below 2.00, but are still in academic good standing according to university standards, are ineligible to major in a College of Design program, but may be eligible for majors in other colleges at ASU. 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 college for early reinstatement. Appeals may be made to the college Standards and Appeals Committee; see an academic advisor for the necessary appeals 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. Students must earn a grade of " C " (2.00) or higher in 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.

## Retention Standards

Students who have passed the milestone are placed on probation when any of the following occurs: 1. failure, incomplete, or withdrawal from any required course; 2. a semester GPA below 3.00; 3. a grade of "D" (1.00) or "E" (0.00) in a design studio, a design laboratory, or a design lecture; or 4 . violation of the university's Code of Student Conduct or any admission agreement. Students on probation must observe rules or limitations that the college or academic unit places on their probation as a condition of continuation. Students may be removed from a program (but not necessarily the university) if: 1. the requirements imposed are not met or the probationary semester GPA is below 3.00 after one semester on probation; 2. failures or withdrawals in required courses are not resolved at the next offering of the course; 3 . they fail or withdraw from required sequential courses; or 4 .
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 in 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 college Governance and Grievance Committee. For more information, see Retention and Academic Standards.

## Incompletes

Students are responsible for contacting the instructor regarding the process of requesting and fulfilling an incomplete. Tardiness in contacting the instructor may result in a failing grade. Students must obtain official "Request for Grade of Incomplete" forms at design.asu.edu/students [1]. 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, proposes 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 they are already enrolled in it. For more information, see Incomplete.

## Withdrawals

University withdrawal regulations apply to all courses. In addition, because the college’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. Withdrawal from a required critical-requirements course automatically places a student on probation. Withdrawal from a required course after the milestone in a required sequence automatically removes the student from the program beginning the subsequent semester. For more information, see Grading System.

## Pass/Fail or Credit/No Credit

The only courses accepted toward graduation with a grade of pass/fail or credit/no credit are internships and field studies.

## Graduate Policies

## Advising

## Architecture

Students should consult the school's Web site at design.asu.edu [2] for general information about the programs and admission procedures. In addition, a graduate coordinator is available for professional advising. For more information, call 480/965-3536, or send e-mail to design.advising@asu.edu [3]. For information about the undergraduate program and for undergraduate advising, send e-mail to design.advising@asu.edu [3].

## Design

Preadmission information, advising, and continued support are provided by the coordinator of the program. General information can be found on the program's Web site at design.asu.edu [2]. For additional information, send e-mail to designmsd@asu.edu [4].

## Planning

Students should consult the school's Web site at design.asu.edu [2] for general information about the program and admission procedures. The school's student coordinator provides admission information, general program information and general advising. The school's director and MUEP program coordinator provide professional advising and continued support. For more information, call 480/965-7167, or access the school's Web site at design.asu.edu [2].

[^0]Links:
[1] http://design.asu.edu/students
[2] http://design.asu.edu
[3] mailto:design.advising@asu.edu
[4] mailto:designmsd@asu.edu

# MARY LOU FULTON COLLEGE OF EDUCATION POLICIES 

## Undergraduate Policies


#### Abstract

Advising

All new students are required to meet with an academic advisor before registering for their first semester. To further assist and support freshmen in their first year, these students are also required to meet with an advisor before registering for their second semester. Each fall, freshmen are notified of "Welcome Week." This is an opportunity to consult with advisors regarding academic difficulties, avenues for student involvement in campus activities, and preparation of spring schedules. To schedule an appointment with an advisor, call 480/965-5555.


## Graduate Policies

General career advising in a program can be obtained by contacting the director of the division or the coordinator of the program in which a degree is offered. After admission to a degree program, specific advice related to degree activities is provided by supervisory committees. Postbaccalaureate students pursuing their teaching certification are advised by the Office of Student Services in EDB L1-13. For more information, call 480/965-5555.

## Continuous Enrollment and Reentry

Once admitted to a PhD or EdD degree program, the 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 PhD degree, the student may enroll for 595 , 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 may apply for leave status. 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 leave status may be removed automatically 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; 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 no later than the last day of registration in the semester of anticipated absence.

## Interdisciplinary PhD Lack of Progress Policy

Students admitted to the Interdisciplinary PhD program must be continuously enrolled to remain active in the program. This means that students must be enrolled for at least one hour every fall and spring semester from the first semester of enrollment until graduation. A student can be placed on academic probation for the following reasons:

1. failing to meet the scholarship requirements of the Graduate College, a GPA of 3.00 (on a 4.00 scale) or higher, or is placed on probationary status, and
2. unsatisfactory progress as noted on Annual Review form by mentor or failure to meet for annual review.

A student can be recommended for dismissal from the doctoral program if the following rules are not adhered to:

1. students have four years from the date of admission to admission to candidacy,
2. students have five years after advancing to candidacy to complete and pass their dissertation. Students who are not enrolled in dissertation hours and who are not making sufficient progress toward defending their dissertation can be withdrawn from the program due to lack of progress, and
3. two semesters of probationary performance constitutes grounds for dismissal from the degree program.

Dismissal for any of the reasons cited above is automatic. The student receives notice from the Curriculum and Instruction Graduate Programs Office that he or she has been removed from the program. A student may appeal any action concerning dismissal by petitioning the Interdisciplinary Executive Committee.

# SCHOOL OF EDUCATIONAL INNOVATION AND TEACHER PREPARATION 

Please contact the school for more information, http://www.poly.asu.edu/saas/education/ [1].

Links:
[1] http://www.poly.asu.edu/saas/education/

## IRA A. FULTON SCHOOL OF ENGINEERING POLICIES

## Undergraduate Policies

## Evaluation of Previous Course Work

Transferring from one institution to another or between programs can result in a net loss in units that count toward the degree. Thus it is important for students who contemplate transferring into this school 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 this 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 on the Web at www.asu.edu/provost/articulation [1].

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 this school. Determination of those particular courses applicable to a specific degree program is made within the appropriate academic unit with the approval of the dean.

## Currency of Course Work

Courses taken more than five years before admission to degree programs in this school are not normally accepted for transfer credit at the option of the department in which the applicant wishes to enroll. Courses completed within the five years preceding admission are judged as to their applicability to the student's curriculum.

## General Education Development

Students admitted to the university after successful completion of the General Education Development examination are admitted to the freshman and sophomore portion of the program within their major provided they meet the minimum ACT or SAT score required for admission as listed in the Fulton School of Engineering Admission Requirements for Freshmen and Transfer Students table.

## Readmission

Undergraduates who have been away from the university for one or more semesters and want to return to ASU in a Fulton School of Engineering program are required to apply for readmission through the University Registrar's office.

Students who left ASU as ineligible or disqualified must first request reinstatement. All other readmission requests are processed as follows:

Fulton School of Engineering students seeking readmission to the Fulton program they left are readmitted to the Fulton program into the same portion of the program and the same academic standing (i.e., good academic standing or on probation) they had when they left ASU.

Fulton School of Engineering students who are seeking readmission to a Fulton program other than the program they left and who have an ASU GPA of 3.00 or higher are readmitted to the new Fulton School of Engineering program in the freshman and sophomore portion with the same academic standing they had when leaving ASU.

Fulton School of Engineering students and non-Fulton School students seeking readmission to a Fulton program, other than the program they were in when they left, 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 Fulton School of Engineering program in the freshman and sophomore portion with the same academic standing they had when leaving ASU.

Once readmitted, returning students are required to meet with a program advisor before enrolling in courses at ASU.

## Advising

Successful completion of a program in the Fulton School of Engineering requires careful planning. While final responsibility for becoming familiar with and understanding academic degree requirements lies with the student, each department 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.

Students are encouraged to utilize the eAdvisor [2] tool for academic planning. eAdvisor provides Critical Requirements and Major Maps [3] which are individualized student reports that layout a specific, clear, and accurate track 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 faculty and professional advisors of any outside work or activity so that course loads may be adjusted accordingly.

Advisors and staff in the Office of the Associate Dean for Academic and Student Affairs in the school are available to assist individual students with many different types of advising issues. They work with students to answer general questions regarding
policy and procedure; help with registration transactions; administer the probation, disqualification, and readmission processes; oversee disciplinary actions; hear grade grievances; and assist with other administrative matters. For more information, access the school's Web site at www.fulton.asu.edu/fulton [4].

## 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.

## Mandatory Advising

All first-year students, all 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 department to determine if advising is required.

## Maximum Hours

Students enrolled in an undergraduate degree program in this school may register for a maximum of 19 semester hours each 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 be advised by a faculty or professional advisor from within the academic unit of their major and complete the Student Self Assessment for Academic Success (SSAAS) form at http://www.fulton.asu.edu/fulton/students/sas/academicstandards.php [5]. The SSAAS form in designed to assist students in identifying a path to academic success. Students on probation are limited to 13 semester hours.

## Undergraduate Nondegree Status

Students who are enrolled in an undergraduate nondegree status in this school must obtain advising and approval to register before registering each semester from the Office of the Associate Dean of Academic and Student Affairs.

## 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 chair of the department 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 school do not receive degree credit for pass/fail courses taken at this institution. In addition, no course in this school is offered for pass/fail credit. Students requesting credit for pass/fail courses taken at another institution must file a College Standards petition to the department of their major. Each request is judged on its particular merits.

## Non-Fulton School of Engineering Students

Students who are not admissible to programs in this school and who enroll in another school at ASU may not register for any 300- or 400-level courses in this school unless the course(s) are required in their degree program and the students have the proper course prerequisites.

## Academic Standards

The school has developed and enforces a number of academic standards, these are designed to support students who are struggling academically and to insure the quality of the school's graduates.

## 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.

## 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 (1) maintain an acceptable GPA, (2) enroll in and complete critical tracking requirements, and (3) 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 on track. Such students are placed on 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 semester hours maximum), retake courses, or even take courses outside of the program if the advisor judges these measures will help bring the student back to academic good standing.

## Conditions for Probation

A student is placed on probation 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 is made by the student's department, which also determines any conditions of probation.

Automatic probation is triggered by any of the following:

1. a semester or summer session with a GPA less than or equal to 1.50 ,
2. two successive semesters with GPAs less than 2.00 , or
3. an ASU Cumulative GPA below 2.00 (for more than 55 semester hours).

Automatic review is triggered by any one of the following:

1. an ASU cumulative GPA less than 2.00 ( 0 to 55 semester hours),
2. a cumulative GPA in the major of less than 2.00 , or
3. 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 school's retention standards become ineligible to continue working toward a degree within the school. Ineligible students who cannot transfer to another program within ASU are designated as disqualified.

Ineligibility occurs if the probationary student:

1. does not attain a semester GPA of 2.25 or higher, or
2. has a cumulative GPA below 2.00 at the end of the probationary semester, or
3. has already been on probation for two consecutive semesters, or
4. failed to complete any courses appropriate for the degree during each semester.

Ineligible students are subject to the following limitations:

1. Students who change colleges may not register for courses in engineering unless the courses are required by their new major.
2. Students who register for courses in the school may be withdrawn from these courses any time during the semester they are registered.

Ineligible students are encouraged to consider these options:

1. Student 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 completed course work. Students should check with an advisor in the Office of Academic Affairs to determine if they are eligible.
2. Student may take nonengineering courses during summer and winter sessions.
3. Student may request a review of their status by contacting the Office of Academic and Student Affairs.

## Reinstatement Process

Students who were ineligible or disqualified when they left the Fulton School of Engineering and ASU must request reinstatement as part of the readmission process.

## Reinstatement:

1. is only considered after a student has remained out of the school for at least 12 months,
2. requires a student to supply proof that he or she is now capable of successfully completing courses in the discipline (e.g., completion at another postsecondary institution of at least 15 hours of appropriate course work at a GPA of 3.00 or higher), and
3. requires a combined ASU plus transfer GPA of 2.50 or higher.

If the reinstatement request is approved and the readmission request involves a change of major, then the change of major review must be completed. All students who gain readmission through reinstatement return on probation at the portion of the program that is deemed appropriate by the program to which the student is being readmitted.

## Graduate Policies

## Policy for Maintaining Satisfactory Progress

A student who has been admitted to a graduate degree program in Engineering, with either regular or provisional admission status, must maintain a 3.0 or higher grade point average (GPA):

1. in all work taken for graduate credit (courses numbered 500 or higher),
2. in the coursework in the student's approved program of study, and
3. in 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 3.0. Students will be notified by mail when placed on academic probation.
B. A student will earn academic good standing by obtaining a 3.0 or better in the GPAs listed above by the time the next nine hours are completed. Coursework such as research and dissertation registration that are for Z or Y grade cannot be included in these nine hours.
C. A student may be recommended for dismissal from a graduate program if the student fails to increase all of the GPAs listed above to 3.0 or better by the time he/she completes at least nine credit hours as defined in section B.

A student may appeal actions concerning dismissal by petitioning the departmental unit in which they are enrolled. Academic units in 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 School of Engineering can be found on each department's webpage. For a list of departments visit, http://fulton.asu.edu/fulton [6].

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

Links:
[1] http://www.asu.edu/provost/articulation
[2] https://webapp.asu.edu/eadvisor/?init=false\&nopassive=true
[3] https://webapp.asu.edu/eadvisor/MajorMaps.html
[4] http://www.fulton.asu.edu/fulton
[5] http://www.fulton.asu.edu/fulton/students/sas/academicstandards.php
[6] http://fulton.asu.edu/fulton

## SCHOOL OF GLOBAL MANAGEMENT AND LEADERSHIP POLICIES

Note: On November 20th, 2008, the Arizona Board of Regents' Academic Affairs Committee voted to disestablish the School of Global Management and Leadership on ASU's West campus. The W. P. Carey School of Business now oversees the business education needs of ASU students on both the Tempe and West campuses. Please visit the W. P. Carey School of Business Web site [1] for more information.

## Undergraduate Policies

## Pass/Fail

School of Global Management and Leadership undergraduate students may not include among the semester hours required for graduation any courses taken at this university on a pass/fail basis. This policy excludes some courses such as internship, which may be offered only for satisfactory/fail credit.

## Academic Standards

The following are minimum academic standards applicable to all degree and certificate programs offered by the School of Global Management and Leadership. Some programs may have more specific or more stringent requirements.

## Probation

Students are placed on probation when their GPA for all courses taken at ASU drops below a 2.00 minimum.

## Disqualification

Probationary students have at most the next two consecutive semesters to raise their ASU GPA to the minimum 2.00 or higher. In the first semester of probation the student must receive a grade of " C " (2.00) or higher in all courses and have a GPA of at least 2.50 for the semester. Immediate disqualification occurs if either of these conditions are not met. If both are satisfied but the GPA for ASU courses still remains below 2.00, then the student may be given a second semester under probation to raise the GPA to the minimum. The student is disqualified from the business program if the ASU GPA has not been restored to at least 2.00 after the two semesters.

## Reinstatement

The School of Global Management and Leadership does not accept applications for reinstatement until the disqualified student has remained out of the college for at least a 12-month period. Merely remaining in a disqualified status for the above period of time does not, in itself, constitute a basis for reinstatement. Evidence of ability to do satisfactory academic work is required. Students who have been academically disqualified are permitted to enroll in courses during summer sessions in order to raise their ASU GPA. Disqualified students may not enroll in upper-division business courses until they have been reinstated in a business program.

## Academic Dishonesty

School of Global Management and Leadership students are expected to adhere to the ASU Academic Integrity Policy. A copy of the policy may be obtained from the school's Advising Office.

Links:
[1] http://wpcarey.asu.edu/sgml.cfm

## BARRETT, THE HONORS COLLEGE POLICIES

## Curriculum

Students planning to graduate from Barrett must also graduate from a disciplinary college. The ASU honors curriculum normally allows students to finish all requirements within the 120 semester hours of credit usually required for graduation. Thirty-six of those credits are honors courses-with a minimum of 18 upper-division credits.

## Special Programs

## Lorraine W. Frank Office of National Scholarship Advisement

The Lorraine W. Frank Office of National Scholarship Advisement assists students by identifying nationally competitive programs appropriate to each person's intellectual and career goals, nurturing these prospective applicants and advancing their candidacy. This office, administered by the college, serves the entire ASU community. ASU students regularly earn distinction in the most rigorous and prestigious scholarship competitions. Many pursue enhanced degree programs and research projects under the auspices of Goldwater or Truman Scholarships. Other students undertake postgraduate study in the United States and abroad as Rhodes, Marshall, Fulbright, Udall, National Science Foundation or Mellon Scholars. Many others have been recognized by a range of postgraduate awards, fellowships and assistantships. This office does not administer any need- or merit-based student financial assistance. For more information, call 480/965-5894.

## Undergraduate Research Opportunities

Undergraduate research and creative opportunities are available across many disciplinary programs, centers and institutes at ASU. Barrett maintains lists of current opportunities, available by accessing the college's Web site at honors.asu.edu [1]. In addition, the college actively seeks new opportunities matching student training with emerging research on campus.

## Study Abroad

Students in Barrett have exclusive access to study abroad programs that significantly enhance their educational experience. Directed and taught by Barrett faculty, these programs usually occur during the first summer session and last between five and six and a half weeks and allow students to earn honors credit while overseas. The five current programs offer students the privilege of studying in several of the most significant and dynamic cities in China, Europe and Latin America. The London, Dublin and Edinburgh program has been offered since 1995, the Paris and Loire Valley program since 1998, the Latin American program since 2002, the China program in 2007 and the Athens, Crete and Rome program started in 2008. The International Programs Office offers semester- and year-long programs abroad for students who desire a fuller experience. Often, students who have participated in one of Barrett's summer programs realize the major benefits of studying abroad and choose to continue through extended programs.

## Internships/Mentorships/Opportunities

Students in Barrett may participate in special internship opportunities-in government, industry and the private sectorthroughout metropolitan Phoenix. The college maintains a database of special opportunities, including community service and international and cultural events. For more information, call 480/727-6993.

## Events/Programming

Students enrolled in Barrett are given special access when important contributors to contemporary thought in society visit ASU. Each year the college hosts the university's premier scholar-in-residence program, the Centennial Lecture. Past guests include novelist Carlos Fuentes, paleontologist Steven Jay Gould, psychiatrist Robert Coles, microbiologist Lynn Margulis, essayist Susan Sontag, paleoanthropologist Meave Leakey, American Indian author N. Scott Momaday, Pulitzer Prize winning authors David Halberstam and Anna Quindlen, prolific and wide-ranging African American author and National Book Award recipient Charles Johnson, playwright Edward Albee, a prominent innovator in modern American drama, and Kathleen Sullivan, a renowned constitutional law scholar.

The college is also home to the John J. Rhodes Chair, designed to bring persons to the college who have significantly contributed to civic life and distinguished themselves as public service leaders. Students have unique opportunities to engage intellectually with these outstanding visiting lecturers. In 1998, the college was honored to have Dr. Henry A. Kissinger serve as the inaugural chair. American Indian scholar Donald Lee Fixico was the 2002 Rhodes Lecturer, followed by Jean Strause, notable biographer of J. P. Morgan in 2003, world-renowned astronomer David Levy in 2004, and leading alternate energy expert Hal Harvey in 2005. The Rhodes Lecturer in 2006 was economist and author Sylvia Ann Hewlett followed by long-time CNN anchor and journalist Aaron Brown in 2007.

## Additional Benefits

Barrett and all its facilities and services are fully available to every student, regardless of where he or she lives. The Honors Halls of Residence offer students an integrated living-learning environment. Barrett has its own faculty and academic advisors to serve all honors students. Classrooms, recreational and study lounges, and a state-of-the-art computing lab make up the principal facilities of the college.

Students enrolled in Barrett receive priority at preregistration and have extended checkout privileges in the campus libraries. Honors courses in disciplinary departments are typically limited to 25 students. Honors courses (with the prefix HON) are usually limited to 19.

Students who meet all requirements of both their disciplinary college and Barrett receive transcript recognition of that accomplishment, as well as special acknowledgment during graduation ceremonies and collegiate honors convocations.

Barrett students have diverse interests and strong records of success. Many are accepted into the nation's finest graduate and professional programs, including Chicago, Cornell, Harvard, Michigan, MIT, Northwestern, Stanford, UC-Berkeley, Virginia, Wisconsin and Yale. Many students have published portions of their honors theses and have presented their work at national and regional meetings of scientific and honors societies.

## Admission

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 Web site at honors.asu.edu [1].

## Retention

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 semester hours of honors course work):

1. HON 171 and 272/273 The Human Event must be completed by the time a student has earned 45 semester hours at ASU. Students are placed on inactive status if this requirement is not met.
2. Thirty additional semester hours of honors course work must be earned with a letter grade of " C " or higher. This may include HON prefix classes, honors sections of classes, honors contracts, or any automatic honors course such as ENG 105 (in-person sections), CHM 117, CHM 118, or PHY 333, or any graduate-level course.
3. Included in the 30 semester hours of honors course work are 18 hours of upper-division or graduate-level honors credits for an earned letter grade of "C" or higher, including six semester hours of honors course work outside the academic major. Students should investigate specialized honors upper-division tracks within their majors.
4. Upper division transfer students (defined as 60 or more university credits completed at the time of Barrett application) 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. 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.
5. Students are required to complete an honors thesis/creative project for at least three semester hours though students are encouraged to complete six thesis semester hours. The thesis semester hours may be included in the 18 required hours of upper-division honors course work. The thesis is launched with a prospectus form due one academic year before the defense. The final copy must be filed by the last week of classes during the student's graduation semester.
6. ASU graduation requirements in an academic major must be met.
7. The student must maintain a cumulative ASU GPA of 3.25 or higher.

Barrett students are expected to meet regularly with honors advisors. Three sessions are mandatory: one during the first semester in Barrett, one during the third semester, and another during the sixth semester. To make an appointment with an honors advisor, call 480/965-9155. Office hours are Monday through Friday 8 a.m. to 5 p.m., in MB C100-L1.

## Course Requirements

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 The Human Event. This cross-disciplinary seminar acquaints them with ideas that form the foundation of a university
education and emphasizes critical thinking, discussion and writing. Barrett students complete HON 171 and 272/273 during their first 45 units at ASU.

Those who enter as upper-division students must take 21 upper division honors credits, including a required 300-level honors course. Junior-level seminar courses introduce them 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 first or second semester after transferring.

Departmental honors-only courses in the ASU Online Schedule of Classes 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 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 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 Interactive 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) and CHM 117 and 118. MAT 300, PHY 201, and PHY 333, when taken by students with 45 or fewer semester hours also carry automatic honors credit, as long as the student receives a grade "A" (4.00) or "B" (3.00). Graduate level courses automatically earn honors credit.

## Honors Transcript Recognition

All courses used to fulfill graduation requirements for Barrett must carry earned letter grades of at least " C " (2.00). A " Y " grade meets college requirements only for HON 492 Honors Directed Study and HON 493 Honors Thesis.

## Graduation Requirements

To graduate through Barrett, students must

- complete all honors course requirements,
- complete all required semester hours of honors course work with a grade of "C" (2.00) or higher (a "Y" grade is allowed for HON 492, HON 493, and for one-semester-hour courses offered through Barrett) unless otherwise provided for by Barrett and the college of the student's major,
- complete ASU graduation requirements in an academic major, and
- earn a cumulative ASU GPA greater than or equal to $3.25(4.00=\mathrm{A})$.


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

Links:
[1] http://honors.asu.edu

## COLLEGE OF HUMAN SERVICES POLICIES

Note: On November 20th, 2008, the Arizona Board of Regents' Academic Affairs Committee voted to disestablish the College of Human Services on ASU's West campus. Its programs have been merged with other Arizona State University colleges and can be found below:

- Aging \& Lifespan Development — http://sald.asu.edu [1]
- Communication Studies-- http://www.newcollege.asu.edu/programs/comm_studies/ [2]
- Criminology \& Criminal Justice -- http://ccj.asu.edu [3]
- Recreation \& Tourism Management -- http://scrd.asu.edu/west [4]
- Social Work -- http://ssw.asu.edu/west [5]

Source URL: http://catalog.asu.edu/policies/human_services
Links:
[1] http://sald.asu.edu/
[2] http://www.newcollege.asu.edu/programs/comm_studies/
[3] http://ccj.asu.edu/
[4] http://scrd.asu.edu/west
[5] http://ssw.asu.edu/west

## WALTER CRONKITE SCHOOL OF JOURNALISM AND MASS COMMUNICATION POLICIES

## Undergraduate Policies


#### Abstract

Advising

Students should follow the sequence of courses outlined on school curriculum check sheets, 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 Cronkite School are available at cronkite.asu.edu [1].


## Graduate Policies

## Academic Standards and Policies

Students are required to maintain a 3.00 GPA. Graduate students wishing to take 400 -level courses with:

1. JMC 301 as a prerequisite must first successfully complete MCO 501 Newswriting and Reporting,
2. JMC 310 as a prerequisite must first successfully take JMC 415 Writing for Public Relations,
3. JMC 313 as a prerequisite must first successfully complete MCO 598 Introduction to Editing, or
4. JMC 330 as a prerequisite must first successfully take MCO 531 Broadcast Journalism.

Contact the department for additional information.

## Advising

Preadmission information, advising, and continued support are provided by the graduate student support specialist, who can be reached at 480/965-1796.

## Maximum Time Limit

Students have six 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

## SANDRA DAY O’CONNOR COLLEGE OF LAW POLICIES

## Graduate Policies

## Retention Standards

Beginning with the entering class of 2006-2007, law students must maintain a cumulative weighted GPA of 73.00 or higher at the end of the first year and each semester thereafter. Any student who fails to achieve a 70.00 GPA as of the end of the first year is permanently disqualified from enrollment. A student whose GPA falls in the 70.00 to 72.999 range is disqualified but can apply for readmission to the Office of the Dean. The Office of the Dean refers the application to a faculty Committee on Readmission. In cases where the GPA deficiency is slight and evidence of extenuating circumstances is convincing, readmission may be granted on a probationary status after a review of the reasons contributing to unsatisfactory performance and a finding that there is a substantial prospect for future acceptable academic performance. Continuation in school thereafter may be conditioned on achieving a level of performance higher than the overall 73.00 GPA.

## 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.

## Advising

Academic assistance is available through the Office of the Assistant Dean for Academic Affairs.

## Admissions Process

The Sandra Day O’Connor College of Law offers a full-time, daytime program. New students are admitted to the Juris Doctor (JD) program for the fall semester only. To be considered for admission to the JD program, an applicant must

1. 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,
2. take the Law School Admission Test (LSAT) and provide a reportable score from that test,
3. submit a completed application, and
4. register with the Law School Data Assembly Service (LSDAS). Note: The LSAT and LSDAS are administered by the Law School Admission Council (LSAC). 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 www.law.asu.edu/admissions [1]. For an application to be considered timely, it must be postmarked or electronically submitted by February 1. For earlier consideration, the early decision deadline is November 1.

Links:
[1] http://www.law.asu.edu/admissions

## COLLEGE OF LIBERAL ARTS AND SCIENCES POLICIES

## Undergraduate Policies

## 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, college graduation, and major degree requirements in their edition of the ASU General Catalog [1]. The ASU General Catalog is the governing source for all degree requirements.

## Regular Advising

All students are strongly urged to seek advising in the appropriate college unit before registration.

## eAdvisor

Members of the fall 2007 freshman class have a new way to manage their academic experience. ASU is introducing eAdvisor, which gives students the tools to successfully follow their major map to graduation. eAdvisor assists students in

1. learning more about graduation requirements for their major;
2. discerning what critical-requirement courses and grades are required to stay on track to successfully complete their degree;
3. planning for and scheduling appropriate courses in the correct sequence to maximize success;
4. monitoring progress toward their degree; and
5. finding out how courses may fit into other majors if they decide to change majors.

Access eAdvisor at https://webapp.asu.edu/eadvisor/ [2].

## Advising Locations

College of Liberal Arts students should seek routine advising at the locations shown in the Advising Locations table below. 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 Locations

| Student | Location |
| :--- | :--- |
| Declared majors in academic <br> good standing | Department of major |

## Mandatory Advising

The following categories of Liberal Arts and Sciences students must receive advising and must be cleared before their classes are scheduled:

1. students in their first semester at ASU,
2. students on probation,
3. students with a cumulative GPA of less than 2.00,
4. students in their first three semesters (in selected departments),
5. students who have been disqualified (these students are allowed to attend ASU summer and winter sessions only and must be advised in the Office of Student and Academic Programs in FULTN 110).

Students in the above mandatory advising categories should consult an advisor in the appropriate advising location listed in the previous section. Students are encouraged to check their mandatory advising status each semester before attempting registration transactions.

## Advising for Preprofessional Programs

Special advising is available for students planning to enter the fields listed in the Advising for Preprofessional Programs. 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 | Office Where Advisor Is Located |
| :--- | :--- |
| Dentistry* | Health Professions, FULTN 110 |
| Foreign service | Department of chosen major |
| Law | Office of Student and Academic Programs, FULTN 110 |
| Medicine* | Health Professions, FULTN 110 |
| Ministry | Department of Religious Studies, ECA 365 |
| Occupational therapy* | Health Professions, FULTN 110 |
| Optometry* | Health Professions, FULTN 110 |
| Osteopathy* | Health Professions, FULTN 110 |
| Pharmacy* | Health Professions, FULTN 110 |
| Physical therapy* | Health Professions, FULTN 110 |
| Podiatry* | Health Professions, FULTN 110 |

*Students preparing for a career in these areas should register in the Pre-Health
Professions office, 480-965-2365.

## 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 Health Professions staff 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 Health Professions, located in FULTN 110, call 480-965-2365.

## Prelaw

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 contact the prelaw advisor in the college or department of his or her major to obtain information regarding the procedure to apply to law school.

## 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 seeking information in their academic departments.

## 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 and Bachelor of Science degrees.
A. Bachelor of Arts Degrees. Students pursuing BA 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 consist of

1. 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),
2. a foreign language course at the 300 level or higher taught in the foreign language and having 202 or its equivalent as a prerequisite,
3. completion of secondary education at a school in which the language of instruction is not English, or
4. completion of SHS 202 American Sign Language IV or its equivalent.
B. Bachelor of Science degrees. Students pursuing BS degrees in the college must complete six semester 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.
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.

## 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 semester 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 semester 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 semester 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 CLAS, the assignment of a grade of " Y " 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 divisions:

1. Humanities:

Asian Languages (Chinese/Japanese)
English
Film and Media Studies
French
German
History
Italian
Philosophy
Religious Studies
Russian
Spanish
2. Natural Sciences and Mathematics:

Biochemistry
Biological Sciences
Clinical Laboratory Sciences
Chemistry
Computational Mathematical Sciences
Earth and Space Exploration
Geological Sciences
Kinesiology
Mathematics
Microbiology
Molecular Bioscience/Biotechnology
Physics
Psychology
Speech and Hearing Science
3. Social Sciences:

African and African American Studies
American Indian Studies
Anthropology
Communication
Economics
Family and Human Development
Geography
Global Health
Global Studies
Human Evolution and Social Change
Justice Studies
Political Science
Sociology
Transborder Chicana/o and Latina/o Studies
Women and Gender Studies

## General Electives

Most liberal arts and sciences majors can meet all of the above requirements with fewer than the 120 semester hours required for graduation. Remaining hours are general electives that may be selected from any of the departments of CLAS and from the offerings of the other colleges.

## Declaration of Graduation

The declaration of graduation, which is required by university regulations during the semester in which an undergraduate earns the 87th hour, must be filed and approved at least two weeks before the registration period for the subsequent semester. Students should run a new Degree Audit Reporting System report every semester to gauge how well they are meeting all requirements for graduation. Students should contact the Office of Student and Academic Programs, in FULTN 110, regarding college graduation rules and deadlines. Deadlines for filing the declaration of graduation after enrolling in the 87th hour are March 1 and October 1 of each year. Students with 87 hours must have a college-approved declaration of graduation before registering for the next semester.

## Credit Requirement

All candidates for graduation in the BA and BS degree curricula are required to complete at least 120 semester 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 semester hours in each major.

## Course Load

The normal course load is 15 to 16 semester hours. First-semester freshmen and entering transfer students are not permitted to register for more than 18 semester hours in the initial semester. Other students who wish to register for more than 18 hours must have a GPA of at least 3.00 and must file a petition in the Office of Student and Academic Programs, in FULTN 110, before registration. Any petition for an overload in excess of 21 hours must be presented to the Standards Committee of the college. No student should assume that his or her petition for overload will be granted.

## Special Credit Options

## 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 mark of "P" contributes to the student's earned hours but does not affect the GPA. A failing grade is computed into the GPA.

Only CLAS students with at least 60 semester hours may take courses under the pass/fail option. The option may be used under the following conditions:

1. enrollment for pass/fail needs the approval of the instructor and the college,
2. enrollment under this option must be indicated during registration and may not be changed after the late registration period, and
3. 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:

1. those taken to satisfy the second language or First-Year Composition requirements,
2. those in the student's major, minor, or certificate program,
3. those counted toward or required to supplement the major,
4. those counted as 499 Individualized Instruction,
5. those taken for honors credits, or
6. those counted toward satisfying the CLAS 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.

## Academic Standards

The standards for GPA and the terms of 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 CLAS is suspended for at least two regular semesters at the university. When students are placed on probation, one of three things can happen:

1. the student may raise his or her cumulative GPA to academic good standing by taking new classes and be removed from probation after the fall or spring semester;
2. 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 probation, earning the required semester GPA, for as many semesters as it takes to raise the cumulative GPA to good standing; or
3. 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 probation are not automatically readmitted. Such students, as well as all disqualified students, should contact the Office of Student and Academic Programs in FULTN 110, regarding procedures and guidance for reinstatement and returning to 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. Academic discipline is one of the functions of the Office of Undergraduate Programs. All students having academic difficulties of any kind should contact this office. 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.

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.

## 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.

## Graduate Policies


#### Abstract

Advising Faculty advisors in each academic unit provide guidance to graduate students from admission through completion of the program. Consult the director of graduate studies in the appropriate academic unit. Graduate students must follow an approved program of study filed with the Graduate College. The calendar for enrollment activities is published in the schedule of classes for each


semester. Teaching and research assistants, who are required to be enrolled in at least six hours, as well as those enrolled for individual project, thesis, and dissertation credit, are subject to the same calendar deadlines as students enrolled in regularly scheduled classes.

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

Links:
[1] http://catalog.asu.edu/
[2] https://webapp.asu.edu/eadvisor/

# MORRISON SCHOOL OF MANAGEMENT AND AGRIBUSINESS POLICIES 

## Graduate Policies

## 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/management

## NEW COLLEGE OF INTERDISCIPLINARY ARTS AND SCIENCES POLICIES

## Undergraduate Policies

## Degree Requirements

All candidates for graduation in the BA and BS degree curricula are required to present at least 120 semester hours, of which at least 45 semester hours must consist of upper-division courses. A minimum cumulative GPA of 2.00 is required for graduation. In cooperation with their college advisors, students file a Declaration of Graduation in accordance with the degree requirements. It is the students' responsibility to be aware of the requirements for their degree program and to select courses accordingly. To graduate, a student must satisfy separate requirements of three kinds:

1. college proficiency requirements for Language and Cultures and Mathematics,
2. university First-Year Composition and General Studies requirements, and
3. 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:

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 in the U.S. (C) designation, in addition to the courses used to meet the University General Studies requirements, or
5. 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 semester 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 semester hours of course work may be required to complete the major, related courses, and prerequisites. A minimum of 12 upper-division semester hours required for the major must be taken within the New College of Interdisciplinary Arts and Sciences.

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

Once the three kinds of requirements have been satisfied, the remainder of the minimum of 120 semester 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

## COLLEGE OF NURSING \& HEALTHCARE INNOVATION POLICIES

## Undergraduate Policies

## Admission

## Preprofessional Admission

Students are admitted into the College of Nursing \& Healthcare Innovation as "pre-major nursing" students. Admission to ASU as a pre-major nursing student does not guarantee admission into the professional program. Admission to the professional
program requires a separate application to the College of Nursing \& Healthcare Innovation and is competitive, with the greatest emphasis placed on grade point average based on selected prerequisite courses. In addition to meeting the university requirements for admission, it is recommended that students complete one year each of high school chemistry and biology. Pre-major nursing students are required to seek academic advising each semester through the College of Nursing \& Healthcare Innovation Student Services Office. This advising includes course planning and information about application materials and deadlines.

## Transfer Credits

While ASU accepts transfer credit from other accredited institutions, all transfer credit may not apply toward a Bachelor of Science in Nursing (BSN) degree. Students completing course work at a community college or university other than ASU should consult a College of Nursing \& Healthcare Innovation academic advisor to plan an appropriate sequence of prerequisite courses and to apply to the professional program. The college has a transfer partnership agreement with the Maricopa Community College District. See a College of Nursing \& Healthcare Innovation academic advisor for details. The college may not accept transfer credit (especially science) completed more than seven years before the date of application to the professional program.

## Professional Program Admission

Individuals interested in applying to the professional program must receive advising from a College of Nursing \& Healthcare Innovation academic advisor and are required to attend an application workshop. Contact the Student Services Office in the College of Nursing \& Healthcare Innovation at 602/496-0888 for details.

Students are eligible for consideration for admission to the professional program if they meet the following criteria: 1. regular admission to the College of Nursing \& Healthcare Innovation at the Downtown campus as a premajor Nursing student; 2. academic good standing at ASU and in the College of Nursing \& Healthcare Innovation; 3. minimum prerequisite GPA of 2.75 ; 4. completion of designated prerequisite courses with an earned grade of " C " (2.00) or higher in each course; 5. completion of all application materials; 6. submission of all required health and immunization requirements; 7. a Test of English as a Foreign Language (TOEFL) score of 550 or higher for international students (see TOEFL); 8. receipt of entrance examination scores; and 9. submission of other required materials. Admission is selective and based on available resources. Meeting the minimum prerequisite GPA does not ensure admission. All qualified applicants may not be admitted. Students admitted to the professional program are required to meet the following additional criteria: 1. proof of CPR certification (Level C American Heart Association Health Care Provider); 2. proof of negative drug screen; 3. completion of all required health and immunization information; 4. eligible for fingerprint clearance card; and 5. other required materials. Professional program courses are offered at the Community Services Building in Tempe, the Downtown Phoenix campus, the Mayo Clinic Hospital campus, the Polytechnic campus, and the West campus. Students are asked to specify location preference as part of the application process. Students are expected to complete the professional program on the campus assigned upon admission. The four semester ( 64 semester hour) professional program is available in two options: (1) a 24 -month option with classes scheduled during the fall and spring semesters at the Downtown campus, and (2) a 16 -month year round option with classes scheduled during fall, spring, and summer sessions with minimal breaks between semesters available at various sites. For more information, visit the Web site at nursing.asu.edu [1], or contact the College of Nursing \& Healthcare Innovation Student Services Office. Opportunities for individual, direct, and group patient care are available in a variety of settings: community clinics, health fairs, hospice, geriatric facilities, schools, industries, hospitals, home health and rehabilitation agencies.

## Professional Program Transfer

Students requesting to transfer into the professional program with advanced standing may be required to submit letters of recommendation. Any student enrolled in good standing at any accredited/approved baccalaureate school of nursing within the past two years may apply for admission into the professional program. To be considered for admission to the professional program, transfer students must first be admitted to ASU as pre-major nursing students (see Undergraduate Admission) and must also meet all professional program admission requirements. To be considered for advanced standing in the professional program courses, petitions for each course must be completed by the student accompanied by course descriptions and syllabus materials and be approved by the College Standards Committee.

## Admission of Registered Nurses (RNs)

All RN students are admitted into the College of Nursing \& Healthcare Innovation as pre-major nursing students. Each RN must show evidence of a current unencumbered Arizona RN license or one from a compact state recognized by the Arizona State Board of Nursing. RN students are responsible for adhering to Arizona State Board of Nursing Rules and Regulations. Alternatives are available to RNs to facilitate their progress in the program, including credit by examination, substitution of previously completed nursing courses for specified ASU nursing courses, and transfer of general education course work completed at other accredited colleges and universities. All RN students must consult with an academic advisor in planning their program of study. See Professional Program Admission, for admission criteria into the BSN professional program. Registered nurses are admitted into the RN-BSN only program track twice a year, in January and in August.

## Readmission to the Professional Program

Students who have not been in continuous enrollment must file a petition requesting readmission to the professional program and must provide the following documents: 1. proof of current enrollment or readmission to ASU and the College of Nursing \& Healthcare Innovation in good standing; 2. transcripts from all colleges or universities attended; and 3. all other admission requirements as outlined under Admission.

## Arizona State Board of Nursing Requirement

To be eligible to take the National Council Licensure Examination for Registered Nurses (NCLEX-RN), a student must have a high school diploma or GED certificate as well as proof of graduation from an approved nursing program. 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.

## College Health Requirements

Students admitted/enrolled in the professional program are responsible for fulfilling the requirements of the health policies of the College of Nursing \& Healthcare Innovation. The student is responsible for providing proof to the College of Nursing \& Healthcare Innovation Student Services Office of having met these requirements before enrollment in the professional program courses.

These health policies include the following requirements: 1. proof of measles (rubeola), mumps, and rubella immunization (two MMRs or appropriate titers); 2. proof of annual tuberculosis screening; 3. completed series of hepatitis B vaccine or proof of hepatitis B titer; 4. current American Heart Association Level C CPR Certification; 5. proof of tetanus, diphtheria immunization (TD); 6. proof of varicella (chicken pox) immunization; and 7. proof of negative drug screen. A student may not participate in any clinical experience without meeting these requirements. An annual flu vaccine is also recommended; other health information may be required. While the Hepatitis A vaccination is not required for admission, information on who might benefit from the vaccination is available from the College of Nursing \& Healthcare Innovation Student Services Office.

## Latex Sensitivity

Healthcare workers are at risk for developing Latex allergies, which may be life threatening. It is the student's responsibility to report if an allergy or sensitivity to Latex products is suspected; medical care is imperative for diagnosis, guidance and treatment.

## Fingerprint Clearance

All College of Nursing \& Healthcare Innovation students admitted to the professional program must submit a photocopy of their fingerprint clearance card to the Student Services Office by the first day of class.

## Essential Functions

Students admitted to the professional program 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. Some clinical experiences may require students to purchase their own protective devices. For complete details, call an advisor in the Student Services Office at 602/496-0888.

## ASU Health Requirements

See Undergraduate Admission, and Immunization Requirements.

## 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

Students are required by state law to carry automobile insurance. Students are responsible for transportation to and from clinical sites. Extensive travel may be required for selected clinical experiences.

## Academic Advising

Academic advising, provided by the College of Nursing \& Healthcare Innovation through the Student Services Office, is an essential aspect of the education experience; see Academic Advising. While the College of Nursing \& Healthcare Innovation provides academic advising, it is ultimately the responsibility of each student to fulfill academic and program requirements. Advisors are available by appointment in the College of Nursing \& Healthcare Innovation Student Services Office. Call 602/4960888 (see Student Services). Advisor appointments are also available at West campus, the Polytechnic campus, and at several community colleges in the area. Advisors assist students with program planning, registration, preparation of needed petitions, verification of graduation requirements, referrals to university and community resources, and career planning. 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.

## Mandatory Advising

All pre-major nursing students are required to meet with an academic advisor before registering for each semester of classes. All students on probation are required to meet with an advisor to plan strategies for improving their academic standing.

## Declaration of Graduation

Students following the curriculum requirements of the 1996-1998 or later catalog editions must file a Declaration of Graduation form using the Degree Audit Reporting System during enrollment in the first semester of the professional program.

## Student Employment

Each of the four semesters in the prelicensured professional program is composed of 16 semester hours. Seven to eight of these semester hours reflect three days in clinical laboratory practicum experience. The remaining eight to nine semester hours reflect classroom hours with preparation and study requiring additional time and effort. It is suggested that any other extracurricular activities or employment be kept at a minimum.

## Academic Standards

Students are admitted into the College of Nursing \& Healthcare Innovation as pre-major nursing students and are subject to the general standards of academic good standing at the university (see Retention and Academic Standards). However, students who maintain standards of academic good standing do not necessarily qualify for admission into the professional program. Consideration for admission into the professional program is contingent on achieving at least a " C " (2.00) in all prerequisite courses and earning a minimum GPA of 2.75 in prerequisite courses. In addition, a grade of " C " (2.00) or higher is required in all course work for the degree except in nursing practice courses where a designation of a " Y " (satisfactory) grade is required. Once admitted into the professional program, students are allowed only one nursing course failure within the program. The second failure in a nursing course leads to an automatic disqualification from the College of Nursing \& Healthcare Innovation. Probation and/or disqualification is in accordance with university policies. Academic dishonesty is not tolerated in any course and is subject to specific College of Nursing \& Healthcare Innovation policies and procedures.

## Graduate Policies

## Academic Advising

Students are advised by the Student Services Office before admission to the Master of Science program. Upon admission, each student is assigned a faculty advisor within the area of concentration.

Links:
[1] http://nursing.asu.edu

## COLLEGE OF PUBLIC PROGRAMS POLICIES

## Undergraduate Policies

## Advising

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.

## Mandatory 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: 1 . students with admissions competency deficiencies, 2 . all freshmen, 3 . transfer students in their first semester at ASU, 4. readmitted students, 5 . students on probation, 6 . students who have been disqualified, 7 . students with special admissions status, and 8. all undergraduate students majoring in Social Work.

## Course Load

A normal course load per semester is 15 to 16 semester hours. The maximum number of hours for which a student can register is 18 semester 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 semester 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.

## Academic Standards And Retention

## Good 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. However, to achieve professional status in the undergraduate degree programs in the college, students must have a cumulative GPA of 2.50 or higher at ASU.

## 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 (1) the student has not returned to good standing, or (2) 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 and/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.

## Reinstatement

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 600, under the direction of the dean of the college. Students having academic problems should call this office for advising at 602/496-0600.

## 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.

## SCHOOL OF SUSTAINABILITY POLICIES

## 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. We encourage 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. It is highly encourage that students call ahead (480-727-6963) to make an appointment so advisors can set aside the appropriate time to answer all their questions.

## Undergraduate Academic Standards

## 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 cancelled. A student who has been disqualified may apply for reinstatement through the School.

## Reinstatement and 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.

## School Undergraduate 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 Bachelor of Arts and Bachelor of Science degrees.

## 1. ASU 101 Requirement:

ASU 101-SOS: The ASU Experience (1)

## 2. Statistics Requirement:

STP 226 Elements of Statistics (3) CS
or
additional statistics course options as approved by the school

## 3. Foreign Language Requirement:

Bachelor of Arts Degrees. Students pursuing BA 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 consist of

- 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; or
- completion of secondary education at a school in which the language of instruction is not English.

Bachelor of Science Degrees. Students pursuing BS 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 consist of

- 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; or
- 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 SOS major courses in order to graduate with a Bachelor of Arts or Bachelor of Science degree 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 BA or BS in Sustainability as well as a BA in Business with a Concentration in Sustainability.

## Graduate Policies And Academic Standards

Graduate students should refer to the School of Sustainability Graduate Handbook at http://schoolofsustainability.asu.edu/docs/sos/GraduateHandbook.pdf [1] for information about graduate policies and academic standards.

Please contact the school for more information, http://schoolofsustainability.asu.edu/ [2].

[^1]Links:
[1] http://schoolofsustainability.asu.edu/docs/sos/GraduateHandbook.pdf
[2] http://schoolofsustainability.asu.edu/

# COLLEGE OF TEACHER EDUCATION AND LEADERSHIP POLICIES 

## Undergraduate Policies

## Academic Policies

Students enrolled in undergraduate education programs are expected to maintain academic standards and demonstrate qualifications for the teaching profession, including mental health, interpersonal skills, basic communication skills, a positive attitude, appropriate professional conduct and satisfactory performance in field experiences. 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.

Any undergraduate education student whose cumulative GPA falls below 2.50 may be placed on academic probation or suspended from enrollment in professional courses for the next semester. Students on academic probation or suspension from the university and/or the College of Teacher Education and Leadership must seek advising from a college academic advisor before registering for additional course work. Probation and/or suspension status for academic reasons begins on the first day of classes of the semester after the probation or suspension action. Students placed on probation or suspension for any reason are subject to disqualification by the College of Teacher Education and Leadership at the end of the following semester if the conditions imposed for reinstatement are not met. Students placed on 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. Students who wish to appeal decisions of the College of Teacher Education and Leadership's Student Issues Committee may do so in writing to the dean of the college. Any exceptions to the above retention and disqualification policies and procedures must be approved by the College of Teacher Education and Leadership’s Student Issues Committee and the dean of the college.

## Graduate Policies

## Graduation/Exit Requirements

Candidates for the MEd degree are required to complete a comprehensive exam unless their program requires an applied project or its equivalent.

## COLLEGE OF TECHNOLOGY AND INNOVATION POLICIES

## Undergraduate Policies

## Advising

New incoming and transfer students should seek initial advising from an academic advisor in the dean's office. College of Technology and Innovation students are then assigned faculty advisors who assist them with planning a program of study in the department of their major. The college requires that students consult with advisors 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 semester 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.

## Academic Standards

## Retention

A student is expected to make satisfactory progress toward completion of degree requirements to continue enrollment in the College of Technology and Innovation. Any one of the following conditions is considered unsatisfactory progress and results in the student's being placed on probationary status:

1. a semester with a GPA less than or equal to 1.50 ,
2. two successive semesters with GPAs less than 2.00 , or
3. an ASU cumulative GPA less than 2.00 .

A student on probation is subject to disqualification if:

1. a semester GPA of 2.25 is not attained and the cumulative GPA is below 2.00 at the end of the probationary semester, or
2. the student is placed on probation for two consecutive semesters and is unable to achieve the standard GPA stated in number one.

Students on academic probation are not allowed to register for more than 13 semester hours. Probationary students may not register for the semester following the semester in which they were declared probationary without a special permit from an advisor in the dean's office. Special permits are given only after the registrar records grades for the current semester.

## Disqualification

During a semester on academic probation, a student who fails to meet the retention standards is disqualified. Students may request a review of their disqualification status by contacting the associate dean in the College of Technology and Innovation. Any disqualified student who is accepted by another college at ASU may not register for courses in the College of Technology and Innovation unless the courses are required in the new major. Disqualified students who register for courses in the college may be withdrawn from these courses any time during the semester.

## Reinstatement

The college does not accept an application for reinstatement until the disqualified student has remained out of the college for at least a 12 -month period. Merely having remained in disqualified status for this period of time does not, in itself, constitute a basis for reinstatement. Proof of ability to do satisfactory college work in the chosen discipline is required; for example, completing pertinent courses in the discipline at a community college with higher-than-average grades.

## 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 semester hours is required for the degree program. Of these, a minimum of 15 semester 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 MSTech, 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 semester hours of appropriate course work completed before admission may be included in the program of study.

## UNIVERSITY COLLEGE POLICIES

## Undergraduate Policies

## Exploratory Major Students Critical Requirements

All incoming ASU freshmen participate in the critical requirements program. Critical requirements are designed to help students graduate in four years by clearly outlining course requirements and course progression and by placing critical courses in the early semesters to help students determine degree fit and suitability.

To that end, University College (UC) has developed major maps that support students exploring potential majors during their first few semesters at the university. Upon admission to University College, all first-year exploratory majors are required to declare an exploratory major track in one of four areas: exploratory social and behavioral sciences track, exploratory health and life sciences track, exploratory humanities and fine arts track, and exploratory math, physical science, and engineering track.

Each of these major 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 current interests. By strategically selecting courses, students can make progress toward choosing a major with the appropriate fit. Each exploratory track is composed of a three-semester major map, with the end goal of having students declare their major by no later than completion of 45 semester 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://webapp.asu.edu/eadvisor/MajorMaps.html [1] [2].

## School of Letters and Sciences

The School of Letters and Sciences offers a liberal arts core curriculum on the Downtown Phoenix campus and a university-wide bachelor's degree in interdisciplinary studies. We provide foundational instruction in humanities, social sciences and natural sciences for all students on the Downtown Phoenix campus, and we are invested in the development of learning-centered coursework for students in the College of Nursing and Healthcare Innovation, College of Public Programs and Walter Cronkite School of Journalism and Mass Communication.

The School of Letters and Sciences is designed to respond to the needs of ASU students, faculties of the downtown schools and colleges, the challenges of higher education and our constituent communities. Guiding principles of the school are embedded student success programs, strategic partnerships both inside the university and in the community, and interdisciplinary inquiry.

## Academic Good Standing

For purposes of retention, academic good standing for all students in University College is defined in the Academic Good Standing table below.

## Academic Good Standing

Total Hours Earned Minimum Cumulative GPA

| 24 or fewer | 1.60 |
| :--- | :--- |
| $25-55$ | 1.75 |
| 56 or more | 2.00 |

A student who does not maintain the minimum GPA standard 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.

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

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

Links:
[1] https://webapp.asu.edu/eadvisor/MajorMaps.html
[2] http://www.asu.edu/programs/majormaps

## ACADEMIC PROGRAMS

## Concurrent and Dual Degrees

| Degrees | Administered by |
| :---: | :---: |
| JD/MBA | Sandra Day O’Connor College of Law/W. P. Carey School of Business |
| JD/MD | Sandra Day O'Connor College of Law/W. P. Carey School of Business |
| JD/MHSM* | Sandra Day O'Connor College of Law/W. P. Carey School of Business |
| JD/MS in Economics* | Sandra Day O'Connor College of Law/W. P. Carey School of Business |
| JD/PhD in Justice Studies | Sandra Day O'Connor College of Law/W. P. Carey School of Business |
| JD/PhD in Psychology | Sandra Day O’Connor College of Law/W. P. Carey School of Business |
| MAIS/MBA | W. P. Carey School of Business |
| MArch/MBA | School of Architecture and Landscape Architecture/W. P. Carey School of Business |
| MBA/Master of International Management | W. P. Carey School of Business/Carlos III University of Madrid (Spain); Graduate School of Business Administration (Peru); Graduate School of Commerce (France); and Monterrey Institute for Technical and Superior Studies, Mexico State Campus (Mexico) |
| MBA/MEng | W. P. Carey School of Business/Ira A. Fulton School of Engineering |
| MBA/MHSM | W. P. Carey School of Business |
| MBA/MSE in Electrical Engineering | W. P. Carey School of Business/Department of Electrical Engineering |
| MBA/MSE in Industrial Engineering | W. P. Carey School of Business/Department of Industrial Engineering |
| MBA/MS in Economics* | W. P. Carey School of Business |
| MBA/MS in Information Management | W. P. Carey School of Business |
| MBA/MTax | W. P. Carey School of Business |
| MPA/MSW | School of Public Affairs |
| MSE in Industrial <br> Engineering/Master of International Management of Technology | Department of Industrial Engineering/Thunderbird-Garvin Center for Culture and Languages of International Management |
| * Applications for this program are not being accepted at this time.; Please contact the department for more information.; |  |
| Source URL: http://catalog.asu | concurrent_dual |

## Accelerated Bachelor's and Master's Programs

Degrees
BSE/MS in Aerospace Engineering
BS/MS in Biology
BS in Computational Mathematical Sciences/MA in
Mathematics
BS/MS in Computer Science
BSE in Computer Systems Engineering/MS in Computer
Science
BSE/MS-MSE in Industrial Engineering
BA/MMC in Journalism and Mass Communication
BS/MA in Mathematics
BSE/MS in Mechanical Engineering
BS in Parks \& Recreation Management/MS in Recreation
and Tourism
BA/MA in Political Science
BS in Tourism Development \& Management/MS in
Recreation and Tourism

| Administered by |
| :--- |
| Department of Mechanical and Aerospace Engineering |
| School of Life Sciences |
| Department of Mathematics and Statistics |
| School of Computing and Informatics |
| School of Computing and Informatics |
| Department of Industrial Engineering |
| Walter Cronkite School of Journalism and Mass Communication |
| Department of Mathematics and Statistics |
| Department of Mechanical and Aerospace Engineering |
| School of Community Resources \& Development |
| Department of Political Science |
| School of Community Resources \& Development |

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

# Graduate Degrees and Certificates (Program Descriptions and Requirements) 

## APPLIED ARTS AND SCIENCES, SCHOOL OF

## Applied Biological Sciences (MS) TSAPBIOSMS

SCHOOL OF APPLIED ARTS AND SCIENCES, POLY

Contact: http://www.poly.asu.edu/saas/appliedbiologicalsciences/index.html | appliedbiologicalsciences@asu.edu | 480/727-1444 | 0180

Official Degree Awarded: Applied Biological Sciences (MS)
Program Description: The MS in Applied Biological Sciences is designed to train 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 MS in Applied Biological Sciences degree is supported by faculty with backgrounds in ecological restoration, environmental biotechnology, environmental policy, plant systematics, urban horticulture and 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.

Program Requirements:

## Program of Study

A minimum of 30 semester hours of approved graduate coursework is required. All students are required to complete two seminars: ABS 591 in the spring semester and ABS 691 in the fall semester. All students also are expected to complete three semester hours of research and three semester hours of thesis. 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 is required.

## Final Examinations

A final oral examination covering the thesis and related subject matter is required.

Admission Requirements: Applicants to the program are expected to meet the minimum requirements for admission to the Division of Graduate Studies. In addition, scores from the Graduate Record Examination (minimum score of 1080 Verbal and Quantitative combined) or Miller Analogies Test (minimum score 45) are required. Applicants are expected to have completed 18 semester 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 requirements may be considered for admission with deficiencies.

Submit the following separate application materials to:

Department of Applied Biological Sciences
College of Technology and Innovation
Arizona State University
7001 E. Williams Field Road
Mesa, AZ 85212-6032

1. a statement of intent (maximum 600 words) explaining (a) the applicant's interest in environmental resources, (b) the applicant's academic background, and (c) the applicant's educational objectives;
2. three letters of recommendation from references who are qualified to comment on the applicant's potential in the selected area of study; and
3. a résumé.

## Application Deadlines

For fall enrollment, application materials are due in the Department of Applied Biological Sciences and the Division of Graduate Studies on March 15.

For spring enrollment, application materials are due in the Department of Applied Biological Sciences and the Division of Graduate Studies on October 15.

## Selection Procedures and Notifications

Department faculty evaluate the applications and supporting materials, and recommend to the Division of Graduate Studies whether the applicant should be granted regular or provisional admission or if admission should be denied. If admission is provisional, the Division of Graduate Studies, in its letter of admission, specifies the provisions to be met to gain regular status. The school informs successful applicants of the procedures for enrollment.

## Applied Psychology (Polytechnic Campus) (MS) ECAPSYCHMS

## SCHOOL OF APPLIED ARTS AND SCIENCES, POLY

Contact: http://www.poly.asu.edu/saas/appliedpsych/masters/ | SUTON 340 | 480/727-1177 | 0180

## Official Degree Awarded: Applied Psychology (MS)

Program Description: The MS program provides professional degrees in human factors and industrial/organizational psychology for students wishing to pursue careers in these fields. Human factors is concerned with assuring the usability of products through design and testing. Industrial/organizational psychology looks at such issues as employee selection, compensation, leadership and job satisfaction. The MS program offers specialized training to complement the BS degree in Applied Psychology at the Polytechnic campus.

Program Requirements: The MS degree requires the completion of 30 semester 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 exam. Students selecting the applied project option will, under the guidance of an advisor, allocate the 12 semester 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 submit the Graduate College online application.
Admission requirements include:

- A bachelor's degree from a recognized educational institution (minimum 3.00 GPA)
- GRE scores on the Verbal and Quantitative tests
- Three letters of recommendation
- A personal statement including background, interests, qualifications, and goals
- TOEFL scores for applicants who are not native English speakers


## Exercise and Wellness (MS) ECEXERMS

SCHOOL OF APPLIED ARTS AND SCIENCES, POLY
Contact: http://www.poly.asu.edu/saas/wellness/degree/masters/ | julie.rice@asu.edu | EAW 109 | 480/727-1945 | 0180
Official Degree Awarded: Exercise and Wellness (MS)
Program Description: The Department of Exercise and Wellness is committed to preparing outstanding scholars and professionals in the areas of strength and conditioning, fitness/wellness leadership as well as in health and wellness promotion. The Master's Degree in Exercise and Wellness 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, commercial fitness and wellness, worksite or corporate health promotion, and personal training who are interested in an advanced training in exercise and wellness, health promotion, or in physical activity and chronic disease should consider the program.

Program Requirements: Potential students must have a designated mentor in order to be accepted into the MS program. All applicants are required to complete a statement of interest describing their career goals and research/professional interests. A minimum of 30 semester hours of graduate courses are required to complete the MS degree. The student's program of study is separated into three course work areas: Research courses, exercise and wellness concentration courses and elective courses. The basic program of study includes 15 semester hours of research course work (research methods, research statistics, research seminar and thesis) and 15 semester hours of Exercise and Wellness concentration courses. The thesis is considered a final integrative experience of the Exercise and Wellness degree. It involves conducting research that is guided by a recognized research paradigm (e.g., scientific, interpretive) and producing a scholarly report of the process and results.

Admission Requirements: Applicants must submit the Graduate College online application. In addition to meeting the Graduate College requirements, all applicants for the MS degree program in Exercise and Wellness are required to submit scores from the Graduate Record Examination (GRE). International applicants whose native language is not English must also submit a Test of English as a Foreign Language (TOEFL) score. Admission to the MS degree program is based on a number of factors including: GPA, GRE scores, letters of recommendation, statement of career/research interests and the availability of a mentor with matching interests. Priority is given to applications completed by January 15. Students who do not have undergraduate credit for the basic courses required for a BS degree in Exercise and Wellness can be admitted with deficiencies. Deficiencies are determined upon admission and students will be provided with a list of courses that must be completed before graduation. These courses are not considered part of the graduate program of study.

## Nutrition (Polytechnic Campus) (MS) ECHNUTMS

## SCHOOL OF APPLIED ARTS AND SCIENCES, POLY

Contact: http://www.poly.asu.edu/ecollege/nutrition/graduate/ | nutrition@asu.edu | Health Science Center | 480/727-1728 | 0180

## Official Degree Awarded: Nutrition (MS)

Program Description: The Master of Science in Nutrition program at Arizona State University's Polytechnic campus 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. The MS degree requires the completion of a minimum of 30 semester hours and a thesis. Graduate students who are currently in good academic standing in the MS program in nutrition at ASU may elect to apply to the ASU Dietetic Internship once they have completed at least six graduate hours from the ASU Department of Nutrition.

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.

Program Requirements: The program of study must contain a minimum of 30 semester hours of approved graduate-level work, and a thesis is required. The following courses are required: research methods, NTR 500 and NTR 501 (six semester hours); statistics (three-six semester 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 semester hours from NTR 521/523/525/527/529/598); thesis (six semester hours).
*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.

Admission Requirements: Applicants must submit a Graduate College online application.
The following are prerequisites for admission into the MS in Nutrition program at the Polytechnic campus:

- General Nutrition for majors (such as NTR 241 at ASU)
- Microbiology with Lab (such as MIC 205 and 206 at ASU)
- Anatomy and Physiology I and II with Labs (such as BIO 201 and 202 at ASU)
- General Chemistry I and II with Labs (such as CHM 113 and 116 at ASU)
- Organic Chemistry with Lab (one semester only is required, such as CHM 231 and 235 lab at ASU)
- Biochemistry (one semester only is required, such as BCH 361 and 367 lab at ASU)
- Statistics (any statistics course)


## Physical Activity, Nutrition, and Wellness (PhD) ECNUTRIPHD

SCHOOL OF APPLIED ARTS AND SCIENCES, POLY
Contact: http://www.poly.asu.edu/saas/wellness/degree/doctorate/ | julie.rice@asu.edu | EAW 109 | 480/727-1945 | 0180
Official Degree Awarded: Physical Activity, Nutrition and Wellness (PhD)
Program Description: The Executive Committee of the Physical Activity, Nutrition and Wellness program offers an interdisciplinary graduate program leading to the PhD degree in Physical Activity, Nutrition and Wellness (PANW). The PhD degree in PANW is an individualized interdisciplinary program that integrates graduate courses from several academic units to provide a sound foundation for research leading to a dissertation. 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 and nutrition. 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. The PANW doctoral program prepares research scholars, teachers, and professionals who study physical activity, nutrition, healthy lifestyles, and health promotion. The program will prepare graduates for careers in higher education, governmental agencies, and health-related positions in private industry. The Interdisciplinary PhD 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 research internships, independent research experiences, seminars and colloquia, and dissertation research.

Program Requirements: This program requires a total of 97 semester hours of course work, a dissertation, and written and oral comprehensive examinations. The program of study (POS) in the PANW program consists of a minimum of 68 semester hours over the MS degree distributed across five areas of study: Professional development (five hours), research core ( 26 hours), cognate ( 12 hours), concentration (12 hours) and dissertation (12 hours). It is expected that nine of the 12 semester hours in the concentration will be in a focused content area within the concentration. No more than six semester hours in the concentration can be taken from outside the PANW program without approval of the PANW executive committee. An individual POS is selected in consultation with the student's supervisory committee. It is expected that students admitted to the PhD program will have a strong foundation in either physical activity or nutrition. Individuals lacking background in these areas will be required to make up deficiencies before admission. It is also expected that all students will enter the program with at least one graduate-level statistics course and a basic research methods course. Other requirements may be necessary depending on the area of study and will be determined by the mentor and executive committee.

It is expected that students will spend three years in full-time residence. The intent is to involve and embed the student in ongoing research as well as class study. Thus, all PhD students are to be full-time students and hold part-time appointments ( 50 percent time - 20 hours per week) -- as a teaching assistant (TA) or research assistant (RA). As such, to be accepted into the program, funding must be available and you must have the expertise, experience and willingness to teach courses in the EXW or Nutrition undergraduate curriculum, or be a research assistant and conduct research with your mentor as funding allows.

Admission Requirements: Applicants must submit the Graduate College online application. In addition to meeting Graduate College requirements, students must submit a letter of intent designating the name of a potential mentor (from a list of approved faculty mentors) and a statement of career goals to the chair of the PANW executive committee. Graduate Record Examination (GRE) scores (verbal, quantitative and writing), a six to ten page writing sample, a professional résumé, and three letters of recommendation must also be submitted. Additionally, all students must submit an application for a teaching/research assistantship. Applicants whose native language is not English must submit a Test of English as a Foreign Language (TOEFL) score. Applicants must have successfully received a master's degree prior to admission to the PhD program and it is preferable that they have completed a data-based research thesis. 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 and GPA, GRE scores, recommendations, and match of research interests with those of available mentors. First priority will be given to completed applications received by January 15 .

## ARTS, KATHERINE K. HERBERGER COLLEGE OF THE

## Art - Digital Technology (MFA) FADIGITMFA

KATHERINE K. HERBERGER COLLEGE OF THE ARTS, TEMPE
Contact: http://art.asu.edu | vicki.kelley@asu.edu | Art Building 121 | 4809656303 | 1505
Official Degree Awarded: Art (Digital Technology) (MFA)
Program Description: The MFA in Digital Technology is offered by the School of Art in collaboration with the Arts, Media and Engineering program. 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.

Program Requirements: A minimum of 60 semester hours of graduate credit subject to committee approval is required, including

1. 27 to 32 graduate studio semester hours in the major area(s) of concentration (with the exception of digital technology where 18 semester hours are ART classes and 18 semester hours are AME classes),
2. six semester hours of graduate-level art history and three semester hours of other interdisciplinary graduate credit to supplement MFA work (nonstudio courses), except for digital technology, which requires six semester hours of ARS,
3. nine semester hours of graduate-level course work outside of the major area of concentration, of which three semester hours must begin with the ART prefix and the remaining six semester hours may be outside the School of Art (except for digital technology, which requires nine semester hours of electives in the School of Art and Arts Media and Engineering), and
4. 10 to 15 hours of ART 680 Practicum, resulting in an MFA exhibition (except digital technology, where six hours will be ART 600 and six hours will be AME593).

Admission Requirements: A bachelor's degree from a college or university recognized by ASU is required. All students applying for the MFA degree 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 and a statement of intent pertaining to the students educational objectives are also required. Applications for the digital technology concentration program must also include a
statement and evidence of work demonstrating digital technology skills beyond end user applications, as well as an art and digital technology resume.

## Art Education (MA) FAARTEDMA

KATHERINE K. HERBERGER COLLEGE OF THE ARTS, TEMPE
Contact: http://art.asu.edu | vicki.kelley@asu.edu | Art Building 121| 4809656303| 1505
Official Degree Awarded: Art (Art Education) (MA)
Program Description: The faculty in the School of Art offer a program with a major in Art leading to the MA degree with concentrations in art education and art history. Students admitted to the Master of Education degree program with a major in Secondary Education may also elect art as the subject matter field.

Program Requirements: The degree program requires a minimum of 30 semester hours of credit in art education, including 18 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, and 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 semester hours), a program of study must be submitted to the Graduate College. Additional program requirements are indicated in the MA in Art Education Guidelines.

Admission Requirements: An applicant must have a bachelor's degree from a regionally accredited college or university with a major of not less than 45 semester 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 3.00 in undergraduate course work during the junior and senior years. Applicants who do not meet these requirements must submit scores from the Miller Analogies Test or the Graduate Record Examination. Applicants should submit a formal art education research paper for review. Applications are accepted throughout the year.

## Art History (MA) FAARTHISMA

KATHERINE K. HERBERGER COLLEGE OF THE ARTS, TEMPE
Contact: http://art.asu.edu | vicki.kelley@asu.edu | Art Building 121 | 4809656303 | 1505
Official Degree Awarded: Art History (MA)
Program Description: The faculty in the School of Art offer a program with a major in Art leading to the MA degree with concentrations in art education and art history.

Program Requirements: The degree program requires 30 semester hours of credit, including 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: non-Western, ancient/medieval, renaissance/baroque, and modern. 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: 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 an average GPA of 3.00 or higher was maintained. Graduate Record Examination (aptitude test) scores must be submitted in support of the application,
along with three letters of recommendation. Applicants should submit one formal research paper for review and a one-page statement of intent indicating their objectives for graduate study. The application deadline is January 15.

## Ceramics (MFA) FACERAMMFA

KATHERINE K. HERBERGER COLLEGE OF THE ARTS, TEMPE
Contact: http://art.asu.edu | vicki.kelley@asu.edu | Art Building 121 | 4809656303 | 1505
Official Degree Awarded: Art (Ceramics) (MFA)
Program Description: 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. Artists come from the world over, including Thailand, China, Australia and Turkey. The recent addition of the nationally important 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.

Program Requirements: A minimum of 60 semester hours of graduate credit subject to committee approval is required, including:

1. 27 to 32 graduate studio semester hours in the major area(s) of concentration (with the exception of digital technology where 18 semester hours are ART classes and 18 semester hours are AME classes),
2. six semester hours of graduate-level art history and three semester hours of other interdisciplinary graduate credit to supplement MFA work (nonstudio courses), except for digital technology, which requires six semester hours of ARS,
3. nine semester hours of graduate-level course work outside of the major area of concentration, of which three semester hours must begin with the ART prefix and the remaining six semester hours may be outside the School of Art (except for digital technology, which requires nine semester hours of electives in the School of Art and Arts Media and Engineering), and
4. 10 to 15 hours of ART 680 Practicum, resulting in an MFA exhibition (except for digital technology, where six hours will be ART 680 and six hours will be AME 593).

Admission Requirements: A bachelor's degree from a regionally accredited college or university recognized by ASU is required. All students applying for the MFA degree must submit to the graduate coordinator a portfolio of images of their work on a CDROM disk containing 20 JPEG files ( 1000 pixels in the long dimension) or 20 images assembled as a PowerPoint presentation. Three letters of recommendation, a current curriculum vitae and a statement of intent pertaining to the student's educational objectives are also required.

## Conducting (DMA) FACONDDMA

KATHERINE K. HERBERGER COLLEGE OF THE ARTS, TEMPE
Contact: http://music.asu.edu | margie.vincent@asu.edu | Music E167 | 480/965-5069 | 0405
Official Degree Awarded: Music (Conducting) (DMA)
Program Description: The Doctor of Musical Arts (DMA) is a professional degree program designed for students desiring high levels of performance, academic proficiency, and preparation for teaching positions at the university level. The major is Music with four concentrations: conducting, music composition, music education, and performance (instrumental, keyboard, piano accompanying, piano pedagogy, voice).

Program Requirements: A total of 90 semester hours beyond the bachelor's degree is required. Only 30 hours from a master's degree or other postgraduate work will be counted toward the 90 hour requirement. Once admitted to a DMA degree program, the student is expected to be enrolled continuously, excluding summer sessions, until all requirements for the degree have been fulfilled. In general, the DMA degree 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 following the first year ( 30 to 32 semester hours) of graduate study must be spent in continuous full-time residence at ASU. After the first year ( 30 to 32 semester hours), at least 54 hours must be completed in residence at ASU. The conducting concentration requires the completion of research paper(s)/project(s) in conjunction with performances (one of which must be a lecture-recital).

Admission Requirements: Students seeking admission normally hold the Master of Music degree. Applicants with other degrees are considered if they have received graduate training similar to that normally expected in a Master of Music degree program. The application for admission must be accompanied by an applicant's statement relating to goals, preparation, and educational background. The applicant must submit scores for the GRE (quantitative, verbal, and analytical) or the MAT. Three letters of recommendation are required. Applicants must supply a clear videotape of a rehearsal performance. Additional audiotapes may be submitted to reflect the applicant's ability to refine music in a performance setting. Once reviewed, an applicant may be asked for a live audition. The deadline is February 15 for teaching assistantship applications.

## Dance (MFA) FADANCEMFA

## KATHERINE K. HERBERGER COLLEGE OF THE ARTS, TEMPE

Contact: http://dance.asu.edu/ | asudance@asu.edu | PEBE 170A | 4809655899 | 0304

## Official Degree Awarded: Dance (MFA)

Program Description: The MFA program in dance at ASU is a highly flexible while offering a solid foundation in practical and theoretical course work. The department actively welcomes a diversity of applicants, including returning professionals, with experience and/or interest in choreography, dance science and somatics, dance and technology, community-based practice, educational and professional partnerships, and dance history, philosophy and criticism, and those whose approaches are interdisciplinary and/or cross-cultural in nature. The ASU Department 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.

Program Requirements: The MFA program in Dance requires 60 credit hours. Incoming students are encouraged to take foundational course work, which has been designed to be a broad and fundamental preparation for future careers in independent artistic practice, professional dance companies, higher education, community colleges, high schools, private studios, the wellness industry, technology and community partnerships (among others). In addition to the foundational course work, approximately 18 credit hours are available to pursue a specialization of interest.The MFA project in dance, worth eight credits, serves as the capstone experience in the graduate dance curriculum. Students have the opportunity to select the format and structure of their project in conjunction with their MFA 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 department recognizes and encourages individual strengths and professional experience that may strongly affect the student's choice of course work. Petitioning out of specific classes in which the MFA candidate has expertise is acceptable upon review by the department chair. The committee will also consider a completely unique program of study.The MFA project, which may involve producing original choreography, presenting a lecture demonstration on a body of research, or presenting another form of original work, acts as the culminating experience of the program. A final written thesis, reflective in nature, as well as an oral defense complete the process. The Graduate College has approved a maximum time limit of seven years to completre the MFA in Dance.

Admission Requirements: To apply for admission to the MFA degree program in Dance, a student must complete an application form and supply official copies of all transcripts from previous institutions to the Graduate College. The Department of Dance requires a current résumé, three letters of reference, and a DVD of work made by the student within the last three years and/or a portfolio of relevant work in a chosen area(s) of expertise. Included with these materials should be a statement of intent regarding program of study (300-600 words) and its relationship to the core values of the department. MFA interviews are required and are generally held in January. At the department interview, the applicant participates in an unfamiliar technique class, presents a solo work of up to five minutes (this work must have been choreographed by the student), shows an improvisation based on a given task, and has a 20 -minute dialogue with a member of the department. A petition may be submitted to the department chair for exception to the above process.

In the case of interview by DVD the above requirements remain as indicated. The interview will be conducted by phone with the department chair and members of the faculty. It is highly recommended that anyone considering enrolling at ASU come to the campus during the regularly scheduled interview time. Because the number of graduate openings is limited, it is important that the particular strengths of the department and the specific needs and wants of the student be matched accordingly.

## Dance - Interdisciplinary Digital Media and Performance (MFA) FADANDIMFA

## KATHERINE K. HERBERGER COLLEGE OF THE ARTS, TEMPE

Contact: http://dance.asu.edu/ | asudance@asu.edu | PEBE 170A | 4809655899 | 0304
Official Degree Awarded: Dance (Interdisciplinary Digital Media and Performance) (MFA)
Program Description: The concentration in Interdisciplinary Digital Media and Performance (IDMP) expands on the strength of the Department of Dance in the specific area of interactive arts, 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 MFA 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. A final written thesis, reflective in nature, as well as an oral defense complete the process.

Program Requirements: The degree requires 60 credit hours and normally involves three years of residency. There is an interview for admission into the program, on-going showings of work, 18 credit hours of required coursework in the concentration taught by AME, 19 required credit hours in the Department of Dance, 15 credits of electives, a final MFA Project (eight credits), a written document and an oral defense. The current MFA in dance is a 60 credit-hour-degree program, normally accomplished during three years of residency in the department. Foundational coursework is offered in areas of technique, choreography, theory, education, professional development and technology. Ongoing showings of choreography and/or other creative work are required.

Students enrolled in the IDMP specialize in areas related to AME research. The MFA 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. A final written thesis, reflective in nature, as well as an oral defense complete the process.

Admission Requirements: To apply for admission to the MFA degree program in Dance, a student must complete an application form and supply official copies of all transcripts from previous institutions to the Graduate College. The Department of Dance requires a current résumé, three letters of reference, and a DVD of work made by the student within the last three years and/or a portfolio of relevant work in a chosen area(s) of expertise. Included with these materials should be a statement of intent regarding program of study (300-600 words) and its relationship to the core values of the department. MFA interviews are required and are generally held in January. At the department interview, the applicant participates in an unfamiliar technique class, presents a solo work of up to five minutes (this work must have been choreographed by the student), shows an improvisation based on a given task, and has a 20 -minute dialogue with a member of the department. A petition may be submitted to the department chair for exception to the above process.

In the case of interview by DVD the above requirements remain as indicated. The interview will be conducted by phone with the department chair and members of the faculty. It is highly recommended that anyone considering enrolling at ASU come to the campus during the regularly scheduled interview time. Because the number of graduate openings is limited, it is important that the particular strengths of the department and the specific needs and wants of the student be matched accordingly.

## Drawing (MFA) FADRAWMFA

KATHERINE K. HERBERGER COLLEGE OF THE ARTS, TEMPE
Contact: http://art.asu.edu | vicki.kelley@asu.edu | Art Building 121 | 4809656303 | 1505

## Official Degree Awarded: Art (Drawing) (MFA)

Program Description: Faculty assist students in both artistic and professional development, teaching about portfolio development, photographing artwork, acquiring a gallery affiliation, different types of exhibition venues available and preparation for graduate school.Top students are chosen for the Senior Honors Studio Award, which provides six seniors each year with their own, semi-private studio space with 24-hour access. Exhibition opportunities are available in the School of Art's
student galleries.Students in the drawing program also have the opportunity to experience another country and culture while taking courses at the school's summer program in Florence, Italy.

Program Requirements: A minimum of 60 semester hours of graduate credit subject to committee approval is required, including:

1. from 27 to 32 graduate studio semester hours in the major area(s) of concentration (with the exception of digital technology where 18 semester hours are ART classes and 18 semester hours are AME classes),
2. six semester hours of graduate-level art history and three semester hours of other interdisciplinary graduate credit to supplement MFA work (nonstudio courses), except for digital technology, which requires six semester hours of ARS,
3. nine semester hours of graduate-level course work outside of the major area of concentration, of which three semester hours must begin with the ART prefix and the remaining six semester hours may be outside the School of Art (except for digital technology, which requires nine semester hours of electives in the School of Art and Arts Media and Engineering), and
4. 10 to 15 hours of ART 680 Practicum, resulting in an MFA exhibition (except for digital technology, where six hours will be ART 680 and six hours will be AME 593).

Admission Requirements: A bachelor's degree from a regionally accredited college or university recognized by ASU is required. All students applying for the MFA degree must submit to the graduate coordinator a portfolio of images of their work on a CDROM disk containing 20 JPEG files ( 1000 pixels in the long dimension) or 20 images assembled as a PowerPoint presentation. Three letters of recommendation, a current curriculum vitae and a statement of intent pertaining to the student's educational objectives are also required.

## Ethnomusicology (MA) FAETHNMA

KATHERINE K. HERBERGER COLLEGE OF THE ARTS, TEMPE
Contact: http://music.asu.edu | margie.vincent@asu.edu | Music E177 | 480/965-5069 |0405
Official Degree Awarded: Music (Ethnomusicology) (MA)
Program Description: The School of Music in the Katherine K. Herberger College of the Arts at ASU is an accredited institutional member of the National Association of Schools of Music. The School of Music is committed to the growth and development of both faculty and students in order that music may be created, performed, studied, and taught with excellence. The faculty in the School of Music offer graduate programs leading to the MA degree in Music with a concentration in ethnomusicology.

Program Requirements: A minimum of 30 semester hours of graduate credit is required, of which at least 20 semester hours must be in the field of ethnomusicology or related fields, including six semester hours of thesis and five or six semester hours in music theory.

Admission Requirements: In addition to the ASU Graduate College requirements and a School of Music application form, interested students must submit:

1. Evidence of scholarly achievement or potential (e.g., a term paper).
2. Letters of recommendation from two qualified persons in the field.
3. A one- to two-page personal statement explaining the relationship between the student's professional and/or personal goals and admission into the MA program.

## Fibers (MFA) FAFIBERMFA

KATHERINE K. HERBERGER COLLEGE OF THE ARTS, TEMPE
Contact: http://art.asu.edu | vicki.kelley@asu.edu | Art Building 121| 4809656303| 1505
Official Degree Awarded: Art (Fibers) (MFA)

Program Description: The curriculum incorporates training in everything from weaving, felt-making, embroidery and 3-D structures, to numerous methods of painting and printing on fabric, including cyanotype and photo-silkscreen techniques.

Graduates enter some of the country's top graduate programs, go on to attend fashion schools, and often obtain assistantships and internships at well-known schools.

Program Requirements: A minimum of 60 to 63 semester hours of graduate credit subject to committee approval is required, including:

1. 27 to 32 graduate studio semester hours in the major area(s) of concentration (with the exception of digital technology where 18 semester hours are ART classes and 18 semester hours are AME classes),
2. six semester hours of graduate-level art history and three semester hours of other interdisciplinary graduate credit to supplement MFA work (nonstudio courses), except for digital technology, which requires six semester hours of ARS,
3. nine semester hours of graduate-level course work outside of the major area of concentration, of which three semester hours must begin with the ART prefix and the remaining six semester hours may be outside the School of Art (except for digital technology, which requires nine semester hours of electives in the School of Art and Arts Media and Engineering), and
4. 10 to 15 hours of ART 680 Practicum, resulting in an MFA exhibition (except for digital technology, where six hours will be ART 680 and six hours will be AME 593).

Admission Requirements: A bachelor's degree from a regionally accredited college or university recognized by ASU is required. All students applying for the MFA degree must submit to the graduate coordinator a portfolio of images of their work on a CDROM disk containing 20 JPEG files ( 1000 pixels in the long dimension) or 20 images assembled as a PowerPoint presentation. Three letters of recommendation, a current curriculum vitae and a statement of intent pertaining to the student's educational objectives are also required.

## History and Theory of Art (PhD) FAHIARTPHD

## KATHERINE K. HERBERGER COLLEGE OF THE ARTS, TEMPE

Contact: http://art.asu.edu | vicki.kelley@asu.edu | Art Building 121 | 4809656303 | 1505
Official Degree Awarded: History and Theory of Art (PhD)
Program Description: The PhD in the History and Theory of Art is a collaborative program with the University of Arizona in Tucson. The emphasis is on interdisciplinary methodologies and electronic technologies to prepare students for teaching and museum careers.

Program Requirements: The PhD degree requires 60 semester hours beyond the M.A. or 90 beyond the B.A. The 42 credits of PhD course work include 12 credits in the major area of emphasis, nine credits in a minor area within art history, six interdisciplinary credits (courses outside of Art History), six hours of Ph.D. core courses (ARS 691 - Methodologies and ARS 692 - Technologies) and ninecredits of electives. The remaining 18 credits are dissertation (ARS 799). A student may elect to have a second minor in an area outside art history. In this joint program all Ph.D. students are required to take courses by faculty at both Arizona State University and the University of Arizona.

Admission Requirements: The complete application required submissions to both the Arizona State University Graduate College and the School of Art. To the Graduate Admissions Office the applicant must submit: the application form, application fee, official notice of GRE scores (within last five years), official transcripts, and any other materials requested by the Graduate College. To the Art History Graduate Advisor, School of Art the following must be sent: a statement of intent regarding graduate study, the M.A. thesis and/or a scholarly research paper, any request for assistantships and tuition scholarships, and three academic letters of recommendation (to be sent directly by referees). The postmark deadline for compete applications for admission beginning in the following spring semester is October 15; for the following fall semester it is January 15. Students entering in the spring will have few or no opportunities for fellowship or assistantship support the first semester.

## Intermedia (MFA) FAMEDIAMFA

KATHERINE K. HERBERGER COLLEGE OF THE ARTS, TEMPE
Contact: http://art.asu.edu | vicki.kelley@asu.edu | Art Building 121 | 4809656303 | 1505
Official Degree Awarded: Art (Intermedia) (MFA)
Program Description: The MFA in Digital Technology is offered by the School of Art in collaboration with the Arts, Media and Engineering program. 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. Coursework 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.

Program Requirements: A minimum of 60 semester hours of graduate credit subject to committee approval is required, including:

1. 27 to 32 graduate studio semester hours in the major area(s) of concentration (with the exception of digital technology where 18 semester hours are ART classes and 18 semester hours are AME classes),
2. six semester hours of graduate-level art history and three semester hours of other interdisciplinary graduate credit to supplement MFA work (nonstudio courses), except for digital technology, which requires six semester hours of ARS,
3. nine semester hours of graduate-level course work outside of the major area of concentration, of which three semester hours must begin with the ART prefix and the remaining six semester hours may be outside the School of Art (except for digital technology, which requires nine semester hours of electives in the School of Art and Arts Media and Engineering), and
4. 10 to 15 hours of ART 680 Practicum, resulting in an MFA exhibition (except for digital technology, where six hours will be ART 680 and six hours will be AME 593).

Admission Requirements: A bachelor's degree from a college or university recognized by ASU is required. All students applying for the MFA degree 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 and a statement of intent pertaining to the student's educational objectives are also required. Applications for the digital technology concentration program must also include a statement and evidence of work demonstrating digital technology skills beyond end user applications, as well as an art and digital technology resume.

## Jazz Studies (MM) FAJAZZMM

KATHERINE K. HERBERGER COLLEGE OF THE ARTS, TEMPE
Contact: http://music.asu.edu | margie.vincent@asu.edu | Music E167 | 480/965-3371|0405

## Official Degree Awarded: Music Education (Jazz Studies) (MM)

Program Description: The faculty in the School of Music offer a graduate program leading to the professional MM degree. For the Music Education major, concentrations are available in

1. choral music,
2. general music,
3. instrumental music, and
4. jazz studies.

Program Requirements: The student must complete a minimum of 32 semester hours of graduate courses, of which at least onethird must be in the area of concentration. Jazz Studies:

MUE 548, 549, 550 (or 579), 560, 562 (two semesters); MUP 509, 510, 517, 518, three semester hours of jazz ensemble; six semester hours of music history; five or six hours of music theory (including MTC 598 Jazz Theory and Ear Training).

Admission Requirements: For admission to the MM degree in Music Education, the applicant must have completed all requirements for music teacher certification. Post baccalaureate certification is available and may be completed concurrently with master's degree work. Letters of recommendation from three qualified persons in the field are also required. A video or audio tape of a recent jazz performance (solo or ensemble) by the applicant must be submitted, and a video or audio tape of a jazz ensemble directed by the applicant should also be submitted if available.

## Media Arts and Sciences (PhD) FAMASPHD

KATHERINE K. HERBERGER COLLEGE OF THE ARTS, AND
IRA A. FULTON SCHOOL OF ENGINEERING, TEMPE
Contact: http://ame.asu.edu | ameed@asu.edu | Brickyard 395 | 4809659168| 8709
Official Degree Awarded: Media Arts and Sciences (PhD)
Program Description: Media Art and Sciences PhD 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 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 MAS Ph.D. students to gain and contribute expertise in knowledge fusion for digital media.

Program Requirements: The program requires a total of 84 semester credits. Thirty of the 39 required course credits will be from the transdisciplinary media courses offered by AME. All students will be required to take at least 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's entrance competencies (for example, students with an engineering background might be asked to take the history of media arts course and the media theory course). With the approval of the student's advisor, up to one of the required ten AME courses (three credit hours) can be substituted by another graduate level course offered by a collaborating department. One more of the required courses (three credit hours) can be substituted by an independent study course (AME 790), again with the approval of the advisor. The nine hours of elective credit can be from any graduate level courses offered at ASU. The selection of the courses will relate to the student's research interests and will require the approval of the student's advisor.

Admission Requirements: Applicants will be required to submit an official ASU graduate application through the Graduate College (http://www.asu.edu/graduate/admissions), official transcripts of all undergraduate and graduate coursework (if applicable), official GRE scores, a curriculum vitae, statement of purpose, three letters of recommendation and a portfolio of supporting material. 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 coursework and may include such courses as: media Authoring Tools, Computer Music, Computer Graphics and Animation, media Theory, Film Theory, Multimedia Systems, Interactive Technologies, Signal Processing, Digital Design, Advanced Computer Programming courses. Additionally, the statement of purpose must show an understanding of current issues in digital media and computation, detail the applicant's qualifications and experience relating to digital media and computation and explicate how this background has prepared them for the degree. The statement must also show an understanding of the transdisciplinary nature of the degree and provide well-supported reasons (career and educational goals) for wanting to pursue transdisciplinary study in experiential media.

## Metals (MFA) FAMETALSMF

KATHERINE K. HERBERGER COLLEGE OF THE ARTS, TEMPE
Contact: http://art.asu.edu | vicki.kelley@asu.edu | Art Building 121 | 4809656303 | 1505
Official Degree Awarded: Art (Metals) (MFA)
Program Description: The metals and jewelry program boasts an extraordinarily well-equipped studio, with a huge variety of metal-smithing tools. Students are required to take more class hours and learn more skills than at many other schools.

Many students take advantage of the close relationship with the school's sculpture and foundry programs. Students also have the opportunity to learn important business skills through the entrepreneurship program offered at ASU's W. P. Carey School of Business. Graduates find bench jobs with jewelers, become teachers or open their own businesses.

Program Requirements: A minimum of 60 semester hours of graduate credit subject to committee approval is required, including:

1. 27 to 32 graduate studio semester hours in the major area(s) of concentration,
2. six semester hours of graduate-level art history and three semester hours of other interdisciplinary graduate credit to supplement MFA work (nonstudio courses),
3. nine semester hours of graduate-level course work outside of the major area of concentration, of which three semester hours must begin with the ART prefix and the remaining six semester hours may be outside the School of Art , and
4. 10 to 15 hours of ART 680 Practicum, resulting in an MFA exhibition.

Admission Requirements: A bachelor's degree from a regionally accredited college or university recognized by ASU is required. All students applying for the MFA degree must submit to the graduate coordinator a portfolio of images of their work on a CDROM disk containing 20 JPEG files ( 1000 pixels in the long dimension) or 20 images assembled as a PowerPoint presentation. Three letters of recommendation, a current curriculum vitae and a statement of intent pertaining to the student's educational objectives are also required.

# Music - Interdisciplinary Digital Media and Performance (DMA) FAINTDDMA 

KATHERINE K. HERBERGER COLLEGE OF THE ARTS, TEMPE
Contact: http://music.asu.edu | margie.vincent@asu.edu | Music E177 | 480/965-5069 |0405
Official Degree Awarded: Music (Interdisciplinary Digital Media and Performance) (DMA)
Program Description: The DMA degree concentration in interdisciplinary digital Media and performance trains students who have interests and skills in unique cross sections of the arts and sciences. The degree expands the School of Music's offerings to include areas, which hold great promise for individual student's professional aspirations. It also keeps the School of Music and its students actively involved in current developments in the ever-changing field of Media. The state of the art Media facilities of Arts, Media and Engineering (AME) and its hybrid arts-engineering faculty and courses will be an invaluable asset to music students, with resources that complement existing or future courses in electronic music.

Program Requirements: This degree program requires 90 semester hours, a dissertation, and written and oral examinations. The program requires 36 hours in arts, Media and engineering, 30 hours in music studies and 24 hours in research and dissertation.

Admission Requirements: Applicants must submit the Graduate College online application. Either a portfolio of works or a performance audition is required, as suits your area of expertise. Application materials should address the hybrid nature of the Arts, Media and Engineering Program.

Send the following items directly to AME, even if duplicates have been sent to the department:

- Statement of Purpose
- Curriculum Vitae

The Statement of Purpose must fulfill any requirements of the department 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 AME Program.

Music - Interdisciplinary Digital Media and Performance (MM) FADIGITMM<br>KATHERINE K. HERBERGER COLLEGE OF THE ARTS, TEMPE<br>Contact: http://ame.asu.edu | margie.vincent@asu.edu | 669 S. Mill Ave. Room 395 | 480/965-9438 | 0405

Official Degree Awarded: Composition (Interdisciplinary Digital Media and Performance) (MM)
Program Description: The concentration in interdisciplinary digital media and performance trains students who have interests and skills in unique cross sections of the arts and sciences. The degree expands the School of Music's offerings to include areas, which hold great promise for individual student's professional aspirations. It also keeps the School of Music and its students actively involved in current developments in the ever-changing field of media. The state of the art media facilities of Arts, Media and Engineering (AME) and its hybrid arts-engineering faculty and courses will be an invaluable asset to music students, with resources that complement existing or future courses in electronic music.

Program Requirements: The program requires 36 semester hours in Arts, Media and Engineering, 30 hours in Music Studies and 24 hours in Research and Dissertation.

Admission Requirements: Either a portfolio of works or a performance audition is required, as suits your area of expertise. Application materials should address the hybrid nature of the Arts, Media and Engineering (AME) Program.

Send the following items directly to AME, even if duplicates have been sent to the department:

- Statement of Purpose
- Curriculum Vitae

The Statement of Purpose must fulfill any requirements of the department 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 AME Program.

## Music Composition (DMA) FACOMPDMA

KATHERINE K. HERBERGER COLLEGE OF THE ARTS, TEMPE
Contact: http://music.asu.edu | margie.vincent@asu.edu | Music E177 | 480/965-5069 | 0405
Official Degree Awarded: Music (Music Composition) (DMA)
Program Description: The Doctor of Musical Arts (DMA) is a professional degree program designed for students desiring high levels of performance, academic proficiency, and preparation for teaching positions at the university level.

Program Requirements: A total of 90 semester hours beyond the bachelor's degree is required. Only 30 hours from a master's degree or other postgraduate work will be counted toward the 90 hour requirement. Once admitted to a DMA degree program, the student is expected to be enrolled continuously, excluding summer sessions, until all requirements for the degree have been fulfilled. In general, the DMA degree 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 following the first year ( 30 to 32 semester hours) of graduate study must be spent in continuous full-time residence at ASU. After the first year ( 30 to 32 semester hours), 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 one more substantial paper.

Admission Requirements: Students seeking admission normally hold the Master of Music degree. Applicants with other degrees are considered if they have received graduate training similar to that normally expected in a Master of Music degree program. The application for admission must be accompanied by an applicant's statement relating to goals, preparation, and educational background. A portfolio presenting evidence of accomplishment as a composer is also required. At least three works should be submitted. Materials may include scores, recordings of performances, electronic tapes and/or videotapes. Recent works are preferred. The applicant must submit scores for the GRE (quantitative, verbal, and analytical) or the MAT. Three letters of recommendation are required. The deadline is February 15 for teaching assistantship applications.

## Music Composition (MM) FAMCOMPMM

KATHERINE K. HERBERGER COLLEGE OF THE ARTS, TEMPE<br>Contact: http://music.asu.edu | margie.vincent@asu.edu | Music E167 | 4809659861 | 0405

Official Degree Awarded: Composition (MM)
Program Description: Students majoring in composition may pursue a traditional composition curriculum or choose a concentration in interdisciplinary digital media and performance.

Program Requirements: The student must complete a minimum of 32 semester hours of graduate courses, of which at least onethird must be in the area of concentration. MTC 523 (nine semester hours), six hours of 599 Thesis; six hours of music history, three hours of music theory.

Admission Requirements: For admission to the major in Composition, the applicant must submit three original works showing technical facility in composition, letters of recommendation from two qualified persons in the field, and a one- to two-page personal statement of the applicant's professional goals.

## Music Education (DMA) FAMUSEDDMA

KATHERINE K. HERBERGER COLLEGE OF THE ARTS, TEMPE
Contact: http://music.asu.edu | margie.vincent@asu.edu | Music E167 | 480/965-5069 | 0405
Official Degree Awarded: Music (Music Education) (DMA)
Program Description: The Doctor of Musical Arts (DMA) is a professional degree program designed for students desiring high levels of performance, academic proficiency, and preparation for teaching positions at the university level. The major is Music with four concentrations: conducting, music composition, music education, and performance (instrumental, keyboard, piano accompanying, piano pedagogy, voice).

Program Requirements: A total of 90 semester hours beyond the bachelor's degree is required. Only 30 hours from a master's degree or other postgraduate work will be counted toward the 90 hour requirement. Once admitted to a DMA degree program, the student is expected to be enrolled continuously, excluding summer sessions, until all requirements for the degree have been fulfilled. In general, the DMA degree 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 following the first year ( 30 to 32 semester hours) of graduate study must be spent in continuous full-time residence at ASU. After the first year ( 30 to 32 semester hours), at least 54 hours must be completed in residence at ASU. The music education concentrations require a dissertation of an original and creative nature.

Admission Requirements: Applicants with other degrees are considered if they have received graduate training similar to that normally expected in a Master of Music degree program. The application for admission must be accompanied by an applicant's statement relating to goals, preparation, and educational background. The applicant must submit scores for the GRE (quantitative, verbal, and analytical) or the MAT. Three letters of recommendation are required. Applicants must also provide a clear videotape of a rehearsal or class, and submit an example of scholarly work or publication (e.g., term paper). Once the materials have been reviewed, an applicant may be asked to a live interview. The deadline is February 15 for teaching assistantship applications.

## Music Education (MM) FAMUSEDMM

KATHERINE K. HERBERGER COLLEGE OF THE ARTS, TEMPE
Contact: http://music.asu.edu | margie.vincent@asu.edu | Music E177 | 480/965-5069 | 0405
Official Degree Awarded: Music Education (MM)
Program Description: The faculty in the School of Music offer a graduate program leading to the professional MM degree. Three majors are available: Composition, Music Education, and Performance. For the Music Education major, concentrations are available in:

1. choral music,
2. general music,
3. instrumental music, and
4. jazz studies.

Program Requirements: Total of 32 credit hours:
Choral Music
MUE 548, 549, 550 (or 579), 568, 570; two semester hours of ensemble; six semester hours of music history (including MHL 675); five or six hours of music theory.

## General Music

MUE 548, 549, 550 (or 579), 551, 552; six semester hours of music history; five or six hours of music theory. One MHL course or one ensemble must be in ethnomusicology.

Instrumental Music
MUE 548, 549, 550 (or 579), 564, 566; six semester hours of music history; five or six hours of music theory.

## Jazz Studies

MUE 548, 549, 550 (or 579), 560, 562 (two semesters); MUP 509, 510, 517, 518, three semester hours of jazz ensemble; six semester hours of music history; five or six hours of music theory (including MTC 598 Jazz Theory and Ear Training).

Admission Requirements: A Bachelor of Music degree or its equivalent from a regionally accredited institution is required for admission to the MM program. For admission to the MM degree in Music Education, the applicant must have completed all requirements for music teacher certification. Post baccalaureate certification is available and may be completed concurrently with master's degree work. Letters of recommendation from three qualified persons in the field are also required. For the jazz studies concentration, a video or audio tape of a recent jazz performance (solo or ensemble) by the applicant must be submitted, and a video or audio tape of a jazz ensemble directed by the applicant should also be submitted if available.

## Music History and Literature (MA) FAMHISTMA

KATHERINE K. HERBERGER COLLEGE OF THE ARTS, TEMPE

Contact: http://music.asu.edu | margie.vincent@asu.edu | Music E167 | 480/965-5069 |0405
Official Degree Awarded: Music (Music History and Literature) (MA)
Program Description: The School of Music in the Katherine K. Herberger College of the Arts at ASU is an accredited institutional member of the National Association of Schools of Music. The School of Music is committed to the growth and development of both faculty and students in order that music may be created, performed, studied, and taught with excellence. The faculty in the School of Music offer graduate programs leading to the MA degree in Music with a concentration in music history and literature.

Program Requirements: A minimum of 30 semester 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 semester hours in music theory. MHL 532, 591 (two semesters), 599 Thesis, five or six hours of music theory, and two semester hours of course work approved by the school.

Admission Requirements: In addition to the ASU Graduate College requirements and a School of Music application form, interested students must submit:

1. Evidence of scholarly achievement or potential (e.g., a term paper).
2. Letters of recommendation from two qualified persons in the field.
3. A one- to two-page personal statement explaining the relationship between the student's professional and/or personal goals and admission into the MA program.

## Music Performance (DMA) FAPERFDMA

KATHERINE K. HERBERGER COLLEGE OF THE ARTS, TEMPE
Contact: http://music.asu.edu | margie.vincent@asu.edu | Music E167 | 480/965-5069|0405
Official Degree Awarded: Music (Performance) (DMA)

Program Description: The Doctor of Musical Arts (DMA) is a professional degree program designed for students desiring high levels of performance, academic proficiency, and preparation for teaching positions at the university level. The major is Music with four concentrations: conducting, music composition, music education, and performance (instrumental, keyboard, piano accompanying, piano pedagogy, voice).

Program Requirements: A total of 90 semester hours beyond the bachelor's degree is required. Only 30 hours from a master's degree or other postgraduate work will be counted toward the 90 hour requirement. Once admitted to a DMA degree program, the student is expected to be enrolled continuously, excluding summer sessions, until all requirements for the degree have been fulfilled. In general, the DMA degree 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 following the first year ( 30 to 32 semester hours) of graduate study must be spent in continuous full-time residence at ASU. After the first year ( 30 to 32 semester hours), 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 semester hours in research (MUP 792), solo performance (MUP 796),

Admission Requirements: Students seeking admission normally hold the Master of Music degree. Applicants with other degrees are considered if they have received graduate training similar to that normally expected in a Master of Music degree program. The application for admission must be accompanied by an applicant's statement relating to goals, preparation, and educational background. The applicant must submit scores for the GRE (quantitative, verbal, and analytical) or the MAT. Three letters of recommendation are required. A live audition is required. This must include materials from a variety of stylistic periods; a repertoire list must included. The repertoire list should include works studied and performed following high school. The list should be divided into two sections: 1) work publicly performed, and 2 ) works studied. In the event a live audition is not possible, tapes may be submitted. If 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 month following the beginning of instruction. The deadline is February 15 for teaching assistantship applications.

## Music Performance (MM) FAPERF3MM

KATHERINE K. HERBERGER COLLEGE OF THE ARTS, TEMPE
Contact: http://music.asu.edu | margie.vincent@asu.edu | Music E167 | 480/965-5069 | 0405
Official Degree Awarded: Performance (Performance) (MM)
Program Description: Options in instrumental, keyboard, or voice.
Program Requirements: TOTAL 32 hours
Foreign Language Requirement: None
Thesis: None
Final Examination: Written and oral examinations are required.
Admission Requirements: A Bachelor of Music degree or its equivalent (from an accredited institution) is required for admission to the M.M. program. Admission to all concentrations under the major in performance is dependent on a successful audition, either in person or by taped performance. Applicants should also submit a repertoire list as evidence of previous study.

## Music Theatre/Opera Musical Direction (MM) FAMUSTHMM

KATHERINE K. HERBERGER COLLEGE OF THE ARTS, TEMPE
Contact: http://music.asu.edu | margie.vincent@asu.edu | Music E167 | 480/965-5069 | 0405
Official Degree Awarded: Performance (Music Theatre/Opera Musical Direction) (MM)
Program Description: Option in opera or Broadway musicals
Program Requirements: TOTAL 32 hours

Foreign Language Requirement: None

Thesis: None

Final Examination: Written and oral examinations are required.

Admission Requirements: A Bachelor of Music degree or its equivalent from a regionally accredited institution is required for admission to the MM program. Admission to all concentrations under the major in Performance is dependent on a successful audition, either in person or by taped performance. Applicants should also submit a repertoire list as evidence of previous study.

# Music Theatre/Opera Performance (MM) FAMUTPOMM 

KATHERINE K. HERBERGER COLLEGE OF THE ARTS, TEMPE

Contact: http://music.asu.edu | margie.vincent@asu.edu | Music E177|480/965-5069|0405
Official Degree Awarded: Performance (Music Theatre/Opera Performance) (MM)
Program Description: Option in opera or Broadway musicals
Program Requirements: TOTAL 32 hours

Foreign Language Requirement: None

Thesis: None

Final Examination: Written and oral examinations are required
Admission Requirements: A Bachelor of Music degree or its equivalent from a regionally accredited institution is required for admission to the MM program. Admission to all concentrations under the major in Performance is dependent on a successful audition, either in person or by taped performance. Applicants should also submit a repertoire list as evidence of previous study.

## Music Theory (MA) FAMTHEOMA

KATHERINE K. HERBERGER COLLEGE OF THE ARTS, TEMPE
Contact: http://music.asu.edu | margie.vincent@asu.edu | Music E167 | 480/965-5069 | 0405
Official Degree Awarded: Music (Music Theory) (MA)

Program Description: The School of Music in the Katherine K. Herberger College of the Arts at ASU is an accredited institutional member of the National Association of Schools of Music. The School of Music is committed to the growth and development of both faculty and students in order that music may be created, performed, studied, and taught with excellence. The faculty in the School of Music offer graduate programs leading to the MA degree in Music with a concentration in music theory.

Program Requirements: A minimum of 32 semester hours of graduate credit is required, of which at least 18 must be in the field of music theory and at least 10 must be selected from the fields of music theory, music composition, and music history. MTC $520,525,527,528$ and 599 Thesis and six semester hours of music history are also required.

Admission Requirements: In addition to the ASU Graduate College requirements and a School of Music application form, interested students must submit:

1. Evidence of scholarly achievement or potential (e.g., a term paper).
2. Letters of recommendation from two qualified persons in the field.
3. A one- to two-page personal statement explaining the relationship between the student's professional and/or personal goals and admission into the MA program.

## Music Therapy (MM) FAMTHERMM

KATHERINE K. HERBERGER COLLEGE OF THE ARTS, TEMPE

Contact: http://music.asu.edu | margie.vincent@asu.edu | Music E177 | 480/965-5069 |0405
Official Degree Awarded: Music Therapy (MM)
Program Description: The faculty in the School of Music offer a graduate program leading to the professional MM degree. The graduate degree in music therapy provides music therapists graduate-level study in the theory and practice of music therapy.

Program Requirements: Students are required to complete a minimum of 32 semester hours of graduate course work, of which a least one-third must be in the area of concentration. The music therapy core is comprised of 12 semester hours and eight or nine MHL and MTC courses. Electives are also taken, as determined by the music therapy advisor.

Admission Requirements: A Bachelor of Music degree (or its equivalent) from an accredited institution is required for admission into the MM program. For admission to the MM degree in Music Therapy, the applicant must also have completed all requirements for music therapy certification. Equivalency certification is available and may be competed concurrently with the master's degree work.

## Painting (MFA) FAPAINTMFA

KATHERINE K. HERBERGER COLLEGE OF THE ARTS, TEMPE
Contact: http://art.asu.edu | vicki.kelley@asu.edu | Art Building 121 | 4809656303 | 1505
Official Degree Awarded: Art (Painting) (MFA)
Program Description: Faculty assist students in both artistic and professional development, teaching about portfolio development, photographing artwork, acquiring a gallery affiliation, different types of exhibition venues available and preparation for graduate school.

Top students are chosen for the Senior Honors Studio Award, which provides six seniors each year with their own, semi-private studio space with 24-hour access. Exhibition opportunities are available in the School of Art's student galleries.

Program Requirements: A minimum of 60 semester hours of graduate credit subject to committee approval is required, including

1. 27 to 32 graduate studio semester hours in the major area(s) of concentration,
2. six semester hours of graduate-level art history and three semester hours of other interdisciplinary graduate credit to supplement MFA work (nonstudio courses)
3. nine semester hours of graduate-level course work outside of the major area of concentration, of which three semester hours must begin with the ART prefix and the remaining six semester hours may be outside the School of Art , and
4. 10 to 15 hours of ART 680 Practicum, resulting in an MFA exhibition.

Admission Requirements: A bachelor's degree from a college or university recognized by ASU is required. All students applying for the MFA degree 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. Three letters of recommendation, a current curriculum vitae and a statement of intent pertaining to the student's educational objectives are also required.

## Performance Pedagogy (MM) FAPPEDMM

KATHERINE K. HERBERGER COLLEGE OF THE ARTS, TEMPE
Contact: http://music.asu.edu | margie.vincent@asu.edu | Music E177 | 480/965-5069|0405
Official Degree Awarded: Performance (Performance Pedagogy) (MM)
Program Description: Performance Pedagogy (MM)

Foreign Language Requirement: None for Instrumental or Piano. For Voice, Sixteen hours of college-level credit in more than one foreign language, chosen from French, German, or Italian.

Thesis: None
Final Examination: Written and oral examinations are required.
Admission Requirements: A Bachelor of Music degree or its equivalent from an accredited institution is required for admission to the MM program. Admission to all concentrations under the major in Performance is dependent on a successful audition, either in person or by taped performance. Students majoring in Performance with a concentration in performance pedagogy (voice) are required to take a diction examination in French, German, and Italian during registration week of their first semester. Students who do not pass this examination are required to take the appropriate semester(s) of MUP 250.

For admission to the concentration in performance pedagogy (piano), a minimum of one semester of prior piano pedagogy study that includes significant intern teaching experience is required. In addition, the student must demonstrate evidence of teaching ability, either in person or by videotape.

## Photography (MFA) FAPHOTOMFA

KATHERINE K. HERBERGER COLLEGE OF THE ARTS, TEMPE
Contact: http://art.asu.edu/ | vicki.kelley@asu.edu | Art Building 102 | 4809656303 | 1505
Official Degree Awarded: Art (Photography) (MFA)
Program Description: The photography program includes critical and cultural analysis of photography. Students can explore interdisciplinary options in their art through close links among the photography program and a number of other disciplines, including printmaking, intermedia and sculpture.

The Northlight Gallery is part of the School of Art's photography program and students have the opportunity to exhibit, as well as view and study, the work of outstanding photographic artists from across the country. Students who take the Photographic Exhibitions class learn how to run a gallery and get practical experience as well as theoretical training.

Program Requirements: A minimum of 60 semester hours of graduate credit subject to committee approval is required, including:

1. from 27 to 32 graduate studio semester hours in the major area(s) of concentration,
2. six semester hours of graduate-level art history and three semester hours of other interdisciplinary graduate credit to supplement MFA work (nonstudio courses),
3. nine semester hours of graduate-level course work outside of the major area of concentration, of which three semester hours must begin with the ART prefix and the remaining six semester hours may be outside the School of Art, and
4. 10 to 15 hours of ART 680 Practicum, resulting in an MFA exhibition.

Admission Requirements: A bachelor's degree from a regionally accredited college or university recognized by ASU is required. All students applying for the MFA degree must submit to the graduate coordinator a portfolio of images of their work on a CDROM disk containing 20 JPEG files ( 1000 pixels in the long dimension) or 20 images assembled as a PowerPoint presentation. Three letters of recommendation, a current curriculum vitae and a statement of intent pertaining to the student's educational objectives are also required

## Piano, Collaborative (MM) FACPIANOMM

KATHERINE K. HERBERGER COLLEGE OF THE ARTS, TEMPE
Contact: http://music.asu.edu | margie.vincent@asu.edu | Music E177 | 480/965-5069 | 0405
Official Degree Awarded: Performance (Collaborative Piano) (MM)

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.

## Post Baccalaureate Artist Diploma (Grad Certificate) FAPBARTDCE

TEMPE
Contact: http://music.asu.edu/ | margie.vincent@asu.edu | MUSIC E167 | 480/965-5069 | 0405
Official Degree Awarded: Post-Bachelor's Artist Diploma (certificate) (CERT)
Program Description: The Post-Bachelor's Artist Diploma graduate certificate program is intended for a very limited number of the most gifted performers who demonstrate strong potential for successful careers in musical performance.

Program Requirements: "The Post-Bachelor's Artist Diploma program is a two-year course of study requiring at least two consecutive semesters of residence. A total of 32 semester hours, including four public recitals, is required. Three of the recitals must be presented on the ASU campus, and one at a venue outside of the metropolitan Phoenix area.

Course Requirements
MUP 527 (16 semester hours), 551 (four semester hours), and 581 (two semester hours); performing ensembles (two semester hours); and four recitals (eight semester hours).

Admission Requirements: Students seeking admission must hold at least a bachelor's degree in music or an equivalent conservatory credential at the time of entrance. All applicants whose native language is not English must submit a score of at least 550 on the Test of English as a Foreign Language (TOEFL). For preliminary screening, every applicant must submit a letter of application, official transcripts, four letters of recommendation, and an audio recording containing works representing a variety of musical styles and composers. Those applicants recommended for a full audition must perform an audition recital and be interviewed on the ASU campus.

## Printmaking (MFA) FAPRINTMFA

KATHERINE K. HERBERGER COLLEGE OF THE ARTS, TEMPE

Contact: http://art.asu.edu | vicki.kelley@asu.edu | Art Building 121 | 4809656303 | 1505
Official Degree Awarded: Art (Printmaking) (MFA)
Program Description: Unusual study options include photogravure, collotype and bookmaking. Combined with the major printmaking forms of intaglio, lithography, screen printing and relief, they create a rare combination of study options not available anywhere else in the country. Photo-processing for printmaking and papermaking are also available.

Book arts (one of fewer than a dozen bookmaking programs in the country) and the renowned Pyracantha Press are premier aspects of the program. There also are classes in papermaking.

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 and studio jobs in some of the country's best fine art print publishing studios. Many former students continue to be productive artists, exhibiting nationally.

Program Requirements: A minimum of 60 semester hours of graduate credit subject to committee approval is required, including:

1. 27 to 32 graduate studio semester hours in the major area(s) of concentration,
2. six semester hours of graduate-level art history and three semester hours of other interdisciplinary graduate credit to supplement MFA work (nonstudio courses),
3. nine semester hours of graduate-level course work outside of the major area of concentration, of which three semester hours must begin with the ART prefix and the remaining six semester hours may be outside the School of Art , and
4. 10 to 15 hours of ART 680 Practicum, resulting in an MFA exhibition.

Admission Requirements: A bachelor's degree from a regionally accredited college or university recognized by ASU is required. All students applying for the MFA degree must submit to the graduate coordinator a portfolio of images of their work on a CDROM disk containing 20 JPEG files ( 1000 pixels in the long dimension) or 20 images assembled as a PowerPoint presentation. Three letters of recommendation, a current curriculum vitae and a statement of intent pertaining to the student's educational objectives are also required.

## Sculpture (MFA) FASCULPMFA

KATHERINE K. HERBERGER COLLEGE OF THE ARTS, TEMPE
Contact: http://art.asu.edu | vicki.kelley@asu.edu | Art Building 121 | 4809656303| 1505
Official Degree Awarded: Art (Sculpture) (MFA)
Program Description: Hard-to-find opportunities to work in neon, study electronics and kinetics in sculpture, or cast in iron, bronze and aluminum all are offered here. There are even a couple of filmmaking courses and one in clay animation. Combine these with woodworking, metal fabrication, installation and public art, and you have a program with something for everyone.

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 the history of sculpture.

Other opportunities include personal studio space for advanced undergraduate students and visiting artists who provide lectures and one-on-one critiques of student's work

Program Requirements: A minimum of 60 semester hours of graduate credit subject to committee approval is required, including

1. 27 to 32 graduate studio semester hours in the major area(s) of concentration,
2. six semester hours of graduate-level art history and three semester hours of other interdisciplinary graduate credit to supplement MFA work (nonstudio courses),
3. nine semester hours of graduate-level course work outside of the major area of concentration, of which three semester hours must begin with the ART prefix and the remaining six semester hours may be outside the School of Art , and
4. 10 to 15 hours of ART 680 Practicum, resulting in an MFA exhibition.

Admission Requirements: A bachelor's degree from a college or university recognized by ASU is required. All students applying for the MFA degree 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 and a statement of intent pertaining to the student's educational objectives are also required.

## Theatre (MA) FATHEAMA

KATHERINE K. HERBERGER COLLEGE OF THE ARTS, TEMPE
Contact: http://theatrefilm.asu.edu/ | theatre@asu.edu | GHall 232 | 4809655337| 2002
Official Degree Awarded: Theatre (MA)
Program Description: The MA degree in Theatre introduces students to graduate-level study in the history, theory and practice of theatre. It is designed for individuals who wish to prepare to enter a PhD program, for $\mathrm{K}-12$ teachers seeking to expand their knowledge of theatre, and for returning students interested in learning more about theatre scholarship and performance.

Program Requirements: The program requires 30 semester credits consisting of 24 semester hours of graduate course work (nine credits of required courses and 15 semester hours of electives), plus six semester hours devoted to a final project chosen by the student and approved by the student's faculty committee. Students may choose to complete an additional six semester hours of courses in lieu of the final project.

Admission Requirements: 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 February 15. Students should include a statement of purpose (this will address their background and experiences as they relate to their reasons for pursuing the master's degree; describe their research interests; and indicate future career goals); a current curriculum vitae; a sample of scholarly writing; and three letters of recommendation from professionals familiar with their work.

## Theatre (MFA) FATHEAMFA

KATHERINE K. HERBERGER COLLEGE OF THE ARTS, TEMPE
Contact: http://theatrefilm.asu.edu/ | theatre@asu.edu | GHall 232 | 4809655337| 2002
Official Degree Awarded: Theatre (MFA)
Program Description: Theatre (MFA)

## Theatre - Interdisciplinary Digital Media (MFA) FATHEADMFA

## KATHERINE K. HERBERGER COLLEGE OF THE ARTS, TEMPE

Contact: http://theatrefilm.asu.edu/ | theatre@asu.edu | GHall 232 | 4809655337 | 2002
Official Degree Awarded: Theatre (Interdisciplinary Digital Media) (MFA)
Program Description: This graduate degree concentration is offered through the School of Theatre and Film in collaboration with the Arts, Media and Engineering (AME) program. It focuses on the growing importance of digital media as a way of both making art and thinking about art. AME program 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.

Program Requirements: The 60-hour program includes 24 hours of core courses in theatre theory, history, and practice, as well as 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 are also required. The overall course of study is developed with the advisor to ensure a breadth of transdisciplinary knowledge.

Admission Requirements: Students must fulfill the requirements of the Graduate College and those of both the School of Theatre and Film and the Arts, Media and Engineering program. The deadline for application to the School of Theatre and Film is February 15, but please note that for financial aid purposes, the AME deadline is Feb. 1. The School of Theatre and Film requires additional application materials for the M.F.A. in Integrated Digital Media: a statement of purpose detailing your background in theatre, as well as your interest in and suitability for work in the inter-discipline of theatre and digital media; a portfolio of materials that support the statement of purpose (writing samples, electronic performance materials, etc.); a current resume; and three letters of recommendation from professionals familiar with your work.

## Theatre Performance (MFA) FAPERFMFA

KATHERINE K. HERBERGER COLLEGE OF THE ARTS, TEMPE
Contact: http://theatrefilm.asu.edu | theatre@asu.edu | GHall 232 | 4809655337 | 2002
Official Degree Awarded: Theatre (Performance) (MFA)
Program Description: Admission to the directing, performance, and performance design concentrations is cohort-based. We will accept applications for these concentrations for the 2011 academic year beginning in Fall 2010

This program readies students for the changing roles of theatre and the performing artist. The School of Theatre and Film offers an approach to training that includes, but goes beyond, traditional actor training. Skills are emphasized for approaching and creating new work, developing artistic entrepreneurship, and performance applications in multimedia, interdisciplinary collaboration, artistic integrity and social responsibility.

Program Requirements: The MFA in Theatre with a concentration in Performance is a three-year, 60 credit-hour program. The first year is dedicated to individual skill and ensemble building. Second-year training further develops the artist's skills in exploring texts and the worlds they emerge from and help to create; understanding the complexity and dramatic potential inherent
in language; encouraging bold and courageous choices; and developing new work that will culminate in a tour. 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.

Admission Requirements: Students are admitted to this program every three years, forming a cohort with their colleagues in the other MFA 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 February 15. The School of Theatre and Film requires additional application materials for the MFA in Theatre (Performance): an audition and interview, either on campus or at one of the U/RTA sites; a statement of purpose; a current resume; and three letters of recommendation from professionals familiar with your work.

## Theatre For Youth (MFA) FAYOUTHMFA

KATHERINE K. HERBERGER COLLEGE OF THE ARTS, TEMPE
Contact: http://theatrefilm.asu.edu | theatre@asu.edu | GHall 232 | 4809655337|2002
Official Degree Awarded: Theatre (Theatre For Youth) (MFA)
Program Description: This MFA program offers comprehensive course work in all areas of Theatre for Youth, renowned faculty, superb facilities, practical experience in working in drama and theatre with and for young people, and a challenging and supportive atmosphere ideal for educating future leaders in the field.

Program Requirements: The M.F.A. in Theatre (Theatre for Youth) is a three-year, 60 credit-hour 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, secondary and/or higher education. An internship with a professional theatre company, school, or arts organization, and a final applied project, complete the program.

Admission Requirements: 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 February 15. The School of Theatre and Film requires additional application materials for the M.F.A. in Theatre (Theatre for Youth): an interview; a statement of purpose (a cover letter indicating the preferred area of study, summarizing the applicant's qualifications, artistic vision and how the candidate feels the M.F.A. Theatre for Youth program can help meet his or her goals); a current resume; and three letters of recommendation from professionals familiar with your work.

## Theatre For Youth (PhD) FAYOUTHPHD

KATHERINE K. HERBERGER COLLEGE OF THE ARTS, TEMPE
Contact: http://theatrefilm.asu.edu/ | theatre@asu.edu | GHall 232 | 4809655337| 2002
Official Degree Awarded: Theatre (Theatre For Youth) (PhD)
Program Description: This PhD degree program is designed to give students a broad knowledge of theatre, as well as special research, production and teaching skills in Theatre for Youth. Studies include theatre history, theory, and literature; the teaching of theatre to grades K-12 and university students; 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 prepare for exams 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.

Program Requirements: A total of 90 semester hours, of which 30 may be fulfilled with a completed master's degree, are required. The concentration in Theatre for Youth requires a core of 30 hours. Additionally, 24 hours in research and dissertation preparation; and six hours of research methodology, approved by the supervisory committee; or successful examination in a foreign language approved by the committee.

In meeting these requirements, you, with the advice of the supervisory committee, may select theatre courses in areas such as theatre education, directing, acting, design, playwriting, theatre history and theatre theory/criticism, in addition to tutorial courses. You may also take courses outside the School of Theatre and Film in areas such as critical and cultural studies, area studies, languages and literatures, educational theory and methodology, aesthetic theory, the arts and arts education, and children's literature. You are encouraged to be involved in on- and off-campus productions, teaching and research. All activities are selected to help you meet the goals of the program and develop the capability of becoming a leader 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.

## 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: 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 January 15. The School of Theatre and Film requires additional application materials for the Ph.D. in Theatre (Theatre for Youth): an interview is strongly recommended; a statement of purpose (this statement should explain your research, artistic and educational philosophies and goals, as appropriate to your desired focus in the Ph.D. program; explain also how study in the ASU Theatre for Youth program might particularly suit these goals/philosophies); a current curriculum vitae; a sample of scholarly writing; and three letters of recommendation from professionals familiar with your work (these letters should address specifically your potential for success in a Ph.D. program).

## Theatre: Directing (MFA) FADIRMFA

## KATHERINE K. HERBERGER COLLEGE OF THE ARTS, TEMPE

Contact: http://theatrefilm.asu.edu | theatre@asu.edu | GHall 232 | 4809655337 | 2002

## Official Degree Awarded: Theatre (Directing) (MFA)

Program Description: Admission to the directing, performance, and performance design concentrations is cohort-based. We will accept applications for these concentrations for the 2011 academic year beginning in Fall 2010.

The program seeks students who demonstrate directing talent, scholastic achievement, and preferably, practical experience in the professional theatre. The program focuses on the collaborative process necessary for new work development. 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, craft and attitude, including interpersonal communication skills, required to be an excellent professional director.

Program Requirements: The MFA in Theatre with a concentration in directing is a three-year, 60 semester-hour program. Practical directing and directing classes are approximately 50 percent of the course work. Classes include: acting, voice, movement, dramatic theory and criticism, dramaturgy, adaptation, design collaboration, theatre organization and management, theatre for social change, theatre history, performance technology, community-based ensemble, assistant directing for professional directors working on the Main-stage and a TYA tour practicum. MFA directors will direct new work every year. Major assignments may include: directing a new full-length play by an MFA playwright, creating and directing an adaptation of an existing work in the Prism Theatre, and 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.

Admission Requirements: Students are admitted to this program every three years, forming a cohort with their colleagues in the other MFA 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 February 15. In addition to the requirements outlined on the Graduate College website, the School of Theatre and Film requires additional application materials for the MFA in Directing: a personal interview, either on campus or at one of the U/RTA sites; a statement of purpose; a current resume; three letters of references from professionals familiar with your work; a written approach to a play selected by the reviewing committee.

## Theatre: Performance America (PhD) FAPERAMPHD

## KATHERINE K. HERBERGER COLLEGE OF THE ARTS, TEMPE

Contact: http://theatrefilm.asu.edu | theatre@asu.edu | GHall 232 | 4809655337| 2002
Official Degree Awarded: Theatre (Theatre/Performance Americas) (PhD)
Program Description: The PhD 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, and 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; and 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 groundwork 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 coursework and practical experience.

Program Requirements: A total of 90 semester hours are required; 30 of the 90 hours may be satisfied through a completed master's degree.

The concentration in Theatre and Performance of the Americas consists of a core of 24 hours. Additionally, 12 hours of electives, two of which must come from outside the school (as approved by the supervisory committee); and 24 hours of research and dissertation preparation.

In meeting these requirements, you, with the advice of the supervisory committee, may select theatre courses in areas such as theatre education, directing, acting, design, playwriting, theatre history and theatre theory/criticism, in addition to tutorial courses. You 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. You are encouraged to be involved in on- and off-campus productions, teaching and research. All activities are selected to help you meet the goals of the program and develop the capability of becoming a leader in the field.

## Preliminary Reviews

Reviews of your 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 and performance of the Americas, and the research area.

## Dissertation Requirements

A dissertation based on original high-quality research work, demonstrating proficiency in your special field, is required.

Admission Requirements: 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 January 15. The School of Theatre and Film requires additional application materials for the Ph.D. in Theatre (Theatre and Performance of the Americas): an interview is strongly recommended; a statement of purpose (this should address your background and experiences as they relate to your reasons for pursuing the Ph.D.; describe your research interests; and indicate future career goals); a current curriculum vitae; a sample of scholarly writing; and three letters of recommendation from professionals familiar with your work. (Please note that we only accept students who have already earned a masters degree in a relevant area.

## Theatre: Performance Design (MFA) FAPERDMFA

KATHERINE K. HERBERGER COLLEGE OF THE ARTS, TEMPE
Contact: http://theatrefilm.asu.edu | theatre@asu.edu | GHall 232 | 4809655337 | 2002
Official Degree Awarded: Theatre (Performance Design) (MFA)
Program Description: Admission to the directing, performance, and performance design concentrations is cohort-based. We will accept applications for these concentrations for the 2011 academic year beginning in Fall 2010.

ASU offers a strenuous and innovative program that focuses on a non-traditional approach to design training in preparation for the theatrical design challenges of the future. The design student is not asked to choose one sub-discipline of performance design, but rather will work 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 drafting and computer imaging, new work development, design applications in multimedia, and the development of artistic entrepreneurship and integrity.

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.

Program Requirements: The MFA in Design is a three-year, 60 credit-hour program. 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. Students conclude with an applied ensemble design project suited to their needs and interests.

A professional internship is required and can be fulfilled anytime after the first year of study. 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: Students are admitted to this program every three years, forming a cohort with their colleagues in the other MFA 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 February 15. The School of Theatre and Film requires additional application materials for the MFA in Performance Design: a personal interview either on campus or at one of the U/RTA sites; a portfolio of ten samples of visual work (to be presented at interview); a written statement of purpose; a current resume; and three letters of recommendation from professionals familiar with your work.

## Wood (MFA) FAWOODMFA

KATHERINE K. HERBERGER COLLEGE OF THE ARTS, TEMPE
Contact: http://art.asu.edu | vicki.kelley@asu.edu | Art Building 121 | 4809656303 | 1505
Official Degree Awarded: Art (Wood) (MFA)

Program Description: The graduate years are seen as a time for searching and experimenting, as well as for developing a high degree of professionalism in creative work. The Herberger College offers one of the best equipped fine woodworking shops in the Southwest. It includes equipment for laminating, carving, turning and fabricating.

Program Requirements: A minimum of 60 semester hours of graduate credit subject to committee approval is required, including:

1. 27 to 32 graduate studio semester hours in the major area(s) of concentration,
2. six semester hours of graduate-level art history and three semester hours of other interdisciplinary graduate credit to supplement MFA work (nonstudio courses),
3. nine semester hours of graduate-level course work outside of the major area of concentration, of which three semester hours must begin with the ART prefix and the remaining six semester hours may be outside the School of Art , and
4. 10 to 15 hours of ART 680 Practicum, resulting in an MFA exhibition.

Admission Requirements: A bachelor's degree from a regionally accredited college or university recognized by ASU is required. All students applying for the MFA degree must submit to the graduate coordinator a portfolio of images of their work on a CDROM disk containing 20 JPEG files ( 1000 pixels in the long dimension) or 20 images assembled as a PowerPoint presentation. Three letters of recommendation, a current curriculum vitae and a statement of intent pertaining to the student's educational objectives are also required

BUSINESS, W. P. CAREY SCHOOL OF

## Accountancy (MACC) BAACCMACC

W. P. CAREY SCHOOL OF BUSINESS, TEMPE

Contact: http://wpcarey.asu.edu/acc/macc.cfm | wpcareyacc@asu.edu | BA223Q | 480/965-3631 | 3606
Official Degree Awarded: Accountancy (MAcc)
Program Description: The Master of Accountancy (MACC) 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 CPA exam. The MACC program also offers an emphasis in information systems.

Program Requirements: The Master of Accountancy program consists of 30 semester hours over a nine month period of study (August through May). The curriculum is constantly updated.

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 Web site. Students applying to this program must submit scores from the Graduate Management Admission Test (GMAT). 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, although other exceptional candidates are considered.

## Accountancy (PhD) BAACCTPHD

W. P. CAREY SCHOOL OF BUSINESS, TEMPE<br>Contact: http://wpcarey.asu.edu/grad/PhD/acc | wpcareyacc@asu.edu | BA 223Q | 480/965-3631 | 4606<br>Official Degree Awarded: Business Administration (Accountancy) (PhD)

Program Description: The objective of the PhD in Business Administration with a concentration in accountancy is to prepare scholars to conduct high-quality research and to teach in the fields of financial and managerial accounting, auditing, information systems, and taxation. This program allows students to develop the capability to review, analyze, conduct, and publish research
through a series of research seminars and theory-building and statistical course work that supplement and complement students' abilities and desires. In addition, PhD students participate in ongoing research projects in conjunction with faculty members in the School of Accountancy.

## Program Requirements: Program of Study

A minimum of 84 semester hours is required for the PhD degree; 12 (and only 12) of these hours must be 799 Dissertation. Of the 84 semester hours, at least 30 hours (which may include research credit) of the approved PhD program and 12 dissertation hours must be completed after admission to the student's PhD 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 semester hours from a previously awarded master's degree toward their doctoral program of study.

Students work with their study committees to determine an appropriate program of study. Common areas of functional specialization among doctoral studies include financial and managerial accounting, auditing, information systems, and taxation. With these functional areas, doctoral studies may emphasize experimental or archival research methods. All accountancy doctoral students are required to take a three-semester sequence of accountancy doctoral course work. A maximum of six approved graduate semester hours can be transferred to satisfy program requirements.

## 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

PhD students achieve 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 PhD degree. The dissertation is defended in an oral examination commonly known as the dissertation defense.

Students must be enrolled for at least one semester hour of credit that appears on the program of study or one hour of appropriate graduate-level 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 ten-year period. The ten-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 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 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.

## Agribusiness (PhD) BAAGRIPHD

## W. P. CAREY SCHOOL OF BUSINESS, TEMPE

Contact: http://wpcarey.asu.edu/grad/PhD/ | wpcareyPhD@asu.edu | BA 171 | 480/727-1488 | 4906
Official Degree Awarded: Business Administration (Agribusiness) (PhD)

## Program Description:

The objective of the agribusiness PhD 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 PhD students are involved with research in:

1. Consumer behavior in food markets;
2. Strategic marketing by food retailers;
3. Food and fiber supply-chain management;
4. Derivatives, commodity trading, and risk management; and
5. International agricultural trade and policy.

## Program Requirements: Program of Study

A minimum of 84 semester hours is required for the PhD degree; 12 (and only 12) of these hours must be 799 Dissertation. Of the 84 semester hours, at least 30 hours (which may include research credit) of the approved PhD program and 12 dissertation hours must be completed after admission to the student's PhD 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 semester hours from a previously awarded master's degree toward their doctoral program of study.

Agribusiness PhD students are expected to develop a program of study that consists of three elements: (1) a core of theory and quantitative methods course work in economics and management from the W. P. Carey School, (2) advanced courses in at least one of economics, finance, marketing, or management from the W. P. Carey School and (3) a two-course sequence of PhD-level theory and methods as applied to issues and concepts specific to the agribusiness sector from the Morrison School. The agribusiness PhD 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

PhD students achieve 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 PhD degree. The dissertation is defended in an oral examination commonly known as the dissertation defense.

Students must be enrolled for at least one semester hour of credit that appears on the program of study or one hour of appropriate graduate-level 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 ten-year period. The ten-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. 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 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.

## Computer Information Systems (PhD) BAINFSYPHD

W. P. CAREY SCHOOL OF BUSINESS, TEMPE<br>Contact: http://www.wpcarey.asu.edu/is | wpcareyis@asu.edu | BA 301P | 4809653252 | 3806

Official Degree Awarded: Economics PHD Business Administration (Computer and Information Systems)

Program Description: The objective of the PhD in Business Administration with a concentration in 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, PhD students participate in ongoing research projects in conjunction with faculty members in the Department of Information Systems.

## Program Requirements: Program of Study

A minimum of 84 semester hours is required for the PhD degree; 12 (and only 12) of these hours must be 799 Dissertation. Of the 84 semester hours, at least 30 hours (which may include research credit) of the approved PhD program and 12 dissertation hours must be completed after admission to the student's PhD 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 semester hours from a previously awarded master's degree toward their doctoral program of study.

Students work with their program committees to determine an appropriate program of study. Common areas of specialization for doctoral studies include decision support systems, database management systems, artificial intelligence in business, systems analysis and design, distributed information systems, data mining, and IT infusion and human interface.

## 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

PhD students achieve 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 PhD degree. The dissertation is defended in an oral examination commonly known as the dissertation defense.

Students must be enrolled for at least one semester hour of credit that appears on the program of study or one hour of appropriate graduate-level 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 ten-year period. The ten-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. 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 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.

## Economics (PhD) BAECONPHD

## W. P. CAREY SCHOOL OF BUSINESS, TEMPE

Contact: http://www.wpcarey.asu.edu/PhDecn | wpcareyecn@asu.edu | BA 104 | 4809653531 | 3806

## Official Degree Awarded: Economics (PhD)

Program Description: The ASU PhD program in Economics is a full-time program intended to prepare students for teaching and research positions at four year institutions of higher education, as well as research positions in public agencies or private business organizations. The PhD 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 PhD students are supported through teaching and research assistantships for four years. Stipends are highly competitive with any graduate program in the country.

Program Requirements: In addition to completing 60 semester hours of credit beyond the bachelor's degree ( 30 semester hours beyond the master's degree) and 24 semester hours of research and dissertation credit, the PhD student must accomplish five tasks:

1. meet the qualification requirement,
2. present at least two fields of study,
pass the comprehensive examination,
pass the dissertation proposal defense, and
complete a dissertation with an oral defense.

See the Department of Economics Graduate Student Handbook for details concenring 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 application form, fee and other materials to ASU Graduate College Admissions; an application packet and list of guidelines are available from Graduate Admissions. The Department of Economics requires applicants to send scores from the aptitude portion of the Graduate Record Exam (GRE). Applications will not be reviewed until the GRE score is received. Applicants whose first language is not English must also submit a Test of English as a Foreign Language (TOEFL) score unless he/she received a degree from a U.S. college or university. In addition, all applicants are required to submit three letters of reference to the PhD Program Director, 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 January 15.

## Finance (PhD) BAFINANPHD

W. P. CAREY SCHOOL OF BUSINESS, TEMPE

Contact: http://wpcarey.asu.edu/fin | wpcareyfin@asu.edu | BA 519|480/965-3131 | 4906
Official Degree Awarded: Business Administration (Finance) (PhD)
Program Description: The primary objective of the PhD 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.

## Program Requirements: Program of Study

A minimum of 84 semester hours is required for the PhD degree; 12 (and only 12) of these hours must be 799 Dissertation. Of the 84 semester hours, at least 30 hours (which may include research credit) of the approved PhD program and 12 dissertation hours must be completed after admission to the student's PhD 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 semester 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

PhD students achieve 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 PhD degree. The dissertation is defended in an oral examination commonly known as the dissertation defense.

Students must be enrolled for at least one semester hour of credit that appears on the program of study or one hour of appropriate graduate-level 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 ten-year period. The ten-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 PhD 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 letters of recommendation, scores from the Graduate Management Admission Test (GMAT), and a brief statement of their career objectives. While many accepted students have an MBA or MS in a business-related field, others have a background in other areas, such as engineering, economics, mathematics, physics, or political science.

## Health Sector Management - Evening Program (MHSM) BAEVENMHSM

W. P. CAREY SCHOOL OF BUSINESS, TEMPE<br>Contact: http://wpcarey.asu.edu/hap/ | wpcareyhmp@asu.edu | BA 318|4809657778 | 4506

Official Degree Awarded: Health Sector Management (Evening) (MHSM)
Program Description: The Master of Health Sector Management (MHSM) is offered in an evening platform with tracks in managerial epidemiology, policy management, and innovation management. In all three tracks, students train in a sophisticated managerial environment integrated with the W. P. Carey MBA programs. There are two platforms for the MHSM degree, the Evening Program (which is completed in two years) and the Evening Accelerated Program (which is completed in 14 months.)

Students in the innovation management track develop an understanding of how a variety of management approaches can be applied to a wide spectrum of healthcare delivery and financing settings. Graduates may seek employment in healthcare delivery organizations such as hospitals, physician group practices, community health centers, long-term care facilities, and home health and hospice agencies, or with financing parties, such as private or public health insurers, or managed care plans.

Students in the managerial epidemiology track learn how to effectively organize and lead epidemiological research efforts. Graduates of the managerial epidemiology track are prepared to participate in the innovation process, working with colleagues to integrate clinical and epidemiological research into business and community practice. Graduates of this program can pursue careers in biotechnology, pharmaceutical, and contract research organizations in which clinical trial design and execution are critical components.

Students in the policy management track develop an understanding of how health policy affects both the business of healthcare and economic health of businesses. Graduates may pursue careers with consulting firms, advocacy organizations, and trade associations where health policy analysis and dissemination are critical components. Graduates may also work in leadership roles in the public sector or in large firms where health policy issues can directly affect the organization.

Program Requirements: The MHSM program requires 48 credit hours ( 15 from the business core; 24 hours from the healthcare core; six hours of electives; and three hours of internship credit).

Admission Requirements: Applications must be submitted online. For the general requirements, see Admission to the Graduate College. Applicants are required to submit evidence of their ability to pursue a graduate degree program in health sector management successfully. All applicants must submit scores from the GMAT, GRE, DAT, PCAT, or MCAT, but the GMAT is recommended. Licensed physicians with an MD or DO degree from a U.S. medical school are not required to provide a test score.

Applicants to the MHSM program submit one application for the MHSM degree. Two recommendations commenting on the student's motivation, commitment, achievements, work experience, and opportunity for success in the program are required. In addition, applicants are required to submit responses to essay questions listed on the application. For more information, access the Web site at http://www.wpcarey.asu.edu/shmp.

## Information Management (MS) BAINFOMS

## W. P. CAREY SCHOOL OF BUSINESS, TEMPE

Contact: http://www.wpcarey.asu.edu/is/msim | wpcareymsim@asu.edu | BA 301P | 4809653252 | 4606

## Official Degree Awarded: Information Management (MS)

Program Description: The Master of Science in Information Management is an evening degree program that teaches business people how to manage in an information technology (IT) environment. The program is designed for working professionals in the IT field who recognize the importance of information technology in the competitive, global economy. For more information about this program, access the Web site at http://wpcarey.asu.edu/is/msim.

Program Requirements: Management consists of a minimum of 30 semester hours and is continually updated. Access the department's Web site for a list of courses. The program is a 10 course, 30 credit-semester hour program spanning one calendar year. It is a lock-step evening program which begins in Summer only. Students graduate the following May. This program requires an applied project as the culminating experience.

Admission Requirements: All applicants are required to submit the supplemental application materials required by the department. Complete application instructions may be obtained from the department's Web site at http://wpcarey.asu.edu/is/msim. Applicants must also submit scores from the Graduate Management Admission Test. International applicants whose native language is not English must submit scores from the Test of English as a Foreign Language.

## Management (PhD) BAMGMTPHD

## W. P. CAREY SCHOOL OF BUSINESS, TEMPE

Contact: http://wpcarey.asu.edu/mgt/degree/PhD-program-description.cfm | delcine.soletski@asu.edu | BA 323|480/965-3431| 4606

Official Degree Awarded: PHD Business Administration (Management)

Program Description: The Department of Management offers students the opportunity to obtain a PhD 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 human resource management, organizational behavior, organizational theory, 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 positions at leading research universities.

## Program Requirements: Program of Study

A minimum of 84 semester hours is required for the PhD degree; 12 (and only 12) of these hours must be 799 Dissertation. Of the 84 semester hours, at least 30 hours (which may include research credit) of the approved PhD program and 12 dissertation hours must be completed after admission to the student's PhD 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 semester 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 passed the comprehensive exam and 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 semester hours for the program, most students enroll for nine to 12 hours per semester. In addition, students work closely with faculty members, typically by assuming an assistantship appointment. The program is relatively small with an emphasis on high quality, and individual attention and mentoring to all doctoral 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

PhD students achieve 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 PhD degree. The dissertation is defended in an oral examination commonly known as the dissertation defense.

Students must be enrolled for at least one semester hour of credit that appears on the program of study or one hour of appropriate graduate-level 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 ten-year period. The ten-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. 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 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.

# Marketing (PhD) BAMARKPHD 

W. P. CAREY SCHOOL OF BUSINESS, TEMPE

Contact: http://www.wpcarey.asu.edu/mkt | wpcareymkt@asu.edu | BAC 460|480/965-3621|4906
Official Degree Awarded: Business Administration (Marketing) (PhD)
Program Description: The PhD 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, and thus cannot complete the program online.

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 only, the program is designed to be completed in five years.

## Program Requirements: Program of Study

A minimum of 84 semester hours is required for the PhD degree; 12 (and only 12) of these hours must be 799 Dissertation. Of the 84 semester hours, at least 30 hours (which may include research credit) of the approved PhD program and 12 dissertation hours must be completed after admission to the student's PhD 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 semester 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

PhD students achieve 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 PhD degree. The dissertation is defended in an oral examination commonly known as the dissertation defense.

Students must be enrolled for at least one semester hour of credit that appears on the program of study or one hour of appropriate graduate-level 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 ten-year period. The ten-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. 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 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.

## Supply Chain Management (PhD) BASCMPHD

W. P. CAREY SCHOOL OF BUSINESS, TEMPE

Contact: http://wpcarey.asu.edu/scm | wpcareyscm@asu.edu | BA 446 | 480/965-6044 | 4906
Official Degree Awarded: Business Administration (Supply Chain Management) (PhD)
Program Description: The objective of the PhD in Business Administration with a concentration in supply chain management is to prepare scholars to conduct high-quality research and to teach in the field of supply chain management.

During their course of study, students have a variety of experiences that enhance their prospects for success as faculty members at leading institutions of higher education.

Students develop the capability to review, analyze, conduct, and publish research through a series of research seminars and courses that supplement and complement each student's background, abilities, and aspirations. The PhD in Business Administration with a concentration in supply chain management is a full-time residential program.

## Program Requirements: Program of Study

A minimum of 84 semester hours is required for the PhD degree; 12 (and only 12) of these hours must be 799 Dissertation. Of the 84 semester hours, at least 30 hours (which may include research credit) of the approved PhD program and 12 dissertation hours must be completed after admission to the student's PhD 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 semester hours from a previously awarded master's degree toward their doctoral program of study.

Students work with their study committees to determine an appropriate program of study. Common areas of functional specialization among doctoral studies include financial and managerial accounting, auditing, information systems, and taxation. With these functional areas, doctoral studies may emphasize experimental or archival research methods. All accountancy doctoral students are required to take a three-semester sequence of accountancy doctoral course work. A maximum of six approved graduate semester hours can be transferred to satisfy program requirements.

## 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

PhD students achieve 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 PhD degree. The dissertation is defended in an oral examination commonly known as the dissertation defense.

Students must be enrolled for at least one semester hour of credit that appears on the program of study or one hour of appropriate graduate-level 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 ten-year period. The ten-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. 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 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.

## Taxation (MTax) BATAMTAX

W. P. CAREY SCHOOL OF BUSINESS, TEMPE

Contact: http://wpcarey.asu.edu/acc/mtax.cfm | wpcareyacc@asu.edu | BA 223Q | 4809653631 | 3606
Official Degree Awarded: Taxation (MTax)
Program Description: The faculty in the School of Accountancy offer a specialized professional program leading to the Master of Taxation (MTax). The MTax 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 entry-level positions in taxation and provides graduate-level education for tax professionals who desire to enhance their skills.

Program Requirements: The Master of Taxation degree program consists of 30 semester hours; students must pass a written comprehensive examination.

Admission Requirements: All applicants are required to submit an application to the Graduate College online. Complete application instructions may be obtained from the school's Web site.

Students applying to this program must submit scores from the Graduate Management Admission Test. International applicants whose native language is not English must submit scores from the Test of English as a Foreign Language exam. Preference in admission is given to those with degrees in accounting and business, although other exceptional candidates are considered.

## W. P. Carey MBA - Custom Corporate Program BACORPMBA

## W. P. CAREY SCHOOL OF BUSINESS, TEMPE

Contact: http://wpcarey.asu.edu/mba/corporate | wpcarey.exceed@asu.edu | 480/965-8617 | 4906
Official Degree Awarded: W. P. Carey MBA (MBA)

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, 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.

Program Requirements: The Custom Corporate Program requires that participants be nominated into the program by the sponsoring company. Students must complete a minimum of 48 semester hours which includes the capstone course, MGT 589.

Admission Requirements: Participants must apply to ASU as part of their admission, and meet Graduate College admission requirements and the guidelines established by the Corporate MBA Program.

## W. P. Carey MBA - Evening Accelerated Program BAEVEAMBA

## W. P. CAREY SCHOOL OF BUSINESS, TEMPE

Contact: http://www.wpcarey.asu.edu/mba | wpcareymba@asu.edu | BA 160 | 4809653332 | 4906
Official Degree Awarded: W. P. Carey MBA (MBA)
Program Description: The purpose of the program is to build knowledge and analytic capabilities in the functional areas of business and to develop interpersonal and leadership skills. Essential skills include computing, writing and critical thinking, presentation and speaking, team and group work, interpersonal relations, and time management. There is a strong team emphasis throughout the ASU curriculum.

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 online at http://wpcarey.asu.edu/mba/current_students/.

Program Requirements: While there are no business course prerequisites, applicants must have computer proficiency and expertise in using a spreadsheet package, a word processing package, a presentation software package, an e-mail package, and an Internet browser. Potential students must also demonstrate strong quantitative ability, as well as effective written and oral communication skills.

At least 48 semester hours are required to complete the Evening Accelerated program. The core courses are designed to provide a foundation in business knowledge, and skills and must be taken in the prescribed sequence. Elective, specialization, or technical certificate courses build upon the business core and focus on the further development of an area of study. There may be additional requirements that vary by area of study. The program is typically completed in less than two years. Both fall and spring start dates may be available, depending on program.

The school of business does not accept graduate credits earned while students are in nondegree status and/or courses taken prior to admission to the MBA program. Registration in school of business courses numbered 501 and above is limited to students who have been admitted to a graduate degree program, have the approval of the MBA program office, and have the prerequisites of calculus and computer literacy.

## 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 degree. 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.

## Concurrent Degree Programs

For more information, see http://graduate.asu.edu/dualdegree.html.

Admission Requirements: All students applying to the Evening Accelerated MBA program are required to take the GMAT. The TOEFL is required of all international applicants whose native language is not English or who are not graduates of an institution located in the United States. The TSE is not required for admission to the MBA program. However, it may be required for a dual degree program. For more information on GMAT, access the Web site at http://www.mba.com; for more information on TOEFL and TSE, access the Web site at http://www.ets.org.

Students applying to the Evening Accelerated MBA program have at least two years of full-time work experience and should submit three essays for the degree program addressing commitment, goals, qualifications, and reasons for interest in the program. Applicants are to provide letters of recommendation commenting on the student's motivation, commitment, achievements, work experience, and opportunity for success in the program. A personal interview may also be required. In addition to the above data, applicants are to communicate their interest in the program by selecting the appropriate application available online at http://graduate.asu.edu.

## W. P. Carey MBA - Evening Program BAEVENMBA

## W. P. CAREY SCHOOL OF BUSINESS, TEMPE

Contact: http://www.wpcarey.asu.edu/mba | wpcareymba@asu.edu | BA 160 | 4809653332 | 4906

## Official Degree Awarded: W. P. Carey MBA (MBA)

Program Description: The purpose of the program is to build knowledge and analytic capabilities in the functional areas of business and to develop interpersonal and leadership skills. Essential skills include computing, writing and critical thinking, presentation and speaking, team and group work, interpersonal relations, and time management. There is a strong team emphasis throughout the ASU curriculum.

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 online at http://wpcarey.asu.edu/mba/current_students/.

Program Requirements: While there are no business course prerequisites, applicants must have computer proficiency and expertise in using a spreadsheet package, a word processing package, a presentation software package, an e-mail package, and an Internet browser. Potential students must also demonstrate strong quantitative ability, as well as effective written and oral communication skills.

At least 48 semester hours are required to complete the Evening program. The core courses are designed to provide a foundation in business knowledge and skills and must be taken in the prescribed sequence. Elective, specialization, or technical certificate courses build upon the business core and focus on the further development of an area of study. There may be additional requirements that vary by area of study. The program is typically completed in less than two years. Both fall and spring start dates may be available, depending on program.

The school of business does not accept graduate credits earned while students are in nondegree status and/or courses taken prior to admission to the MBA program. Registration in school of business courses numbered 501 and above is limited to students who have been admitted to a graduate degree program, have the approval of the MBA program office, and have the prerequisites of calculus and computer literacy.

## 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 degree. 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.

## Concurrent Degree Programs

For more information, see http://graduate.asu.edu/dualdegree.html.

Admission Requirements: All students applying to the Evening MBA program are required to take the GMAT. The TOEFL is required of all international applicants whose native language is not English or who are not graduates of an institution located in the United States. The TSE is not required for admission to the MBA program. However, it may be required for a dual degree program. For more information on GMAT, access the Web site at http://www.mba.com; for more information on TOEFL and TSE, access the Web site at http://www.ets.org.

Students applying to the Evening MBA program have at least two years of full-time work experience and should submit three essays for the degree program addressing commitment, goals, qualifications, and reasons for interest in the program. Applicants are to provide letters of recommendation commenting on the student's motivation, commitment, achievements, work experience, and opportunity for success in the program. A personal interview may also be required. In addition to the above data, applicants are to communicate their interest in the program by selecting the appropriate application available online at
http://graduate.asu.edu.

## W. P. Carey MBA - Executive Program BAEXECMBA

## W. P. CAREY SCHOOL OF BUSINESS, TEMPE

Contact: http://www.wpcarey.asu.edu/mba/exe | wpcareymba@asu.edu | BA $160 \mid 4809653332$ | 4906
Official Degree Awarded: W. P. Carey MBA (MBA)
Program Description: The purpose of the program is to build knowledge and analytic capabilities in the functional areas of business and to develop interpersonal and leadership skills. Essential skills include computing, writing and critical thinking, presentation and speaking, team and group work, interpersonal relations, and time management. There is a strong team emphasis throughout the ASU curriculum.

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 online at http://wpcarey.asu.edu/mba/current_students/.

Program Requirements: While there are no business course prerequisites, applicants must have computer proficiency and expertise in using a spreadsheet package, a word processing package, a presentation software package, an e-mail package, and an Internet browser. Potential students must also demonstrate strong quantitative ability, as well as effective written and oral communication skills.

At least 48 semester hours are required to complete the executive program. The core courses are designed to provide a foundation in business knowledge and skills, and must be taken in the prescribed sequence. Elective, specialization, or technical certificate courses build upon the business core and focus on the further development of an area of study. There may be additional requirements that vary by area of study. The program is typically completed in less than two years. Both fall and spring start dates may be available, depending on program.

The school of business does not accept graduate credits earned while students are in nondegree status and/or courses taken prior to admission to the MBA program. Registration in school of business courses numbered 501 and above is limited to students who
have been admitted to a graduate degree program, have the approval of the MBA program office, and have the prerequisites of calculus and computer literacy.

## 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 degree. 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.

## Concurrent Degree Programs

For more information, see http://graduate.asu.edu/dualdegree.html.

Admission Requirements: The TOEFL is required of all international applicants whose native language is not English or who are not graduates of an institution located in the United States. The TSE is not required for admission to the Executive MBA program. For more information on TOEFL, access the Web site at http://www.ets.org.

Applicants should submit three essays for the degree program addressing commitment, goals, qualifications, and reasons for interest in the program. Applicants are to provide letters of recommendation commenting on the student's motivation, commitment, achievements, work experience, and opportunity for success in the program. A personal interview is also required. In addition to the above data, applicants are to communicate their interest in the program by selecting the appropriate application available online at http://graduate.asu.edu. Students applying to the Executive MBA Program should have extensive work experience; and usually have seven years experience as mid-level managers.

## W. P. Carey MBA - Full-Time Program BAFULLMBA

## W. P. CAREY SCHOOL OF BUSINESS, TEMPE

Contact: http://www.wpcarey.asu.edu/mba | wpcareymba@asu.edu | BA 160 | 4809653332 | 4906

## Official Degree Awarded: W. P. Carey MBA (MBA)

Program Description: The purpose of the program is to build knowledge and analytic capabilities in the functional areas of business and to develop interpersonal and leadership skills. Essential skills include computing, writing and critical thinking, presentation and speaking, team and group work, interpersonal relations, and time management. There is a strong team emphasis throughout the ASU curriculum.

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 online at http://wpcarey.asu.edu/mba/current_students/.

Program Requirements: While there are no business course prerequisites, applicants must have computer proficiency and expertise in using a spreadsheet package, a word processing package, a presentation software package, an e-mail package, and an Internet browser. Potential students must also demonstrate strong quantitative ability, as well as effective written and oral communication skills.

At least 48 semester hours are required to complete the Full-Time program. The core courses are designed to provide a foundation in business knowledge and skills, and must be taken in the prescribed sequence. Elective, specialization, or technical
certificate courses build upon the business core and focus on the further development of an area of study. There may be additional requirements that vary by area of study. The program is typically completed in less than two years. Both fall and spring start dates may be available, depending on program.

The school of business does not accept graduate credits earned while students are in nondegree status and/or courses taken prior to admission to the MBA program. Registration in school of business courses numbered 501 and above is limited to students who have been admitted to a graduate degree program, have the approval of the MBA program office, and have the prerequisites of calculus and computer literacy.

## 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 degree. 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.

## Concurrent Degree Programs

For more information, see http://graduate.asu.edu/dualdegree.html.

Admission Requirements: All students applying to the Full-Time MBA program are required to take the GMAT. The TOEFL is required of all international applicants whose native language is not English or who are not graduates of an institution located in the United States. The TSE is not required for admission to the MBA program. However, it may be required for a dual degree program or a graduate assistantship. For more information on GMAT, access the Web site at http://www.mba.com; for more information on TOEFL and TSE, access the Web site at http://www.ets.org.

Students applying to the Full-Time MBA program usually have at least two years of full-time work experience and should submit three essays for the degree program addressing commitment, goals, qualifications, and reasons for interest in the program. Applicants are to provide letters of recommendation commenting on the student's motivation, commitment, achievements, work experience, and opportunity for success in the program. A personal interview may also be required. In addition to the above data, applicants are to communicate their interest in the program by selecting the appropriate application available online at http://graduate.asu.edu.

## W. P. Carey MBA - Online Program BAONLINMBA

## W. P. CAREY SCHOOL OF BUSINESS, TEMPE

Contact: http://www.wpcarey.asu.edu/mba/online | wpcareymba@asu.edu | BA 160 | 4809653332 | 4906

## Official Degree Awarded: W. P. Carey MBA (MBA)

Program Description: The purpose of the program is to build knowledge and analytic capabilities in the functional areas of business and to develop interpersonal and leadership skills. Essential skills include computing, writing and critical thinking, presentation, team and group work, interpersonal relations, and time management. There is a strong team emphasis throughout the ASU curriculum.

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 online at http://wpcarey.asu.edu/mba//online/program/curriculum.cfm.

Program Requirements: At least 48 semester hours are required to complete the Online Program. The core courses are designed to provide a foundation in business knowledge and skills and must be taken in the prescribed sequence. The program is typically completed in less than two years. Both fall and spring start dates are available.

The school of business does not accept graduate credits earned while students are in nondegree status and/or courses taken prior to admission to the MBA program. Registration in school of business courses numbered 501 and above is limited to students who have been admitted to a graduate degree program, have the approval of the MBA program office, and have the prerequisites of calculus and computer literacy.

## 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 degree. 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.

## Concurrent Degree Programs

For more information, see http://graduate.asu.edu/dualdegree.html or http://wpcarey.asu.edu/mba/online/program/dualdegree.cfm.

Admission Requirements: While there are no business course prerequisites, applicants must have computer proficiency and expertise in using a spreadsheet package, a word processing package, a presentation software package, an e-mail package, and an Internet browser. Potential students must also demonstrate strong quantitative ability, as well as effective written and oral communication skills.

All students applying to the online MBA program are required to take the GMAT. The TOEFL is required of all international applicants whose native language is not English or who are not graduates of an institution located in the United States. The TSE is not required for admission to the MBA program. However, it may be required for dual degree programs. For more information on the GMAT, access the Web site at http://www.mba.com; for more information on TOEFL and TSE, access the Web site at http://www.ets.org.

Students applying to the W. P. Carey Online Program usually have at least two years of full-time work experience and should submit three essays for the degree program addressing commitment, goals, qualifications, and reasons for interest in the program. Applicants are to provide letters of recommendation commenting on the student's motivation, commitment, achievements, work experience, and opportunity for success in the program. A personal interview may also be required. In addition to the above data, applicants are to communicate their interest in the program by selecting the appropriate application available online at http://graduate.asu.edu.

## W. P. Carey MBA - Shanghai Program BASHANGMBA

W. P. CAREY SCHOOL OF BUSINESS, TEMPE

Contact: http://wpcarey.asu.edu/china | wpcareymba@asu.edu | BA 160 | 4809653332 | 4906
Official Degree Awarded: W. P. Carey MBA (MBA)
Program Description: Classes in the W. P. Carey Shanghai executive MBA program, for top Chinese business leaders cosponsored by the W. P. Carey School of Business and the Shanghai National Accounting Institute (SNAI), launched on Sept. 20, 2003.

The Shanghai program is one of the most exciting undertakings of the W. P. Carey School of Business. The vision of the program is to cultivate world-class executives for China's state-owned enterprises and to advance the Sino-U.S. trading relationship. This vision reflects the aspiration of ASU and the W. P. Carey School of Business to play a crucial role in enabling the state of Arizona to deepen its global reach, particularly in the Asia Pacific region.

Program Requirements: The curriculum, consisting of 12 courses and a total of 48 semester hours, is designed to leverage participants' existing strengths in financial management and institutional knowledge in the financial services sector. The curriculum has a strong institutional focus on this sector and at the same time provides intensive knowledge on managerial decision-making and strategic formulation. Accordingly, 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 and supplemented by online instruction materials to enable learning interactions between faculty and participants.

Admission Requirements: All applicants must apply through the Graduate College web application and meet Graduate College admission requirements.

## DESIGN, COLLEGE OF

## Architecture (MArch) ARARCMARCH

COLLEGE OF DESIGN, TEMPE
Contact: http://design.asu.edu/ | sala@asu.edu | "CDN 162, Design North Bldg" | 4809653536 | 1605
Official Degree Awarded: Architecture (MArch)
Program Description: The Master of Architecture is the accredited professional degree program at ASU. There are two programs of study available: (1) a two-year program for applicants who have completed the four-year Bachelor of Science in Design (with a major in Architectural Studies) at ASU or an equivalent degree from another school that offers an accredited professional degree in architecture, and (2) 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.

## Program Requirements: Requirements for the Two-Year Program

The two-year graduate program requires a minimum of 56 semester hours of approved courses and electives and a comprehensive examination. For most students, this program involves an average of 14 semester hours per semester. An internship may be offered as an elective to be taken in the summer before the final year of study. The internship is an honors program individually arranged and approved by the Master of Architecture Committee.

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 Program 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)
College of Design Professional elective1 (3)
Second Year
ADE 621 Advanced Architectural Studio III (5)
AAD 515 Current Issues and Topics (3)
College of Design Professional elective 1 (3)
ADE 622 Advanced Architectural Studio IV (3)
L/AAD 652 Architectural Management II (3)
College of Design Professional elective 1 (3)
Approved Elective 2 (3)
1 The list of College of Design electives can be found on the school's website: www.design.asu.edu
2 Elective can be taken outside the college with graduate coordinator approval

## Requirements for the Three-Plus Year Program

The three-plus-year graduate program requires a minimum of 78 semester hours of graduate-level course work and 24 semester hours of deficiency course work, which make up the total number of 102 semester hours of approved courses and electives, and a comprehensive examination. For most students, this program involves 15 semester hours in the first summer and 14 to 15 semester hours in each of the subsequent six semesters. A summer internship is required after the first full year of study. A second internship may be offered as an elective to be taken in the summer before the final year of study. The second internship is an honors program individually arranged and approved by the Master of Architecture Committee.

Students who can adequately demonstrate previous academic course work for any of the deficiencies are encouraged to petition the graduate coordinator for a course substitution.

## Typical Program of Study

Master of Architecture Program (3+ Year)
Program of Study and Checksheet
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 LA (1st five week session) (3)
APH 509 Foundation Seminar (2nd five week session) (3)

## Admission Requirements: Applicants to the two-year program must:

- Hold a baccalaureate or graduate degree from a college or university recognized by ASU.
- have completed a four-year Bachelor of Science degree with a major in Architectural Studies or similar preprofessional degree in architecture. The undergraduate degree must be granted by an institution that offers the National Architectural Accreditation Board (NAAB) accredited degree program in architecture.
- meet the minimum GPA requirements as established by the Graduate College.
- provide official copy of GRE scores (unofficial copies will not be accepted). For more information on the GRE: (http://www.gre.org, or if you live near ASU, http://ww.asu.edu/uts). The School of Architecture and Landscape

Architecture does not have a minimum score for admissions; however, the average scores of admitted students are between 500-600 for each section.

In addition to the above requirements, international students are required to submit an official TOEFL score (http://www.TOEFL.org). 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 Web site http://www.asu.edu/graduate/international/index.htm.

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 deparment.

## Applicants to the three-year-plus program must:

- Applicants must hold a baccalaureate or graduate degree from a college or university recognized by ASU.
- Applicants must have earned a bachelors degree in a field other than architectural studies leading to the NAAB accredited program.
- Applicants must meet the minimum GPA requirements as established by the Graduate College.
- Official copy of GRE scores (unofficial copies will not be accepted). For more information on the GRE: (http://www.gre.org, or if you live near ASU, http://ww.asu.edu/uts). The School of Architecture and Landscape Architecture does not have a minimum score for admissions; however, the average scores of admitted students are between 500-600 for each section.

In addition to the above requirements, international students are required to submit an official TOEFL score (http://www.TOEFL.org). 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 Web site http://www.asu.edu/graduate/international/index.htm.

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.

A personal interview is not required; however, a candidate wishing to visit the school is welcome and should make arrangements by contacting.

## Additional Master of Architecture Three-plus Program Requirements

Applicants should write their name in a clear and consistent manner on all materials submitted, preferably in the "family name, first name" format (e.g. Smith, John).

Statement of Intent. A personal narrative (maximum 600 words or two pages typed) indicating the applicant's interest, previous academic and practical background, as well as personal and professional educational objectives.

Letters of Recommendation. A minimum of three letters of recommendation in support of the applicant must be mailed directly to the Graduate Admissions Committee, School of Architecture and Landscape Architecture. The references should be from professionals or educators familiar with the applicant's experience and capability for graduate work.

Creative Works Portfolio. Candidates applying for the Three-plus year Master of Architecture program must also provide a portfolio of creative works. See the portfolio requirements outlined on the College of Design website for more information. Submit the statement of intent, recommendation letters, creative works portfolio, and the contact information sheet to the following address:

Master of Architecture Admissions Committee
School of Architecture and Landscape Architecture
Arizona State University
PO Box 871605
College of Design North, room 162
Tempe, AZ 85287-1605

Please submit your online application and fees, test scores (GRE or TOEFL), and official transcripts form all post-secondary institutions directly to the Graduate College.

## Application Deadlines

All materials must be received by the School of Architecture and Landscape Architecture and the Graduate College by January 15 for summer semester consideration. Priority will be given to students who have submitted all the required application materials to both the Graduate College and the School of Architecture and Landscape Architecture by deadline of January 15. The Master of Architecture (three-plus) program does not admit students for the spring semester of fall semester.

## Building Design: Energy Performance/Climate Responsive Architecture (MS) ARENERGYMS

COLLEGE OF DESIGN, TEMPE
Contact: http://design.asu.edu/ | sala@asu.edu | CDN 162 | 4809653536 | 1605
Official Degree Awarded: Building Design (Energy Performance and Climate Responsive Architecture) (MS)
Program Description: The Building Design MS degree program with a concentration in energy performance and climateresponsive 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.

## Program Requirements: First Year

Fall
ANP 500 Research Methods (3)
ATE 521 Building Environmental Science (3)
*ATE 591 -Seminar-Energy and Climate I (1)
*EET 598 -Intro to Photovoltaic (3)
Spring
ATE 560-Building Energy Analysis (3)
ATE 562 -Experimental Evaluation(3)
ATE 582 -Environmental Control Systems (3)

## Second Year

ADE 621 Advanced Architecture Studio (5)
*ATE 598 Energy Analysis II (3)
ATE 691 Seminar- Energy and Climate III (1)
Spring
ATE 550 Passive Heating and Cooling (3)
ATE 599 Thesis (6)

## Minimum Total 30

*These are not required courses for the degree; however they are recommended electives.

## Admission Requirements: Applicants to the program must:

- Submit an online Graduate College application.
- Have a previous five-or-six-year NAAB (National Architectural Board) accredited degree in Architecture (BArch or MArch) degree.
- Hold a baccalaureate or graduate degree from a college or university recognized by ASU.
- Meet the minimum GPA requirements as established by the Graduate College.
- Provide official copy of GRE scores (unofficial copies will not be accepted). For more information on the GRE: (http://www.gre.org, or if you live near ASU, http://www.asu.edu/uts). The School of Architecture and Landscape Architecture does not have a minimum score for admissions; however, the average scores of admitted students are between 500-600 for each section.

In addition to the above requirements, international students are required to submit an official TOEFL score (http://www.TOEFL.org). 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 http://www.asu.edu/graduate/international/index.htm.

Admission to the 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 the department.

## Additional Admission Requirements

Applicants should write their name in a clear and consistent manner on all materials submitted, preferably in the "family name, first name" format (e.g. Smith, John).

Statement of Intent. A personal narrative (maximum 600 words or two-pages typed) indicating the applicant's interest, previous academic and practical background, as well as personal and professional educational objectives.

Letters of Recommendation. A minimum of three letters of recommendation in support of the applicant must be mailed directly to the Graduate Admissions Committee, School of Architecture and Landscape Architecture. The references should be from professionals or educators familiar with the applicant's experience and capability for graduate work.

Portfolio. Candidates applying for the MS in Building Design program must also provide a portfolio. See the portfolio requirements outlined on the College of Design Web site for more information.

Submit the statement of intent, recommendation letters, portfolio, and the contact information sheet to the following address:
Master of Science in Building Design Admissions Committee

School of Architecture and Landscape Architecture
Arizona State University
PO Box 871605
College of Design North, room 162
Tempe, AZ 85287-1605
Please submit your online application and fee, test scores (GRE or TOEFL), and official transcripts from all post-secondary institutions directly to the Graduate College.

## Application Deadlines

All materials must be received by the School of Architecture and Landscape Architecture and the Graduate College by January 15 for summer semester consideration. Priority will be given to students who have submitted all the required application materials to both the Graduate College and the School of Architecture and Landscape Architecture by deadline of January 15. The Master of Science in Building Design program does not admit students for the spring semester of fall semester.

Applications for assistantships and scholarships are generally considered at the same time as the application.

Design (Arts, Media and Engineering) (MSD) ARDESAMMSD<br>COLLEGE OF DESIGN, TEMPE<br>Contact: http://www.design.asu.edu/msd | design.grad@asu.edu | CDN 162 | 480/965-7007 | 2105<br>Official Degree Awarded: Design (Arts, Media and Engineering) (MSD)

Program Description: The MSD with a concentration in arts, media and engineering is meant for individuals who wish to be at the forefront of design and development in those overlapping areas among arts, media and engineering. The concentration provides the opportunity to span the breath of experimental media, from the more creative aspects to that part which is more quantitative, and everything in between. The concentration prepares a student for work with companies at the leading edge of media development.

Program Requirements: This program requires 36 credits and a thesis or 36 credits 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 MSD Program must hold a baccalaureate degree in Graphic Design, Industrial Design, Interior Design, or a related design discipline. When applying for admission, applicants must declare one of seven concentrations: Healthcare and healing environments, new product innovation, interactive design, arts/media/engineering, visual communication design, industrial design, or interior design. Further information can be found in the program description on the admissions Web page at http://www.design.asu.edu/msd/admission.shtml.

Applicants must file separate application materials to both the Graduate College and the MSD Program.

## MSD Program Requirements

- A 3.00 or higher baccalaureate grade point average is required for application.
- Minimum TOEFL score of 550 on paper-based test or 213 on computer-based test is required of international students whose native language is not English.

Submit the following materials to:
MSD Program
COLLEGE OF DESIGN
ARIZONA STATE UNIVERSITY

1. A mandatory statement of intent form found on the admissions website listed above (maximum 600 words; ) which must include the following points:

- Specify intended concentration: Healthcare and Healing Environments, New Product Innovation, Interactive Design, Visual Communication Design, Industrial Design, Interior Design, or Arts/Media/Engineering.
- Discuss proposed research topic. What will be your research focus? Why is this research important to you, the design community, and the general population?
- Specify a proposed mentor for intended research. Faculty biographies can be found on the website at design.asu.edu/msd/faculty.shtml.
- Discuss personal academic background and professional experience that has prepared you for or will support your proposed research topic.

2. Three recommendation forms (found on the admissions Web site listed above) from persons who are qualified to comment on your potential in the selected area of study. Students must have the recommender use the recommendation form. Students have two options to return letters of recommendation: 1) have the recommender mail in the letter to the MSD program or 2 ) submit letters with a complete application packet; letters must be sealed and the recommender's signature must be across the seal in ink.
3. An additional statement from applicants wishing to be considered for teaching or research assistantships 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 (international students who wish to be considered for a teaching assistantship and whose first language is not English are required to pass the Test of Spoken English [TSE] or the SPEAK test.

- The TSE is administered by TOEFL/TSE Services, (PO Box 6151, Princeton, NJ, 08541-6151, USA) and can be taken in your home country (or US). Ask to have the score sent directly to the MSD Program at the above address.
- The SPEAK test is the local version of the TSE, authorized by Educational Testing Services (ETS) and administered on campus through the American English and Culture Program (AECP) at ASU. It is an oral proficiency exam.

4. An $8.5^{\prime \prime} \times 11^{\prime \prime}$ portfolio documenting papers and imaginative projects that support the intended concentration and demonstrate drawing, rendering, graphic and modeling skills.

The portfolio is returned after final admission procedures, provided sufficient prepaid postage is enclosed, or if the materials are claimed in person within one year of submission. Unclaimed portfolios are retained for only one year.

The MSD Program assumes no liability for lost or damaged materials. IMPORTANT NOTE: Items 1 to 4 above must be sent to the MSD Program address. DO NOT send these materials to the Graduate College. If these materials are sent to any other area other than the MSD Program, they will not be reviewed and your application will be denied.

## C. Application Deadlines

Primary consideration is given to completed applications received by the deadline. Applications for assistantships and scholarships normally are considered at the same time, but positions will not be filled until July.

The Graduate College and the MSD Program must receive all materials by January 15 to be considered for the following fall semester. Please note that the MSD program only accepts fall admission.

## D. Selection Procedures and Notifications

The faculty evaluates the applications and supporting materials and recommends 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 specifies in its letter of admission the provisions to be met to gain regular status. The MSD Program informs successful applicants of the procedures for enrollment.

## E. Foreign Language Requirements

None.

## F. Thesis or Applied Project

For students choosing the thesis option, six semester hours of DSC 599 Thesis apply toward the thesis. Guidelines in the Format Manual must be followed. For students choosing the applied project option, six hours of DSC 593 Applied Project apply.

You can find more information about the Thesis/Dissertation at the Graduate College Web site.
G. Final Examinations

An oral examination in defense of the thesis or applied project is required for all students in the MSD Program. Graduation Deadlines and Procedures can be found on the Graduate College Web site.

## Design (Interaction Design) (MSD) ARDSCIMSD

COLLEGE OF DESIGN, TEMPE
Contact: http://design.asu.edu/msd/concentrations.shtml | design.grad@asu.edu | CDN 162 | 480/965-7007 | 2105
Official Degree Awarded: Design (Interaction Design) (MSD)
Program Description: Interaction design is about people: 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 humanspatial interactions. Design principles guide the students in the methods of creating dynamic, expressive, and communicative forms.

Program Requirements: This program requires 36 semester hours and a thesis or 36 hours 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 MSD Program must hold a baccalaureate degree in Graphic Design, Industrial Design, Interior Design, or a related design discipline. When applying for admission, applicants must declare one of seven concentrations: Healthcare and healing environments, new product innovation, interactive design, arts/media/engineering, visual communication design, industrial design, or interior design. Further information can be found in the program description on the admissions Web page at http://www.design.asu.edu/msd/admission.shtml.

Applicants must file separate application materials to both the Graduate College and the MSD Program.

## MSD Program Requirements

- A 3.00 or higher baccalaureate grade point average is required for application.
- Minimum TOEFL score of 550 on paper-based test or 213 on computer-based test is required of international students whose native language is not English.

Submit the following materials to:
MSD Program
COLLEGE OF DESIGN
ARIZONA STATE UNIVERSITY
PO BOX 872105
TEMPE AZ 85287-2105

1. A mandatory statement of intent form found on the admissions website listed above (maximum 600 words; ) which must include the following points:

- Specify intended concentration: Healthcare and Healing Environments, New Product Innovation, Interactive Design, Visual Communication Design, Industrial Design, Interior Design, or Arts/Media/Engineering.
- Discuss proposed research topic. What will be your research focus? Why is this research important to you, the design community, and the general population?
- Specify a proposed mentor for intended research. Faculty biographies can be found on the website at design.asu.edu/msd/faculty.shtml.
- Discuss personal academic background and professional experience that has prepared you for or will support your proposed research topic.

2. Three recommendation forms (found on the admissions Web site listed above) from persons who are qualified to comment on your potential in the selected area of study. Students must have the recommender use the recommendation form. Students have two options to return letters of recommendation: 1 ) have the recommender mail in the letter to the MSD program or 2) submit letters with a complete application packet; letters must be sealed and the recommender's signature must be across the seal in ink.
3. An additional statement from applicants wishing to be considered for teaching or research assistantships 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 (international students who wish to be considered for a teaching assistantship and whose first language is not English are required to pass the Test of Spoken English [TSE], the SPEAK test, or have a score of 24 or higher on the iBT TOEFL in the speaking section.

- The TSE is administered by TOEFL/TSE Services, (PO Box 6151, Princeton, NJ, 08541-6151, USA) and can be taken in your home country (or US). Ask to have the score sent directly to the MSD Program at the above address.
- The SPEAK test is the local version of the TSE, authorized by Educational Testing Services (ETS) and administered on campus through the American English and Culture Program (AECP) at ASU. It is an oral proficiency exam.

4. An $8.5^{\prime \prime} \times 11^{\prime \prime}$ portfolio documenting papers and imaginative projects that support the intended concentration and demonstrate drawing, rendering, graphic and modeling skills.

The portfolio is returned after final admission procedures, provided sufficient prepaid postage is enclosed, or if the materials are claimed in person within one year of submission. Unclaimed portfolios are retained for only one year.

The MSD Program assumes no liability for lost or damaged materials. IMPORTANT NOTE: Items 1 to 4 above must be sent to the MSD Program address. DO NOT send these materials to the Graduate College. If these materials are sent to any other area other than the MSD Program, they will not be reviewed and your application will be denied.

## C. Application Deadlines

Primary consideration is given to completed applications received by the deadline. Applications for assistantships and scholarships normally are considered at the same time, but positions will not be filled until July.

The Graduate College and the MSD Program must receive all materials by January 15 to be considered for the following fall semester. Please note that the MSD program only accepts fall admission.

## D. Selection Procedures and Notifications

The faculty evaluates the applications and supporting materials and recommends 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 specifies in its letter of admission the provisions to be met to gain regular status. The MSD Program informs successful applicants of the procedures for enrollment.

## E. Foreign Language Requirements

None.

## F. Thesis or Applied Project

For students choosing the thesis option, six semester hours of DSC 599 Thesis apply toward the thesis. Guidelines in the Format Manual must be followed. For students choosing the applied project option, six hours of DSC 593 Applied Project apply.

You can find more information about the Thesis/Dissertation at the Graduate College Web site.
G. Final Examinations

An oral examination in defense of the thesis or applied project is required for all students in the MSD Program. Graduation Deadlines and Procedures can be found on the Graduate College Web site.

# Design (New Product Innovation) (MSD) ARDSCNMSD 

COLLEGE OF DESIGN, TEMPE
Contact: http://www.design.asu.edu/msd/index.shtml | design.grad@asu.edu | CDN 162 | 480/965-7007 | 2105
Official Degree Awarded: Design (New Product Innovation) (MSD)
Program Description: The Master of Science in Design program with a concentration in new product innovation is a researchoriented 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 in principles of 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.

Program Requirements: This is a 36 semester hour, project-based concentration that 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 MSD Program must hold a baccalaureate degree in Graphic Design, Industrial Design, Interior Design, or a related design discipline. When applying for admission, applicants must declare one of seven concentrations: Healthcare and healing environments, new product innovation, interactive design, arts/media/engineering, visual communication design, industrial design, or interior design. Further information can be found in the program description on the admissions Web page at http://www.design.asu.edu/msd/admission.shtml.

Applicants must file separate application materials to both the Graduate College and the MSD Program.

## MSD Program Requirements

- A 3.00 or higher baccalaureate grade point average is required for application.
- Minimum TOEFL score of 550 on paper-based test or 213 on computer-based test is required of international students whose native language is not English.

Submit the following materials to:
MSD Program
COLLEGE OF DESIGN
ARIZONA STATE UNIVERSITY
5. A mandatory statement of intent form found on the admissions website listed above (maximum 600 words; ) which must include the following points:

- Specify intended concentration: Healthcare and Healing Environments, New Product Innovation, Interactive Design, Visual Communication Design, Industrial Design, Interior Design, or Arts/Media/Engineering.
- Discuss proposed research topic. What will be your research focus? Why is this research important to you, the design community, and the general population?
- Specify a proposed mentor for intended research. Faculty biographies can be found on the website at design.asu.edu/msd/faculty.shtml.
- Discuss personal academic background and professional experience that has prepared you for or will support your proposed research topic.

6. Three recommendation forms (found on the admissions Web site listed above) from persons who are qualified to comment on your potential in the selected area of study. Students must have the recommender use the recommendation form. Students have two options to return letters of recommendation: 1) have the recommender mail in the letter to the MSD program or 2 ) submit letters with a complete application packet; letters must be sealed and the recommender's signature must be across the seal in ink.
7. An additional statement from applicants wishing to be considered for teaching or research assistantships 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 (international students who wish to be considered for a teaching assistantship and whose first language is not English are required to pass the Test of Spoken English [TSE], the SPEAK test, or have a score of 24 or higher on the iBT TOEFL in the speaking section.

- The TSE is administered by TOEFL/TSE Services, (PO Box 6151, Princeton, NJ, 08541-6151, USA) and can be taken in your home country (or US). Ask to have the score sent directly to the MSD Program at the above address.
- The SPEAK test is the local version of the TSE, authorized by Educational Testing Services (ETS) and administered on campus through the American English and Culture Program (AECP) at ASU. It is an oral proficiency exam.

8. An $8.5^{\prime \prime} \times 11^{\prime \prime}$ portfolio documenting papers and imaginative projects that support the intended concentration and demonstrate drawing, rendering, graphic and modeling skills.

The portfolio is returned after final admission procedures, provided sufficient prepaid postage is enclosed, or if the materials are claimed in person within one year of submission. Unclaimed portfolios are retained for only one year.

The MSD Program assumes no liability for lost or damaged materials. IMPORTANT NOTE: Items 1 to 4 above must be sent to the MSD Program address. DO NOT send these materials to the Graduate College. If these materials are sent to any other area other than the MSD Program, they will not be reviewed and your application will be denied.

## C. Application Deadlines

Primary consideration is given to completed applications received by the deadline. Applications for assistantships and scholarships normally are considered at the same time, but positions will not be filled until July.

The Graduate College and the MSD Program must receive all materials by January 15 to be considered for the following fall semester. Please note that the MSD program only accepts fall admission.

## D. Selection Procedures and Notifications

The faculty evaluates the applications and supporting materials and recommends 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 specifies in its letter of admission the provisions to be met to gain regular status. The MSD Program informs successful applicants of the procedures for enrollment.

None.

## F. Thesis or Applied Project

For students choosing the thesis option, six semester hours of DSC 599 Thesis apply toward the thesis. Guidelines in the Format Manual must be followed. For students choosing the applied project option, six hours of DSC 593 Applied Project apply.

You can find more information about the Thesis/Dissertation at the Graduate College Web site.

## G. Final Examinations

An oral examination in defense of the thesis or applied project is required for all students in the MSD Program. Graduation Deadlines and Procedures can be found on the Graduate College Web site.

## Design (Visual Communication Design) (MSD) ARVCDMSD

COLLEGE OF DESIGN, TEMPE

Contact: http://design.asu.edu | design.grad@asu.edu | CDN 162 | 480/965-7007 | 2105
Official Degree Awarded: Design (Visual Communication Design) (MSD)
Program Description: The MSD 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.

Program Requirements: This program requires 36 semester hours and a thesis or 36 hours 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 MSD Program must hold a baccalaureate degree in Graphic Design, Industrial Design, Interior Design, or a related design discipline. When applying for admission, applicants must declare one of seven concentrations: Healthcare and healing environments, new product innovation, interactive design, arts/media/engineering, visual communication design, industrial design, or interior design. Further information can be found in the program description on the admissions Web page at http://www.design.asu.edu/msd/admission.shtml.

Applicants must file separate application materials to both the Graduate College and the MSD Program.

## MSD Program Requirements

- A 3.00 or higher baccalaureate grade point average is required for application.
- Minimum TOEFL score of 550 on paper-based test or 213 on computer-based test is required of international students whose native language is not English.

Submit the following materials to:

MSD Program
COLLEGE OF DESIGN

1. A mandatory statement of intent form found on the admissions website listed above (maximum 600 words; ) which must include the following points:
o Specify intended concentration: Healthcare and Healing Environments, New Product Innovation, Interactive Design, Visual Communication Design, Industrial Design, Interior Design, or Arts/Media/Engineering.
o Discuss proposed research topic. What will be your research focus? Why is this research important to you, the design community, and the general population?
o Specify a proposed mentor for intended research. Faculty biographies can be found on the website at design.asu.edu/msd/faculty.shtml.
0 Discuss personal academic background and professional experience that has prepared you for or will support your proposed research topic.
2. Three recommendation forms (found on the admissions Web site listed above) from persons who are qualified to comment on your potential in the selected area of study. Students must have the recommender use the recommendation form. Students have two options to return letters of recommendation: 1 ) have the recommender mail in the letter to the MSD program or 2 ) submit letters with a complete application packet; letters must be sealed and the recommender's signature must be across the seal in ink.
3. An additional statement from applicants wishing to be considered for teaching or research assistantships 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 (international students who wish to be considered for a teaching assistantship and whose first language is not English are required to pass the Test of Spoken English [TSE], the SPEAK test, or have a score of 24 or higher on the iBT TOEFL in the speaking section.

0 The TSE is administered by TOEFL/TSE Services, (PO Box 6151, Princeton, NJ, 08541-6151, USA) and can be taken in your home country (or US). Ask to have the score sent directly to the MSD Program at the above address.
o The SPEAK test is the local version of the TSE, authorized by Educational Testing Services (ETS) and administered on campus through the American English and Culture Program (AECP) at ASU. It is an oral proficiency exam.
4. An $8.5^{\prime \prime}$ x $11^{\prime \prime}$ portfolio documenting papers and imaginative projects that support the intended concentration and demonstrate drawing, rendering, graphic and modeling skills.

The portfolio is returned after final admission procedures, provided sufficient prepaid postage is enclosed, or if the materials are claimed in person within one year of submission. Unclaimed portfolios are retained for only one year.

The MSD Program assumes no liability for lost or damaged materials. IMPORTANT NOTE: Items 1 to 4 above must be sent to the MSD Program address. DO NOT send these materials to the Graduate College. If these materials are sent to any other area other than the MSD Program, they will not be reviewed and your application will be denied.

## C. Application Deadlines

Primary consideration is given to completed applications received by the deadline. Applications for assistantships and scholarships normally are considered at the same time, but positions will not be filled until July.

The Graduate College and the MSD Program must receive all materials by January 15 to be considered for the following fall semester. Please note that the MSD program only accepts fall admission.
D. Selection Procedures and Notifications

The faculty evaluates the applications and supporting materials and recommends 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 specifies in its letter of admission the provisions to be met to gain regular status. The MSD Program informs successful applicants of the procedures for enrollment.

## E. Foreign Language Requirements

None.

## F. Thesis or Applied Project

For students choosing the thesis option, six semester hours of DSC 599 Thesis apply toward the thesis. Guidelines in the Format Manual must be followed. For students choosing the applied project option, six hours of DSC 593 Applied Project apply.

You can find more information about the Thesis/Dissertation at the Graduate College Web site.

## G. Final Examinations

An oral examination in defense of the thesis or applied project is required for all students in the MSD Program. Graduation Deadlines and Procedures can be found on the Graduate College Web site.

## Environmental Design/Planning (PhD) ARENVDEPHD

COLLEGE OF DESIGN, TEMPE
Contact: http://design.asu.edu/PhD | design.grad@asu.edu | CDN 162 | 480/965-7007 | 1905
Official Degree Awarded: Environmental Design/Planning (PhD)
Program Description: The PhD degree in Environmental Design and Planning is an individualized college-wide interdisciplinary degree that integrates graduate courses and faculty research expertise with concentrations in design; planning; or history, theory and criticism. The program is at the cutting edge of creating new knowledge in architecture, design and planning. It complements interdisciplinary research in other disciplines within the university. Broad in scope, the program involves multidisciplinary research interests at both micro- and macro-scale levels of design and planning. The program provides research experience for students wishing to pursue careers in industry as members of interdisciplinary design and planning teams on environmental and energy issues, as well as for those wishing to teach in the architecture, design, or planning fields.

Program Requirements: Students must be thoroughly familiar with design and planning and are expected to demonstrate a high level of academic maturity before being admitted to the program. This program requires 84 credit hours, a dissertation, and written and oral comprehensive exams. Up to 30 credit hours from a previously awarded master's degree can count towards the requirements of the PhD program.

Of the 54 semester hours, 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 PhD program. No transfer credits are allowed to fulfill the 54 -semester-hour minimum requirement completed after admission to the PhD program.

The student is required to take 15 semester hours in the area of concentration, and a minimum of nine semester hours of specialized course work outside the area of concentration; a minimum of six semester hours in current research and research methods is required.Each student entering the PhD program is required to submit a program of study during the first year.

Admission Requirements: Students are admitted to the PhD program only upon completion of a master's degree in architecture, environmental resources, design, landscape architecture, or planning or upon the demonstration of equivalent standing.In addition to meeting Graduate College admission requirements, applicants must submit the following items to:

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PhD PROGRAM IN ENVIRONMENTAL DESIGN AND PLANNING
COLLEGE OF DESIGN
ARIZONA STATE UNIVERSITY
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1. A minimum of three letters of reference,
2. A sample of written work and any other evidence relevant to admission to the program,
3. 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 College of Design),
4. A proposed mentor and concentration form, and
5. Graduate Record Examination (GRE) scores.

A Test of English as a Foreign Language (TOEFL) score of at least 600 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 (TAs) must take the SPEAK test administered at ASU and become certified.

Additional information is available at http://design.asu.edu.

## Healthcare and Healing Environments (MSD) ARHHEMSD

## COLLEGE OF DESIGN, TEMPE

Contact: http://design.asu.edu | design.grad@asu.edu | CDN 162 | 480/965-7007 | 2105
Official Degree Awarded: Design (Design of Healthcare and Healing Environments) (MSD)
Program Description: The concentration in healthcare and healing environments is focused on factors that impact the design and planning of healthcare facilities and healing environments, especially the integration of evidence based design, sustainable science, and best practices benchmarks with planning healthcare 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 healthcare design consultants, teaming with nursing students, working directly with real clients, and corresponding with forwardthinking healthcare research centers.

Program Requirements: This program requires 36 semester hours and a thesis or 36 hours 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 MSD Program must hold a baccalaureate degree in Graphic Design, Industrial Design, Interior Design, or a related design discipline. When applying for admission, applicants must declare one of seven concentrations: Healthcare and healing environments, new product innovation, interactive design, arts/media/engineering, visual communication design, industrial design, or interior design. Further information can be found in the program description on the admissions Web page at http://www.design.asu.edu/msd/admission.shtml.

Applicants must file separate application materials to both the Graduate College and the MSD Program.

## MSD Program Requirements

A 3.00 or higher baccalaureate grade point average is required for application.

- Minimum TOEFL score of 550 on paper-based test or 213 on computer-based test is required of international students whose native language is not English.

Submit the following materials to:

1. A mandatory statement of intent form found on the admissions website listed above (maximum 600 words; ) which must include the following points:
o Specify intended concentration: Healthcare and Healing Environments, New Product Innovation, Interactive Design, Visual Communication Design, Industrial Design, Interior Design, or Arts/Media/Engineering.
o Discuss proposed research topic. What will be your research focus? Why is this research important to you, the design community, and the general population?
O Specify a proposed mentor for intended research. Faculty biographies can be found on the website at design.asu.edu/msd/faculty.shtml.
o Discuss personal academic background and professional experience that has prepared you for or will support your proposed research topic.
2. Three recommendation forms (found on the admissions Web site listed above) from persons who are qualified to comment on your potential in the selected area of study. Students must have the recommender use the recommendation form. Students have two options to return letters of recommendation: 1) have the recommender mail in the letter to the MSD program or 2 ) submit letters with a complete application packet; letters must be sealed and the recommender's signature must be across the seal in ink.
3. An additional statement from applicants wishing to be considered for teaching or research assistantships 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 (international students who wish to be considered for a teaching assistantship and whose first language is not English are required to pass the Test of Spoken English [TSE], the SPEAK test, or have a score of 24 or higher on the iBT TOEFL in the speaking section.
o The TSE is administered by TOEFL/TSE Services, (PO Box 6151, Princeton, NJ, 08541-6151, USA) and can be taken in your home country (or US). Ask to have the score sent directly to the MSD Program at the above address.
o The SPEAK test is the local version of the TSE, authorized by Educational Testing Services (ETS) and administered on campus through the American English and Culture Program (AECP) at ASU. It is an oral proficiency exam.
4. An $8.5^{\prime \prime} \times 11^{\prime \prime}$ portfolio documenting papers and imaginative projects that support the intended concentration and demonstrate drawing, rendering, graphic and modeling skills.

The portfolio is returned after final admission procedures, provided sufficient prepaid postage is enclosed, or if the materials are claimed in person within one year of submission. Unclaimed portfolios are retained for only one year.

The MSD Program assumes no liability for lost or damaged materials. IMPORTANT NOTE: Items 1 to 4 above must be sent to the MSD Program address. DO NOT send these materials to the Graduate College. If these materials are sent to any other area other than the MSD Program, they will not be reviewed and your application will be denied.

## C. Application Deadlines

Primary consideration is given to completed applications received by the deadline. Applications for assistantships and scholarships normally are considered at the same time, but positions will not be filled until July.

The Graduate College and the MSD Program must receive all materials by January 15 to be considered for the following fall semester. Please note that the MSD program only accepts fall admission.
D. Selection Procedures and Notifications

The faculty evaluates the applications and supporting materials and recommends 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 specifies in its letter of admission the provisions to be met to gain regular status. The MSD Program informs successful applicants of the procedures for enrollment.

## E. Foreign Language Requirements

None.

## F. Thesis or Applied Project

For students choosing the thesis option, six semester hours of DSC 599 Thesis apply toward the thesis. Guidelines in the Format Manual must be followed. For students choosing the applied project option, six hours of DSC 593 Applied Project apply.

You can find more information about the Thesis/Dissertation at the Graduate College Web site.
G. Final Examinations

An oral examination in defense of the thesis or applied project is required for all students in the MSD Program. Graduation Deadlines and Procedures can be found on the Graduate College Web site.

## Industrial Design (MSD) ARINDDEMSD

COLLEGE OF DESIGN, TEMPE
Contact: http://design.asu.edu/industrial | design.grad@asu.edu | CDN 162 | 480/965-7007 | 2105
Official Degree Awarded: Design (Industrial Design) (MSD)

Program Description: The Master of Science in Design (MSD) program with a concentration in industrial design is a researchoriented graduate degree. Its focus is on research, both theoretical and applied, and it prepares students for research in academic and professional settings. The program is not an extension of the undergraduate studio experience, but culminates in a written thesis or applied project.

The MSD program has four goals:

1. provide graduate education for students who have a baccalaureate degree in industrial design;
2. provide an opportunity for the development of specialized research skills to support the profession of industrial design;
3. provide the opportunity for design professionals to gain the necessary research skills for academic and professional careers; and
4. develop critical skills that enable the graduates of the program to contribute to the literature of design through articles, essays, and books or to participate in professional and/or academic conferences related to their concentration.

Program Requirements: This program requires 36 credit hours and a thesis or 36 credit hours 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.

## Foreign Language Requirements

None.

## Thesis or Applied Project

For students choosing the thesis option, six semester hours of DSC 599 Thesis apply toward the thesis. Guidelines in the Format Manual must be followed. For students choosing the applied project option, six hours of DSC 593 Applied Project apply.

You can find more information about the Thesis/Dissertation at the Graduate College Web site.

## Final Examinations

An oral examination in defense of the thesis or applied project is required for all students in the MSD Program. Graduation Deadlines and Procedures can be found on the Graduate College Web site.

Admission Requirements: Applicants to the MSD Program must hold a baccalaureate degree in Graphic Design, Industrial Design, Interior Design, or a related design discipline. When applying for admission, applicants must declare one of seven concentrations: Healthcare and healing environments, new product innovation, interactive design, arts/media/engineering, visual communication design, industrial design, or interior design. Further information can be found in the program description on the admissions Web page at http://www.design.asu.edu/msd/admission.shtml.

Applicants must file separate application materials to both the Graduate College and the MSD Program.

- A 3.00 or higher baccalaureate grade point average is required for application.
- Minimum TOEFL score of 550 on paper-based or 83 iBT is required of applicants whose native language is not English.

Submit the following materials to:

MSD Program
COLLEGE OF DESIGN
ARIZONA STATE UNIVERSITY
PO BOX 872105
TEMPE AZ 85287-2105

1. A mandatory statement of intent form found on the admissions website listed above (maximum 600 words; ) which must include the following points:
o Specify intended concentration: Healthcare and Healing Environments, New Product Innovation, Interactive Design, Visual Communication Design, Industrial Design, Interior Design, or Arts/Media/Engineering.
o Discuss proposed research topic. What will be your research focus? Why is this research important to you, the design community, and the general population?
o Specify a proposed mentor for intended research. Faculty biographies can be found on the website at design.asu.edu/msd/faculty.shtml.
O Discuss personal academic background and professional experience that has prepared you for or will support your proposed research topic.
2. Three recommendation forms (found on the admissions Web site listed above) from persons who are qualified to comment on your potential in the selected area of study. Students must have the recommender use the recommendation form. Students have two options to return letters of recommendation: 1) have the recommender mail in the letter to the MSD program or 2 ) submit letters with a complete application packet; letters must be sealed and the recommender's signature must be across the seal in ink.
3. An additional statement from applicants wishing to be considered for teaching or research assistantships 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 (international students who wish to be considered for a teaching assistantship and whose first language is not English are required to pass the Test of Spoken English [TSE], the SPEAK test, or have a score of 24 or higher on the iBT TOEFL in the speaking section.

0 The TSE is administered by TOEFL/TSE Services, (PO Box 6151, Princeton, NJ, 08541-6151, USA) and can be taken in your home country (or US). Ask to have the score sent directly to the MSD Program at the above address.
o The SPEAK test is the local version of the TSE, authorized by Educational Testing Services (ETS) and administered on campus through the American English and Culture Program (AECP) at ASU. It is an oral proficiency exam.
4. An $8.5^{\prime \prime} \times 11^{\prime \prime}$ portfolio documenting papers and imaginative projects that support the intended concentration and demonstrate drawing, rendering, graphic and modeling skills.

The portfolio is returned after final admission procedures, provided sufficient prepaid postage is enclosed, or if the materials are claimed in person within one year of submission. Unclaimed portfolios are retained for only one year.

The MSD Program assumes no liability for lost or damaged materials. IMPORTANT NOTE: Items 1 to 4 above must be sent to the MSD Program address. DO NOT send these materials to the Graduate College. If these materials are sent to any other area other than the MSD Program, they will not be reviewed and your application will be denied.

## Application Deadlines

Primary consideration is given to completed applications received by the deadline. Applications for assistantships and scholarships normally are considered at the same time, but positions will not be filled until July.

The Graduate College and the MSD Program must receive all materials by January 15 to be considered for the following fall semester. Please note that the MSD program only accepts fall admission.

## Selection Procedures and Notifications

The faculty evaluates the applications and supporting materials and recommends 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 specifies in its letter of admission the provisions to be met to gain regular status. The MSD Program informs successful applicants of the procedures for enrollment.

## Interior Design (MSD) ARINTDEMSD

## COLLEGE OF DESIGN, TEMPE

Contact: http://design.asu.edu/interior | design.grad@asu.edu | CDN 162 | 480/965-7007 | 2105
Official Degree Awarded: Design (Interior Design) (MSD)
Program Description: The Master of Science in Design (MSD) program with a concentration in interior design is a researchoriented graduate degree. Its focus is on research, both theoretical and applied, and it prepares students for research in academic and professional settings. The program is not an extension of the undergraduate studio experience, but culminates in a written thesis or applied project.

The Master of Science in Design (MSD) program with a concentration in interior design is a research-oriented graduate degree. Its focus is on research, both theoretical and applied, and it prepares students for research in academic and professional settings. The program is not an extension of the undergraduate studio experience, but culminates in a written thesis or applied project.

The MSD program has four goals:

1. provide graduate education for students who have a baccalaureate degree in interior design;
2. provide an opportunity for the development of specialized research skills to support the profession of interior design;
3. provide the opportunity for design professionals to gain the necessary research skills for academic and professional careers; and
4. develop critical skills that enable the graduates of the program to contribute to the literature of design through articles, essays, and books or to participate in professional and/or academic conferences related to their concentration.

Program Requirements: This program requires 36 credit hours and thesis or 36 credit hours 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 creatively apply research to a design situation.

Admission Requirements: Applicants to the MSD Program must hold a baccalaureate degree in Graphic Design, Industrial Design, Interior Design, or a related design discipline. When applying for admission, applicants must declare one of seven concentrations: Healthcare and healing environments, new product innovation, interactive design, arts/media/engineering, visual communication design, industrial design, or interior design. Further information can be found in the program description on the admissions Web page at http://www.design.asu.edu/msd/admission.shtml.

Applicants must file separate application materials to both the Graduate College and the MSD Program.

## MSD Program Requirements

- A 3.00 or higher baccalaureate grade point average is required for application.
- Minimum TOEFL score of 550 on paper-based test or 213 on computer-based test is required of international students whose native language is not English.

Submit the following materials to:

MSD Program
COLLEGE OF DESIGN
ARIZONA STATE UNIVERSITY
PO BOX 872105
TEMPE AZ 85287-2105

1. A mandatory statement of intent form found on the admissions website listed above (maximum 600 words; ) which must include the following points:
o Specify intended concentration: Healthcare and Healing Environments, New Product Innovation, Interactive Design, Visual Communication Design, Industrial Design, Interior Design, or Arts/Media/Engineering.
o Discuss proposed research topic. What will be your research focus? Why is this research important to you, the design community, and the general population?
o Specify a proposed mentor for intended research. Faculty biographies can be found on the website at design.asu.edu/msd/faculty.shtml.
o Discuss personal academic background and professional experience that has prepared you for or will support your proposed research topic.
2. Three recommendation forms (found on the admissions Web site listed above) from persons who are qualified to comment on your potential in the selected area of study. Students must have the recommender use the recommendation form. Students have two options to return letters of recommendation: 1 ) have the recommender mail in the letter to the MSD program or 2 ) submit letters with a complete application packet; letters must be sealed and the recommender's signature must be across the seal in ink.
3. An additional statement from applicants wishing to be considered for teaching or research assistantships 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 (international students who wish to be considered for a teaching assistantship and whose first language is not English are required to pass the Test of Spoken English [TSE] or the SPEAK test.

0 The TSE is administered by TOEFL/TSE Services, (PO Box 6151, Princeton, NJ, 08541-6151, USA) and can be taken in your home country (or US). Ask to have the score sent directly to the MSD Program at the above address.
o The SPEAK test is the local version of the TSE, authorized by Educational Testing Services (ETS) and administered on campus through the American English and Culture Program (AECP) at ASU. It is an oral proficiency exam.
4. An $8.5^{\prime \prime} \times 11^{\prime \prime}$ portfolio documenting papers and imaginative projects that support the intended concentration and demonstrate drawing, rendering, graphic and modeling skills.

The portfolio is returned after final admission procedures, provided sufficient prepaid postage is enclosed, or if the materials are claimed in person within one year of submission. Unclaimed portfolios are retained for only one year.

The MSD Program assumes no liability for lost or damaged materials. IMPORTANT NOTE: Items 1 to 4 above must be sent to the MSD Program address. DO NOT send these materials to the Graduate College. If these materials are sent to any other area other than the MSD Program, they will not be reviewed and your application will be denied.

## C. Application Deadlines

Primary consideration is given to completed applications received by the deadline. Applications for assistantships and scholarships normally are considered at the same time, but positions will not be filled until July.

The Graduate College and the MSD Program must receive all materials by January 15 to be considered for the following fall semester. Please note that the MSD program only accepts fall admission.
D. Selection Procedures and Notifications

The faculty evaluates the applications and supporting materials and recommends 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 specifies in its letter of admission the provisions to be met to gain regular status. The MSD Program informs successful applicants of the procedures for enrollment.

## E. Foreign Language Requirements

None.
F. Thesis or Applied Project

For students choosing the thesis option, six semester hours of DSC 599 Thesis apply toward the thesis. Guidelines in the Format Manual must be followed. For students choosing the applied project option, six hours of DSC 593 Applied Project apply.

You can find more information about the Thesis/Dissertation at the Graduate College Web site.
G. Final Examinations

An oral examination in defense of the thesis or applied project is required for all students in the MSD Program. Graduation Deadlines and Procedures can be found on the Graduate College Web site.

## Landscape Architecture (MLA) ARLDEMLA

COLLEGE OF DESIGN, TEMPE
Contact: http://design.asu.edu | sala.grad@asu.edu | COD 162 | 480/965-3536 | 1905

Official Degree Awarded: Landscape Architecture (MLA)
Program Description: The Master of Landscape Architecture 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 the 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 Master of Science in Building Design, and/or the Master of Urban Design degree program.

## Master of Landscape Architecture Program Two Year Degree Requirements

## First Year

Fall

LDE 521 Advanced Architectural Studio I (5)
LTC 563 Building Systems III (3)
LPH 513 Building Structures III (3)
ATE 598 Sustainability of the Built Environment (3)

Spring

LDE 522 Advanced Landscape Architectural Studio (5)
LTC 546 LA Alternative technologies and Materials (3)
LPH 612 Landscape Architecture Research Methods (3)
L/APH 505 Foundation Theory Seminar (3)

## Second Year (6th Year)

Fall

LDE 621 Advanced Landscape Architectural Studio (5)
LTC 598 ST: Urban Ecological Design (3)
LPH 613 Landscape Architecture Seminar (3)
College of Design Professional Graduate Elective * (3)

Spring

LDE 622 Advanced Landscape Architectural Studio (5)
L/AAD 652 Professional Practice (3)
LTC 598 ST: Urban Landscape Water Systems and Management (3)

Total Graduate Hours in Program: 53

Required Deficiency Course

LPH 411 LA Theory and Criticism (3)

Total program Hours: 56

* The list of College of Design electives can be found on the school's Web site: http://www.design.asu.edu.


## Master of Landscape Architecture Program Three-Plus Year Requirements

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 LA (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 341/542 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 432 GIS (3)

Summer

ARP 584 Clinical Internship 1 (1)
Admission Requirements: Admissions Requirements to the Two-Year Program:
Applicants must:

- Hold a baccalaureate or graduate degree from a college or university recognized by ASU.
- Be a licensed landscape architect or have completed a four-year Bachelor of Science degree with a major in Landscape Architectural Studies. The undergraduate degree must be granted by an institution that offers the Landscape Architectural Accreditation Board (LAAB) accredited degree program in architecture.
- Meet the minimum GPA requirements as established by the Graduate College.
- Provide official copy of GRE scores (unofficial copies will not be accepted). For more information on the GRE visit http://www.ets.org/. The School of Architecture and Landscape Architecture does not have a minimum score for admissions; however, the average scores of admitted students are between 500-600 for each section.

In addition to the above requirements, international students are required to submit an official TOEFL score (www.TOEFL.org).
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
http://graduate.asu.edu/admissions/international.html.

## Additional Admission Requirements

Applicants should write their name in a clear and consistent manner on all materials submitted, preferably in the "family name, first name" format (e.g. Smith, John).

Statement of Intent. A personal narrative (maximum 600 words or two pages typed) indicating the applicant's interest, previous academic and practical background, as well as personal and professional educational objectives.

Letters of Recommendation. A minimum of three letters of recommendation in support of the applicant must be mailed directly to the Graduate Admissions Committee, School of Architecture and Landscape Architecture. The references should be from professionals or educators familiar with the applicant's experience and capability for graduate work.

Portfolio. Candidates applying for the Two-Year Master of Landscape Architecture program must also provide a portfolio of creative works. See the portfolio requirements outlined on the College of Design website for more information. Submit the statement of intent, recommendation letters, creative works portfolio, and the contact information sheet to the following address:

Master of Architecture and Landscape Architecture Admissions Committee
School of Architecture and Landscape Architecture
Arizona State University
PO Box 871605
Tempe, AZ 85287-1605

Please submit your online application and fee, test scores (GRE or TOEFL), and official transcripts form all post-secondary institutions directly to the Graduate College.

## Admissions Requirements to the Three-Plus Year Program:

Applicants must:

- Apply and then begin the program in the summer
- Hold a baccalaureate 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 NAAB accredited program.
- Meet the minimum GPA requirements as established by the Graduate College.
- Provide official copy of GRE scores (unofficial copies will not be accepted). For more information on the GRE visit http://www.ets.org/. The School of Architecture and Landscape Architecture does not have a minimum score for admissions; however, the average scores of admitted students are between 500-600 for each section.

In addition to the above requirements, international students are required to submit an official TOEFL score (www.TOEFL.org). 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 http://graduate.asu.edu/admissions/international.html.

Admission to the 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.

A personal interview is not required; however, a candidate wishing to visit the school is welcome and should make arrangements by contacting.

## Additional Admission Requirements

Applicants should write their name in a clear and consistent manner on all materials submitted, preferably in the "family name, first name" format (e.g. Smith, John).

Statement of Intent. A personal narrative (maximum 600 words or two pages typed) indicating the applicant's interest, previous academic and practical background, as well as personal and professional educational objectives.

Letters of Recommendation. A minimum of three letters of recommendation in support of the applicant must be mailed directly to the Graduate Admissions Committee, School of Architecture and Landscape Architecture. The references should be from professionals or educators familiar with the applicant's experience and capability for graduate work.

Creative Works Portfolio. Candidates applying for the Three-plus year Master of Architecture program must also provide a portfolio of creative works. See the portfolio requirements outlined on the College of Design website for more information. Submit the statement of intent, recommendation letters, creative works portfolio, and the contact information sheet to the following address:

Master of Architecture and Landscape Architecture Admissions Committee
School of Architecture and Landscape Architecture
Arizona State University
PO Box 871605
Tempe, AZ 85287-1605

Please submit your online application and fee, test scores (GRE or TOEFL), and official transcripts form all post-secondary institutions directly to the Graduate College.

## Application Deadlines

All materials must be received by the School of Architecture and Landscape Architecture and the Graduate College by January 15 for summer semester consideration. Priority will be given to students who have submitted all the required application materials to both the Graduate College and the School of Architecture and Landscape Architecture by deadline of January 15. The Master of Architecture (three-plus) program does not admit students for the spring semester of fall semester.

Applications for assistantship and scholarships are generally considered at the same time as the application.

## Real Estate Development (MRED) ARREMREDEV

## COLLEGE OF DESIGN, TEMPE

Contact: http://www.mred.asu.edu | megan.paul@asu.edu | 777 S College Ave Ste 205|480/298-8225 | 8205
Official Degree Awarded: Real Estate Development (MREDev)
Program Description: The Master of Real Estate Development (MRED) program is unlike any other in the nation; it is built upon an innovative transdisciplinary curriculum offered by departments in design, law, business, and construction. The curriculum is presented in a fast-paced sequence of topics reflective of the real estate development process.

The curriculum covers specific core knowledge centers and strategic decision-making tools during each of the eight program segments: valuation, segmentation, location, conceptualization, regulations, capitalization, construction, value realization and community.

The Master of Real Estate Development is as an accelerated 30 credit hour, 30-week, full-immersion program focused on educating students and mid-career professionals in real estate development. The curriculum includes three synthesis projects that serve as core knowledge demonstration events along with relevant industry case studies, interactive classroom exercises, collaborative group engagements, integration of topical research, site visits, professional mentor presentations and meetings, distinguished visitor lectures and social events. An applied project is required as a culminating experience.

For more information, see http://www.mred.asu.edu.
Program Requirements: Thirty semester hours and an applied project are required.

Admission Requirements: Application to the Master of Real Estate (MRED) program is available online through the ASU Graduate College at http://graduate.asu.edu.

To be eligible for admission to graduate studies, students must have the following:

1. a bachelor's degree or the equivalent from a regionally accredited institution, and
2. a 3.00 GPA.

Other required application materials include a GMAT test score or a petition to waive (if the applicant submits TOEFL exam scores), three letters of recommendation, and a personal statement.

## Urban and Environmental Planning (MUEP) ARURBMUEP

## COLLEGE OF DESIGN, TEMPE

Contact: http://design.asu.edu/planning | sop.advising@asu.edu | CDN 162 | 4809657167 | 2005
Official Degree Awarded: Urban and Environmental Planning (MU/EP)
Program Description: The Master of Urban and Environmental Planning (MUEP) is an interdisciplinary professional degree designed to prepare students for leadership roles in planning in both the public and private sectors within organizations ranging from local to international in scope. The MUEP degree 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 sustainable design, environmental resources, growth management, environmental policy analysis, open space design, and conservation. The international planning specialization prepares planners to work in the diverse and changing urban fabric of developing nations and in US cities, with their growing multinational and multicultural populations. Transportation planning 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 College of Design and 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.

Program Requirements: An approved program of study for the Master of Urban and Environmental Planning is 47 semester hours. The program has the typical distribution as follows:

Required core courses, including either the capstone studio, thesis, or professional project (26)
Specialization courses (12)
Electives (9)
Total 47

Students must take 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 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:

1. an application to the Graduate College,
2. official transcripts from all other colleges and universities attended,
3. a statement of intent (maximum 600 words) explaining,
A. the applicant's interest in planning,
B. the applicant's academic and professional background, and if appropriate, preparation for the selected area of specialty: community and urban development, environmental planning, international planning or transportation planning (these may include written samples or a portfolio, but are not required), and C. the applicant's educational objectives.
4. test scores: TOEFL scores from international students whose native language is not English,
5. three letters of recommendation from references who are qualified to comment on the applicant's potential in the selected area of study (a recommendation form is provided on the school's Website), and
6. a current résumé.

Official transcripts and test scores should be submitted to:

GRADUATE COLLEGE
ARIZONA STATE UNIVERSITY
PO BOX 871003
TEMPE AZ 85287-1003

All other materials should be submitted to:

SCHOOL OF PLANNING
ARIZONA STATE UNIVERSITY
ATTN: MUEP Admissions
PO BOX 872005
TEMPE AZ 85287-2005

Some teaching and research assistantships are available on a competitive basis. International students who wish to be considered for a teaching assistantship and whose first language is not English are required to pass the SPEAK test administered by the American English and Culture Center at ASU.

## Urban Design (MUD) ARMUDMUD

COLLEGE OF DESIGN, TEMPE
Contact: http://design.asu.edu | sala.grad@asu.edu | COD 162 | 480/965-3536 | 1905

## Official Degree Awarded: Urban Design (MUD)

Program Description: The Master of Urban Design (MUD) is a multidisciplinary program within the College of Design. 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 United States. The program leverages its local conditions (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 joint degree with the school's Master of Science in Building Design.

Applicants who hold a professional design degree (BSLA, MLA, BArch, or MArch) will be considered for the Two-Year MUD program. Applicants who do not have a background in design will be considered for admission to a Three-Year MUD program that includes an initial year of design studies. The MUD is a post-professional, non-accredited program.

Program Requirements: Master of Urban Design (MUD) Degree Requirements:

## First Year

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)
College of Design Professional elective (3)

Summer

MUD 610 Applied Urban Design Research Project (1-3)
or MUD 611 Professional Honors

## Second Year

Fall

MUD 621 Advanced Urban Design Studio III (5)
MUD 623 Thesis Research (3)
College of Design Professional elective (3)

Spring

MUD 622 Advanced Urban Design Studio IV (5)
College of Design Professional elective (3)
Urban Design Professional elective (3)

## Total Hours in Program: 45

An oral comprehensive examination is required.

## Admission Requirements: Admission Requirements Master of Urban Design

Applicants who hold a professional design degree (BSLA, MLA, BArch, or MArch) will be considered for the two-year MUD program. Applicants who do not have a background in design will be considered for admission to a three-year MUD program that includes an initial year of design studies. The MUD is a post-professional, nonaccredited program.

## Two-year Program Admission Requirements

Applicants must hold a baccalaureate or graduate degree from a college or university recognized by ASU. An applicant must be a licensed landscape architect or architect or have completed:

- an accredited (LAAB) four-year Bachelor of Science degree with a major in Landscape Architectural Studies, or an accredited (LAAB) Master of Landscape Architecture degree, or
- an accredited (NAAB) four-year Bachelor of Science degree with a major in Architectural Studies or an accredited (NAAB) Master of Architecture degree,
- meet the minimum GPA requirements as established by the Graduate College, and
- provide an official copy of GRE scores (unofficial copies will not be accepted).

For more information regarding the GRE, visit http://www.gre.org. The School of Architecture and Landscape Architecture does not have a minimum score for admissions; however, the average scores of admitted students are between 500-600 for each section. In addition to the above requirements, international students are required to submit an official TOEFL score (www.TOEFL.org). The minimum score for admission to the program is 100 (Internet), 250 (computer-based), or 600 (paperbased). Other information for International applicants can be found on the Graduate College Web site http://graduate.asu.edu/admissions/international.html.

## Admission Documents

- Applicants should write their name in a clear and consistent manner on all materials submitted, preferably in the "family name, first name": format (e.g. Smith, John).
- Statement of Intent. A personal narrative (maximum 600 words or two pages typed) indicating the applicant's interest, previous academic and practical background, as well as personal and professional educational objectives.
- Letters of Recommendation. A minimum of three letters of recommendation in support of the applicant must be mailed directly to the Graduate Admissions Committee, School of Architecture and Landscape Architecture. The references should be from professionals or educators familiar with the applicant's experience and capability for graduate work.
- Portfolio: candidates applying for the two-year Master of Urban Design program are required to submit a portfolio. See the portfolio requirements for more information.
- Please complete and submit the Contact Information Sheet.

Submit the statement of intent, recommendation letters, portfolio, and the contact information sheet to the following address:

Master of Urban Design Admissions Committee
School of Architecture and Landscape Architecture
Arizona State University
PO Box 871605
Tempe, AZ 85287-1605

Submit your online application and fee, test scores (GRE or TOEFL), and official transcripts from all post-secondary institutions directly to the Graduate College.

## Three-Plus Program Admission Requirements

Applicants must submit an online Graduate College application.

Applicants must hold a baccalaureate or graduate degree from a college or university recognized by ASU. They must have earned a bachelor's degree in a field other than landscape architectural studies leading to the LAAB accredited program.

Applicants must meet the minimum GPA requirements as established by the Graduate College.

They must submit an official copy of GRE scores (unofficial copies will not be accepted). For more information on the GRE visit http://www.gre.org. The School of Architecture and Landscape Architecture does not have a minimum score for admissions; however, the average scores of admitted students are between 500-600 for each section.

In addition to the above requirements, international students are required to submit an official TOEFL score (www.TOEFL.org). The minimum score for admission to the program is 100 (Internet), or 600 (paper-based). Other information for International applicants can be found on the Graduate College Web site at http://graduate.asu.edu/admissions/international.html.

## Additional Master of Urban Design Three-plus Program Requirements

Applicants should write their name in a clear and consistent manner on all materials submitted, preferably in the "family name, first name" format (e.g. Smith, John).

They must submit:

- A Statement of Intent. A personal narrative (maximum 600 words or two pages typed) indicating the applicant's interest, previous academic and practical background, as well as personal and professional educational objectives.
- Letters of Recommendation. A minimum of three letters of recommendation in support of the applicant must be mailed directly to the Graduate Admissions Committee, School of Architecture and Landscape Architecture. The references should be from professionals or educators familiar with the applicant's experience and capability for graduate work.
- Creative Works Portfolio. Candidates applying for the Three-plus year Master of Urban Design program must also provide a portfolio of creative works. See the portfolio requirements for more information.
- complete the Contact Information Sheet.

Submit the statement of intent, recommendation letters, creative works portfolio, and the contact information sheet to the following address:

Master of Urban Design Admissions Committee
School of Architecture and Landscape Architecture
Arizona State University
PO Box 871605
Tempe, AZ 85287-1605

Please submit your online application and fee, test scores (GRE or TOEFL), and official transcripts from all post-secondary institutions directly to the Graduate College.

## EDUCATION, MARY LOU FULTON COLLEGE OF

An Overview of Autism Spectrum Disorders (Grad Certificate) EDSPEGRCA
MARY LOU FULTON COLLEGE OF EDUCATION, TEMPE
Contact: http://education.asu.edu/ | cnigrad@asu.edu | ED 434 | 480/965-4602 | 1911
Official Degree Awarded: An Overview of Autism Spectrum Disorders (certificate) (CERT)
Program Description: The Division of Curriculum and Instruction within the Mary Lou Fulton College of Education developed a program that prepares participants with the latest information and practical techniques to better understand and serve those with Autism Spectrum Disorders (ASD). This 15 -semester hour program uses both in-class and online sessions to prepare students for the challenges of working with individuals with Autism Spectrum Disorders (ASD). 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.

## Applied Linguistics (PhD) EDAPLPHD

MARY LOU FULTON COLLEGE OF EDUCATION, TEMPE
Contact: http://education.asu.edu/prospective_students/graduate_studies/applied_linguistics | cnigrad@asu.edu | Farmer 434 |
480/965-4602 | 1911
Official Degree Awarded: Applied Linguistics (PhD)

Program Description: The Applied Linguistics Ph.D. is a University-wide program created as a partnership between the Mary Lou Fulton College of Education and the College of Liberal Arts and Sciences. The field of Applied Linguistics is interdisciplinary in nature, involving principled approaches to language-related concerns viewed through the broad disciplinary lens of linguistic sciences. At ASU, Applied Linguistics focuses on simultaneous and developmental bilingualism rather than adult second language acquisition.

Students in the program study a common core of subjects and select one of five specializations:

1. Bilingualism,
2. English as an International Language,
3. Language Planning and Policy,
4. Educational Linguistics, and
5. Indigenous Language Education.

See http://appliedlinguistics.asu.edu/ for detailed program information.

Program Requirements: The program requires a total of 84 semester hours, a dissertation, oral and written comprehensive examinations and one foreign language, including 12 (and only 12) dissertation credits. There must be a minimum of 30 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 coursework in addition to coursework completed toward their chosen specialization.

Admission Requirements: Prior to admission, students must have completed a Bachelor's degree. Because Applied Linguistics is an interdisciplinary field, applicants with undergraduate preparation in any field are welcome; however, students must have completed an accredited bachelor's degree program. Applicants will submit an official ASU graduate application, official GRE scores and transcripts of all undergraduate and graduate coursework, a statement of purpose outlining career and research goals, three letters of recommendation, and other materials deemed appropriate by the Program Oversight Committee. Admissions processing will be handled by the Curriculum and Instruction Graduate Programs Office.

## Art Education (PhD) EDARTEDPHD

MARY LOU FULTON COLLEGE OF EDUCATION, TEMPE
Contact: http://coe.asu.edu/candi | cnigrad@asu.edu | ED 434 | 4809654602 | 1911
Official Degree Awarded: Curriculum and Instruction (Art Education) (PhD)

Program Description: The PhD requires 93 credit hours, a dissertation, and written and oral comprehensive examinations.

Core Requirements: 6 semester hours

DCI 701 Curriculum Theory and Practice
DCI 702 Interdisciplinary Research Seminar in Curriculum and Instruction Professional

Inquiry and Analysis: 15 semester hours in approaches to education research

Examples of courses that meet this requirement are:
COE 502 Introduction to Quantitative Methods
COE 503 Introduction to Qualitative Methods
DCI 691 Narrative Research in Education
DCI 791 Discourse Analysis

Major Area of Concentration: 30 semester hours

Internships: 6 semester hours
Three two-semester-hour doctoral internships are required in the areas of research and college teaching. One area must be chosen twice. During the course of the internship, the student works closely with selected Art Education Program faculty members from the Interdisciplinary Committee on Curriculum and Instruction or other faculty members designated by the Interdisciplinary PhD Degree Program in Curriculum and Instruction.

Cognate Study: 12 semester hours
Twelve semester hours are required of students to broaden their understanding of the conceptual base and issues underlying the field of art. Students will take course work outside of art education. Cognate studies can be drawn from a broad range of offerings, both from within and outside the College of Education.

Dissertation and Independent Research: 24 semester hours
These semester hours demonstrate that the student is capable of conducting original research of high quality. The research is to be conceived and carried out such that it advances scholarship in art education.

Doctoral students are also encouraged to participate in the Preparing Future Faculty Program offered by the Graduate College of Arizona State University. This program consists of two semester hours in which students learn faculty roles and responsibilities and participate in an ongoing series of integrative and collaborative seminars coordinated with the Graduate College. Students have the opportunity to develop and participate in interdisciplinary teaching, research, and service activities.

The broad goals of the Interdisciplinary PhD Program in Curriculum and Instruction are to:

1. produce research scholars who can enhance the knowledge base underlying curriculum and instruction in a variety of concentrations;
2. provide experts, for all levels of instruction, in the design, implementation, and evaluation of educational personnel preparation programs; prepare individuals who can provide leadership to the evolving field of curriculum and instruction;
3. produce research scholars who are well-equipped for empirical and systematic examination of educational theories, strategies, principles, and practices related to the content and organization of curriculum and to the process and outcome of instruction.

The program also seeks to produce scholars who have the knowledge base to engage in such studies within the broad historical, social, political, economic, linguistic, intellectual and physical contexts in the country and abroad.

Admission Requirements: The following are required:

1. application to the Graduate College,
2. transcripts,
3. letter of intent/statement of purpose,
4. curriculum vita (resume),
5. statement of research interests,
6. a writing sample (approximately ten pages long),
7. GRE scores, and
8. three letters of recommendation from individuals who can speak to the applicant's potential for success in a graduate programs.

Additional materials may be required to gain admission into certain programs/cohorts. For specific information regarding admission requirements, see http://coe.asu.edu/candi.

## Bilingual Education (MA) EDBILINMA

MARY LOU FULTON COLLEGE OF EDUCATION, TEMPE
Contact: http://education.asu.edu/ | cnigrad@asu.edu | Farmer Building 434 | 4809654602 | 1911
Official Degree Awarded: Curriculum and Instruction (Bilingual Education) (MA)

Program Description: The Master of Arts Degree in Curriculum and Instruction is intended for students wishing to conduct original research and continue on for the PhD. The MA concentration in bilingual education is designed to provide coursework related to bilingual education in US settings (SLA theory, bilingual programs and methods, and bilingual assessment) along with coursework in research methods to be used in the design and implementation of the thesis. The BLE concentration offers advanced coursework in research methodology, theory and practice in the area of bilingual education. Candidates for the MA in bilingual education must be able to demonstrate proficiency in a language other than English.

Program Requirements: The Master of Arts Degree in Curriculum and Instruction is intended for students wishing to conduct original research and continue on for the PhD . The MA concentration in bilingual education requires 30 semester hours is designed to provide coursework related to bilingual education in US settings (SLA theory, bilingual programs and methods, and bilingual assessment) along with coursework in research methods to be used in the design and implementation of the thesis. The BLE concentration offers advanced coursework in research methodology, theory and practice in the area of bilingual education. Candidates for the MA in bilingual education must be able to demonstrate proficiency in a language other than English.

Admission Requirements: The following are required: application to the Graduate College, transcripts, letter of intent/statement of purpose and three letters of recommendation from individuals who can speak to the applicants potential for success in a graduate programs. Additional materials may be required to gain admission into certain programs/cohorts. For specific information regarding admission requirements, see http://coe.asu.edu/candi.

## Bilingual Education (MEd) EDBILINMED

## MARY LOU FULTON COLLEGE OF EDUCATION, TEMPE

Contact: http://education.asu.edu/ | cnigrad@asu.edu | Farmer Building 434 | 4809654602 | 1911
Official Degree Awarded: Curriculum and Instruction (Bilingual Education) (MEd)
Program Description: The Master of Education degree (MEd) in Curriculum and Instruction with a concentration in bilingual education is designed for practitioners to facilitate the development of advanced professional knowledge of research, theory and practice in the area of bilingual education. The Master of Education degree in Curriculum and Instruction is intended for students who are currently teaching in a bilingual program, typically at the K-8 level of education. The MEd in Curriculum and Instruction with a concentration in Bilingual Education is designed to provide coursework related to bilingual education in U.S. settings (SLA theory, bilingual programs and methods, and bilingual assessment). Candidates for the MEd in Curriculum and Instruction with a concentration in bilingual education must be able to demonstrate proficiency in a language other than English.

Program Requirements: A minimum of 30 hours of graduate credit is required for the MEd in Curriculum and Instruction. Each student is assigned a graduate advisor to design the program of study. Students in this program will complete either a comprehensive examination, a research project or an applied project as a culminating activity after completing at least 24 of the 30 credit hours listed on the program of study. Students must choose their culminating activity (written examination, research project or applied project) in consultation with their faculty advisor before completing their program of study. Students who choose to complete an applied project must enroll in Teacher as Researcher the semester prior to completing the applied project, and they must meet with their graduate advisor for approval of the applied project. For more information, refer to the Curriculum and Instruction MEd Student Handbook.

Admission Requirements: The following are required: application to the Graduate College, transcripts, letter of intent/statement of purpose and three letters of recommendation from individuals who can speak to the applicants potential for success in a graduate programs. Additional materials may be required to gain admission into certain programs/cohorts. For specific information regarding admission requirements, see http://coe.asu.edu/candi.

## Counseling (MC) EDCOUNMC

MARY LOU FULTON COLLEGE OF EDUCATION, TEMPE
Contact: http://education.asu.edu | dpe@asu.edu | EDB 302 | 480/965-3384 | 0611
Official Degree Awarded: Counseling (MC)
Program Description: The mission of the Master of Counseling (MC) program is to prepare students to become professional counselors, culturally competent to work with diverse clientele in a variety of community settings in Arizona and other states.

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 MC program was designed according to the standards for community counseling by the Council for the Accreditation of Counseling and Related Educational Programs (CACREP).

The faculty has endorsed the Multicultural Counseling Competencies of the American Counseling Association and the Guidelines on Multicultural Education, Training, Research, Practices, and Organizational Change for Psychologists and Guidelines for Psychotherapy with Lesbian, Gay, and Bisexual Clients of the American Psychological Association. Program Requirements: The MC degree is a 60 semester hour professional program. 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. 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 programs within the Division of Psychology in Education must first meet the Graduate College requirements for admissions (e.g. minimum 3.00 junior/senior GPA; English language proficiency). Psychology in Education further requires that all applicants score at least 5.5 on the FRK index. Applicants are required to take the aptitude sections (Verbal and Quantitative) of the Graduate Record Examination (GRE). The test must be retaken if scores are more than five years old. All students must be graduates of accredited higher education institutions.

## Non-Academic/Professional/Life Experiences

Applicants are required to submit a three to five page personal statement which will include information on significant life experiences, professional experiences, personal attributes, personal and professional goals, and other information which 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 For further information, go to
http://education.asu.edu/prospective_students/graduate_studies/counselor_ed_mc.dot.

## Counseling Psychology (PhD) EDCPSYPHD

MARY LOU FULTON COLLEGE OF EDUCATION, TEMPE
Contact: http://education.asu.edu | dpe@asu.edu | EDB 302 | 480/965-3384 | 0611
Official Degree Awarded: Counseling Psychology (PhD)
Program Description: The doctoral program in Counseling Psychology at ASU closely adheres to the scientist-practitioner training model in preparing graduates for employment in academic and/or service delivery settings. Although faculty interests are diverse, there is a common emphasis on empirical data as the basis for professional practice. The program faculty has endorsed the Multicultural Counseling Competencies of the American Counseling Association and the Guidelines on Multicultural Education, Training, Research, Practice, and Organizational Change for Psychologists and Guidelines for Psychotherapy with Lesbian, Gay, and Bisexual Clients of the American Psychological Association. The CPY 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: multiculturalism, at-risk populations, positive psychology, process/outcome in therapy, supervision, training, and career development.

Program Requirements: Our doctoral curriculum typically requires three to five years of full-time graduate study plus a year-long internship in an APA- approved 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. Students will complete 113 semester credits, a written comprehensive examination and a successful dissertation defense prior to graduation.

Admission Requirements: Applicants to doctoral study in Counseling Psychology must first submit a Graduate College application and then meet the Division of Psychology in Education admissibility standard. A minimum FRK index of 5.5 is required for admission to graduate study in the division. The following supplemental materials are required by the Counseling Psychology program: three letters of recommendation. We prefer that two of these letters be from persons familiar with your academic work; 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 sevenpage 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). All of your application materials must be submitted by December 1 in order to ensure consideration from admission the following fall semester.

For further information, go to http://education.asu.edu/prospective_students/graduate_studies/counseling_psychology.dot.

## Counselor Education (MEd) EDCOUNEMED

MARY LOU FULTON COLLEGE OF EDUCATION, TEMPE
Contact: http://education.asu.edu | dpe@asu.edu | EDB 302 | 480/965-3384 | 0611
Official Degree Awarded: Counselor Education (MEd)

Program Description: The Master of Education in Counseling (M.Ed.) at ASU is for certified or certifiable teachers which provide the following:

- A greater understanding of the psychological and behavioral development of individual students,
- A greater understanding of the dynamics and use of groups in the instructional process,
- A greater understanding of principles of testing and vocational and career dynamics that have applications in the instructional process,
- A greater understanding of the effective utilization of school specialists in aiding student development,
- A greater understanding of the role of the school counselor in the instructional process.

The M.Ed. in Counseling is generally chosen as a student's fifth year of teacher preparation. The M.Ed. degree alone does not provide academic preparation for the State certification as a school counselor. Students interested in becoming a school counselors should apply to the Master of Counseling (M.C.) degree.

Program Requirements: A minimum of 30 semester hours are required: Analysis of the Individual; Theories of Counseling; Psychological Tests; Occupations and Career; Group Procedures; Field Based Experience; Evaluation in School Settings; Multicultural Counseling. Professional Education Core: Introduction to Research and Evaluation In Education; Intro to Quantitative Methods (required if an undergraduate statistics course was not taken). Students in the M.Ed. program are required to complete a comprehensive examination based on the required courses in the program.

Admission Requirements: Factors which are evaluated in the admission process include:

1. academic potential as measured by the FRK index,
2. professional training and experiences in education, and
3. a recommendation from a professional within the schools setting.

Applicants must first meet the requirements for admission set by the Graduate College (e.g. minimum 3.00 junior and senior GPA) and meet the English Language Requirement. (See the Graduate Catalog.) Psychology in Education further requires that all applicants score at least 5.5 on the FRK index.

Applicants to the M.Ed. in Counseling are also required to submit scores from the aptitude sections of the Graduate Record Examination (GRE) taken within the last five years. Applicants are required to submit a personal statement (three to five pages) that will include information on significant educational and work experiences and other information that will assist the faculty in evaluating the application. One letter of recommendation is required. The letter should be written by a school principal or counselor who can evaluate the applicant's professional experience and personal attributes. For further information, go to http://education.asu.edu/prospective_students/graduate_studies/.

## Curriculum Studies (EdD) EDCURSTEDD

MARY LOU FULTON COLLEGE OF EDUCATION, TEMPE
Contact: http://coe.asu.edu/candi | cnigrad@asu.edu | ED 434 | 4809654602 | 1911
Official Degree Awarded: Curriculum and Instruction (Curriculum Studies) (EdD)
Program Description: The mission of the curriculum studies concentration is to produce scholars who can contribute to the knowledge base underlying curriculum theory; to provide experts in the overall design, implementation, and evaluation of school curricula; to conduct curriculum research; and to prepare leaders in the field of curriculum studies. Students of curriculum studies examine educational issues that transcend the various areas of educational inquiry as they impact upon the design, implementation, and evaluation of education programs. These issues tend to be holistic and cross-disciplinary. Curriculum inquirers also investigate the relationship between curriculum theory and educational practice and the relationship between school programs and the contours of the society and cultures in which schools are located.

Program Requirements: An individualized program of study is developed for each student under the guidance of the advisor and the Doctoral Committee. The program of study is designed to be consistent with the goals of the student and the requirements of the university.

The minimum requirements for the Doctor of Education degree program are:

## Core (15 semester hours):

COE 502 Introduction to Quantitative Research
COE 503 Introduction to Qualitative Research
DCI 791 EdD Doctoral Seminar
DCI 701 Curriculum Theory and Practice
An advanced level research course

## Concentration (48 semester hours):

C\&I Major Concentration (30 hours):
Minor Concentration (18 semester hours)
Internship (6 semester hours)
The internship experience is designed to provide students with an opportunity to engage in university teaching, research and/or other professional experiences. Students earn six hours of university credit for these experiences.

Admission Requirements: The following are required: application to the Graduate College, transcripts, letter of intent/statement of purpose, curriculum vita (resume), statement of research interests, a writing sample (approximately 10 pages long), GRE scores and 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/cohorts. For specific information regarding admission requirements, see http://coe.asu.edu/candi. Admission to the program is contingent upon the commitment from an approved mentor in the concentration to advise the applicant.

## Curriculum Studies (PhD) EDCURSTPHD

MARY LOU FULTON COLLEGE OF EDUCATION, TEMPE
Contact: http://coe.asu.edu/candi | cnigrad@asu.edu | Farmer Building 434 | 4809654602 | 1911

Official Degree Awarded: Curriculum and Instruction (Curriculum Studies) (PhD)
Program Description: The Interdisciplinary Ph.D. Program in the Division of Curriculum and Instruction is designed to be highly experiential in endeavor that addresses distinct and important educational issues. The Curriculum Studies concentration addresses distinct and important educational issues. These issues transcend the various areas of educational inquiry as they impact upon the design, implementation, and evaluation of education programs. These issues tend to be holistic and transdisciplinary, concerned with interrelationships of various concentration areas. Questions considered include: What should be taught in schools? Why should it be taught? To whom should it be taught? What does it mean to be an educated person? Curriculum inquirers also investigate the relationship between curriculum theory and educational practice and the relationship between school programs and the contours of the society and cultures in which schools are located.

Program Requirements: The PhD program requires 93 semester hours, a dissertation, and written and oral comprehensive examinations.

## Core Course Requirements

6 semester hours:
DCI 701 Curriculum Theory and Practice
DCI 702 Interdisciplinary Research Seminar in Curriculum and Instruction Professional

Inquiry and Analysis:
15 semester hours in approaches to education research. Examples of courses that meet this requirement are:
COE 502 Introduction to Quantitative Methods
COE 503 Introduction to Qualitative Methods
DCI 691 Narrative Research in Education
DCI 791 Discourse Analysis

## Major Area of Concentration

30 semester hours are required of doctoral students in Curriculum Studies.

Six required core Curriculum Studies courses are:
DCI 691 Perspectives on Curriculum
DCI 691 Critical Theory and Curriculum
One Course in Curriculum Policy:
SPF 691 Cultural Studies in Education
One Course in Comparative/ International Curriculum:
DCI 691 Special Topics in Curriculum

The remaining 12 hours of course work in this area is determined by the student's area of sub-specialization and anticipated focus of the dissertation.

## Internships

Six semester hours consisting of three two-semester-hour doctoral internships are required in the areas of research and college teaching. One area must be chosen twice. During the course of the internship, the student works closely with selected Curriculum Studies Program faculty members from the Interdisciplinary Committee on Curriculum and Instruction or other faculty members designated by the Interdisciplinary PhD Degree Program in Curriculum and Instruction.

## Cognate Study

Twelve semester hours are required for students to broaden their understanding of the conceptual base and issues underlying the field of Curriculum Studies. Students will take course work outside of Curriculum Studies. Cognate studies can be drawn from a broad range of offerings, both from within and outside the College of Education.

## Dissertation and Independent Research

Twenty-four semester hours are taken to demonstrate that the student is capable of conducting high quality original research. The research is to be conceived and carried out in such a manner as to make a contribution to advancing scholarship in Curriculum Studies.

Doctoral students are also encouraged to participate in the Preparing Future Faculty Program offered by the Graduate College of Arizona State University. This program consists of two semester hours in which students learn faculty roles and responsibilities and participate in an ongoing series of integrative and collaborative seminars coordinated with the Graduate College. Students have the opportunity to develop and participate in interdisciplinary teaching, research, and service activities.

Admission Requirements: The following are required: application to the Graduate College, transcripts, letter of intent/statement of purpose, curriculum vita (resume), statement of research interests, a writing sample (approximately 10 pages long), GRE scores and 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/cohorts. For specific information regarding admission requirements, see [http://coe.asu.edu/candi](http://coe.asu.edu/candi). Admission to the program is contingent upon the commitment from an approved mentor in the concentration to advise the applicant.

## Early Childhood Education (EdD) EDCHILDEDD

## MARY LOU FULTON COLLEGE OF EDUCATION, TEMPE

Contact: http://coe.asu.edu/candi | cnigrad@asu.edu | ED 434 | 4809654602 | 1911
Official Degree Awarded: Curriculum and Instruction (Early Childhood Education) (EdD)
Program Description: Early childhood education encompasses education and care of children from birth through the primary grades. The discipline of early childhood education includes the ability to communicate and work with parents and other adults and agencies that serve young children. The field requires professionals who can (1) educate and research to provide programs and services that are appropriate for young children from diverse backgrounds, and (2) conduct research on the range of issues influencing young children's education and well-being.

The goals of the doctoral program in early childhood education are to mentor scholars who:

1. Generate research that will influence policy and practice regarding the care and education of young children in multiple contexts.
2. Plan and implement teacher education and professional development programs and related research.
3. Serve as leaders in the field of early childhood education.
4. Exhibit critical thinking grounded in a range of theoretical frameworks and research methodologies related to and influencing childhood studies and early education.

Upon completion of course work and prior to candidacy, students must take a comprehensive examination that demonstrates knowledge of the field and knowledge of research philosophies and methodologies related to early childhood education. This examination is typically a written response to questions related to the research literature in the field and/or professional development experiences (e.g., writing an article and/or grant proposal, or designing a research study), posed by five committee members.

In this culminating study, the student pursues an educational problem or issue of concern, grounding this effort in research and scholarship. The culminating study may take the form of either a traditional dissertation or a scholarly applied project. Examples of a scholarly applied project include: a set of curriculum materials, a computerized database for instruction, a film or videotape series, or a program and materials for staff development. The scholarly applied project must be accompanied by a formal written report including: a rationale justified theoretically and with research, an explication of the theoretical grounds for the perspective and content of the project (as well as issues raised within that content), a review of the literature related to that content, a comprehensive documentation of the development of the project, and a full discussion of the local and wider social implications of applying what is produced by the project.

Program Requirements: The Curriculum and Instruction EdD program requires at least 93 semester hours beyond the bachelor's degree, dissertation, and written and oral comprehensive examinations. Students with a master's degree directly related to the anticipated course of study must complete at least 54 semester hours (documented in an approved program of study) taken at Arizona State University, and a minimum of 24 semester hours in independent research and dissertation, directed by a duly qualified dissertation chairperson.

Early Childhood Education Concentration: 30 semester hours from a range of foundational and emerging courses in the field; several new courses have been developed recently, emphasizing a range of theoretical and methodological approaches to childhood studies and emphasizing social policy and advocacy. A professional development seminar is also offered each semester, which provides practical experiences related to higher education in early childhood education.

Curriculum and Instruction Core Requirements: six semester hours of Interdisciplinary Research Seminar in Curriculum and Instruction, and Curriculum Theory and Practice.

Inquiry and Analysis: 15 semester hours, including ontologies and epistemologies of research, overviews of quantitative and qualitative research methods, and in-depth study of particular research philosophies and methods (dependent on student goals and committee advice).

Internships: Six semester hours, concentrating on college teaching, research and public policy/advocacy.

Cognate Study: 12 semester hours that provide an interdisciplinary element to the program. With the advice and approval of the program chair and the student's committee, the student chooses a cognate area of study suitable to individual goals.

Dissertation and Independent Research: 24 semester hours of independent research leading to completion of an approved dissertation.

Residency: During the first two years of the EdD program, students must complete a total of at least 24 hours of course work in four consecutive semesters that may include summer. This includes enrollment in the required EdD seminar (DCI 791).

Upon completion of course work and prior to candidacy, students must take a comprehensive examination that demonstrates knowledge of the field and knowledge of research philosophies and methodologies related to early childhood education. This examination is typically a written response to questions related to the research literature in the field and/or professional development experiences (e.g.,writing an article and/or grant proposal, or designing a research study), posed by five committee members.

In this culminating study, the student pursues an educational problem or issue of concern, grounding this effort in research and scholarship. The culminating study may take the form of either a traditional dissertation or a scholarly applied project. Examples of a scholarly applied project include: a set of curriculum materials, a computerized database for instruction, a film or videotape series, or a program and materials for staff development. The scholarly applied project must be accompanied by a formal written report including: a rationale justified theoretically and with research, an explication of the theoretical grounds for the perspective and content of the project (as well as issues raised within that content), a review of the literature related to that content, a comprehensive documentation of the development of the project, and a full discussion of the local and wider social implications of applying what is produced by the project.

Admission Requirements: The following are required: application to the Graduate College, transcripts, letter of intent/statement of purpose, curriculum vita (resume), statement of research interests, a writing sample (approximately ten pages long), GRE scores and three letters of recommendation from individuals who can speak to the applicant's potential for success in a graduate programs. Additional materials may be required to gain admission into certain programs/cohorts. For specific information regarding admission requirements, see http://coe.asu.edu/candi.

Admission to the program is contingent upon the commitment from an approved mentor in the concentration to advise the applicant.

# Early Childhood Education (MA) EDCHILDMA 

MARY LOU FULTON COLLEGE OF EDUCATION, TEMPE
Contact: http://coe.asu.edu/candi | cnigrad@asu.edu | ED 434 | 4809654602 | 1911
Official Degree Awarded: Curriculum and Instruction (Early Childhood Education) (MA)
Program Description: The Master of Arts degree (MA) in Curriculum and Instruction with a concentration in early childhood education is a research degree program designed to facilitate the development of advanced level professional knowledge, skills and understanding. MA students complete a hybrid program with a mix of off-campus cohort coursework and on-campus master's and doctoral coursework. Early childhood education encompasses education and care of children from birth through the primary grades. The discipline of early childhood education includes the ability to communicate and work with parents and other adults and agencies that serve young children. The program prepares professionals who can (1) educate and conduct research to provide programs and services that are appropriate for young children from diverse backgrounds, and (2) conduct research on the range of issues influencing young children's education and well-being.

Program Requirements: A minimum of 30 semester hours and a thesis is required for the Master of Arts (MA) in Curriculum and Instruction. Curriculum and Instruction MA students are assigned an advisor at the time of their admission. The advisor assists in selecting the Graduate Committee and serves as chair of the student's Graduate Committee. Each MA degree candidate must form a Graduate Committee in consultation with their advisor and complete a thesis, under the direction of the thesis advisor. The Graduate Program Committee must be formed prior to completing 12 hours of credit in the program. Because of the research component, students enrolling in the MA degree typically need more than 30 hours to complete the degree. Each MA candidate will complete a thesis after completing at least 24 hours in the program. Six semester hours of thesis are required along with a minimum of 24 semester hours of approved coursework.

Admission Requirements: The following are required: application to the Graduate College, transcripts, letter of intent/statement of purpose and three letters of recommendation from individuals who can speak to the applicant's potential for success in a graduate programs. Additional materials may be required to gain admission into certain programs/cohorts. For specific information regarding admission requirements, see http://coe.asu.edu/candi.

## Early Childhood Education (PhD) EDCHILDPHD

MARY LOU FULTON COLLEGE OF EDUCATION, TEMPE
Contact: http://coe.asu.edu/candi | cnigrad@asu.edu | ED 434 | 480/965-4602 | 1911
Official Degree Awarded: Curriculum and Instruction (Early Childhood Education) (PhD)
Program Description: Early childhood education encompasses education of children from birth through the primary grades. The age levels involved necessitate work with parents and other adults and agencies that serve young children as well. The field requires skilled professionals who can prepare educators and researchers to provide programs and services that are developmentally appropriate for young children and to conduct research regarding those issues.

The early childhood education program area presently is a part of the Division of Curriculum and Instruction within the College of Education. The PhD concentration in early childhood education is an integral part of the interdisciplinary PhD degree in Curriculum and Instruction, and is a major area of concentration ( 30 semester hours minimum) within the professional focus component of the program of study.

The goals of the doctoral program in early childhood education are to mentor scholars who:

1. generate research that will influence policy and practice regarding the care and education of young children in multiple contexts,
2. plan and implement teacher education and professional development programs and related research,
3. serve as leaders in the field of early childhood education,
4. exhibit critical thinking grounded in a range of theoretical frameworks and research methodologies related to and influencing childhood studies and early education.

Program Requirements: The Curriculum and Instruction PhD program requires at least 93 semester hours beyond the bachelor's degree. Students with a master's degree directly related to the anticipated course of study must complete at least 54 semester hours (documented in an approved program of study) taken at ASU, and a minimum of 24 semester hours in independent research and dissertation, directed by a duly qualified dissertation chairperson.

Early Childhood Education Concentration: 30 semester hours from a range of foundational and emerging courses in the field; several new courses have been developed recently, emphasizing a range of theoretical and methodological approaches to childhood studies and emphasizing social policy and advocacy. A professional development seminar is also offered each semester, which provides practical experiences related to higher education in early childhood education.

Curriculum and Instruction Core Requirements: six semester hours of Interdisciplinary Research Seminar in Curriculum and Instruction, and Curriculum Theory and Practice.

Inquiry and Analysis: 15 semester hours, including ontologies and epistemologies of research, overviews of quantitative and qualitative research methods, and in-depth study of particular research philosophies and methods (dependent on student goals and committee advice).

Internships: six semester hours, concentrating on college teaching, research, and public policy/advocacy.

Cognate Study: 12 semester hours that provide an interdisciplinary element to the program. With the advice and approval of the program chair and the student's committee, the student chooses a cognate area of study suitable to individual goals.

Dissertation and Independent Research: 24 semester hours of independent research leading to completion of an approved dissertation.

## The Curriculum

The curriculum requires that, after admission to the Curriculum and Instruction PhD program and prior to the completion of the comprehensive examination, at least two consecutive semesters (not including summer sessions) be spent as a full-time student on ASU's campus in Tempe.

Upon completion of course work and prior to candidacy, students must take a comprehensive examination that demonstrates knowledge of the field and knowledge of research philosophies and methodologies related to early childhood education. This examination is typically a written response to questions related to the research literature in the field and/or professional development experiences (e.g., writing an article and/or grant proposal, or designing a research study), posed by five committee members.

A dissertation is required, which is expected to demonstrate the student's skills in research design, implementation, and interpretation (as described in the program of study).

Admission Requirements: The following are required:

1. application to the Graduate College,
2. transcripts,
3. letter of intent/statement of purpose,
4. curriculum vita (resume),
5. statement of research interests,
6. a writing sample (approximately ten pages in length),
7. GRE scores and three letters of recommendation from individuals who can speak to the applicant's potential for success in a graduate programs.

Additional materials may be required to gain admission into certain programs/cohorts. For specific information regarding admission requirements, see http://coe.asu.edu/candi. Admission to the program is contingent upon the commitment from an approved mentor in the concentration to advise and mentor the applicant.

## Early Childhood Education - Tempe Campus (MEd) EDCHILDMED

MARY LOU FULTON COLLEGE OF EDUCATION, TEMPE
Contact: http://coe.asu.edu/candi | cnigrad@asu.edu | Farmer Building 434 | 4809654602 | 1911
Official Degree Awarded: Curriculum and Instruction (Early Childhood Education) (MEd)
Program Description: The Master of Education degree (MEd) in Curriculum and Instruction with a concentration in early childhood education is a practitioner's degree program designed to facilitate the development of advanced level professional knowledge, skills and understanding. The newly revised program emphasizes inclusion practices in early education classrooms. Course work focuses on developmental diversity, full inclusion practices and culturally relevant early education. New certification requirements are also reflected in this program. Early childhood education encompasses education and care of children from birth through the primary grades. The discipline of early childhood education includes the ability to communicate and work with parents and other adults and agencies that serve young children. The program prepares professionals who can (1) educate and research to provide programs and services that are appropriate for young children from diverse backgrounds, and (2) conduct research on the range of issues influencing young children's education and well-being. We also offer an Early Childhood Education MEd program. It is 100 percent online following a one-day orientation which is presented at the beginning of each semester. Supervised Pre-K internship/student teaching (four semester hours) and a passing score on the early childhood subject knowledge portion of the Arizona Educator Proficiency Assessment is required for the endorsement.

Program Requirements: A minimum of 30 semester hours of graduate credit is required for the MEd in Curriculum and Instruction. Each student is assigned a graduate advisor to design the program of study. Students in this program will complete either a comprehensive examination, a research project or an applied project as a culminating activity after completing at least 24 of the 30 semester hours listed on the program of study. Students must choose their culminating activity (written exam, research project or applied project) in consultation with their faculty advisor before completing their program of study. Students who choose to complete an applied project must enroll in "Teacher as Researcher" the semester prior to completing the applied project, and they must meet with their graduate advisor for approval of the applied project. For more information, refer to the Curriculum and Instruction MEd Student Handbook.

Admission Requirements: The following are required: application to the Graduate College, transcripts, letter of intent/statement of purpose and three letters of recommendation from individuals who can speak to the applicant's potential for success in a graduate programs. Additional materials may be required to gain admission into certain programs/cohorts. For specific

## Educational Administration and Supervision (EdD) EDSUPVEDD

MARY LOU FULTON COLLEGE OF EDUCATION, TEMPE
Contact: http://education.asu.edu | deltadocs@asu.edu | ED 120H | 4809657224| 2411
Official Degree Awarded: Educational Administration and Supervision (EdD)
Program Description: The D.E.L.T.A. Doctorate Program is a professional leadership educational program designed for practicing professionals seeking an alternative to traditional graduate programs. The program seeks applicants who are practicing teacher leaders, school or district administrators, and government educational personnel. After careful screening, cohorts of approximately 25 students are admitted and remain together for the entire program. Courses are taught by a dynamic faculty composed of full-time ASU professors along with clinical courses taught by successful practicing administrators. A component of this unique program is international travel opportunities designed to prepare leaders who are ready to address education issues within global contexts and better serve the needs of students with diverse languages and cultures. Program goals are geared to develop leaders with knowledge and deep understandings of:

1. leadership for innovation and change,
2. the needs of schools in urban settings,
3. educational equity and social justice,
4. curricular and instructional leadership,
5. indigenous and immigrant communities,
6. binational, international and global issues in education,
7. research in applied settings, and
8. Spanish or another language relevant to the Southwest.

Program Requirements: The D.E.L.T.A. program curriculum focuses on five areas:

1. research/evaluation and assessment,
2. diversity/international/binational and global studies,
3. a leadership core,
4. internships/fieldwork/action research, and
5. research proposal development/dissertation.

The degree requirements include:

1. Successful completion of 90 graduate credits of which 30 may be met by a previously awarded master's degree.
2. Successful completion of a pre-proposal/research prospectus including a review of literature at the end of the second year (this requirement satisfies the written comprehensive examination).
3. Successful completion of a dissertation research proposal with committee approval at the end of the second year/beginning of the third year.
4. Successful completion of a doctoral dissertation with oral defense.

All classes are taken with the cohort and no other course work can be substituted.

Admission Requirements: Admission Requirements:

- Master's Degree in Education or related field
- Three years teaching experience preferred
- GRE Scores
- Demonstrated potential for educational leadership

For specific application information, contact
Arizona State University
Graduate College
Interdisciplinary B, Rm 170
PO Box 871003
Tempe AZ 85287-1003
PH: 480/965-6113

# Educational Administration and Supervision (MEd) EDSUPVMED 

MARY LOU FULTON COLLEGE OF EDUCATION, TEMPE
Contact: http://education.asu.edu | delps@asu.edu | Farmer Building 120 | 4809656357 | 2411
Official Degree Awarded: Educational Administration and Supervision (MEd)
Program Description: The Master of Education degree in Educational Administration and Supervision is designed to develop instructional leaders for the 21st Century. Students in this program will learn how to create and sustain collaborative environments in pre-K-12 schools that support learning for all children. Central to the purpose of the program is the identification, development and articulation of organizational goals that enhance learning, curriculum, instruction, assessment and leadership. An emphasis on practical application will assure the identification and collection of those tools and techniques deemed essential for effective management.

Program Requirements: The program of study consists of 36 credit hours of course work. Of these hours, 30 hours must be in area of Educational Administration. The remaining 6 hours are foundational core requirements. A capstone course, EDA 691, or a written comprehensive exam is required.

Admission Requirements: Applications for the M. Ed. in Educational Administration and Supervision are due on February 1 for cohort groups starting during the summer sessions, on April 1 for cohort groups starting during the fall semester, and on October 1 for cohort groups starting during the spring semester. No test scores are required for applicants. Applicants must provide an online application, official transcripts, and application fee to the Graduate College admissions office. The Division of Educational Leadership and Policy requires a supplemental application, letter of intent, resume and three letters of recommendation.

## Educational Leadership/Policy Studies (PhD) EDLDRSHPHD

MARY LOU FULTON COLLEGE OF EDUCATION, TEMPE
Contact: http://education.asu.edu | delps@asu.edu | Farmer Building 120 | 4809656357 | 2411
Official Degree Awarded: Educational Leadership and Policy Studies (PhD)
Program Description: The Division of Educational Leadership and Policy Studies offers a Ph.D. in Educational Leadership and Policy Studies that emphasizes methods of policy analysis and provides for specializations in particular disciplines. Education policy studies deal with the entire process by which society derives, institutes, evaluates and modifies the rules, both stated and unspoken, by which the educational system runs. Doctoral students receive course work and practical experiences in a variety of special contexts, including higher education, elementary and secondary schools, and education governing bodies. The faculty seeks to train persons who will teach or pursue policy studies in school districts, government agencies and universities.

Program Requirements: Requirements for the PhD degree consist of:

- a minimum of 84 hours of course work specified in a student's Program of Study,
- comprehensive exams, and
- successful defense of a Dissertation.

There is a 10 -year time limit for PhD students, starting at the time of admission. Students entering the PhD program with a Masters degree in a related discipline and with credit for between 24 and 30 semester hours of graduate course work will be expected to earn a total of 84 hours past the B.A. including the transferred Masters hours; of these 84 hours, 54 must be earned at ASU. Students can use a block of 30 credits from a previously awarded master's degree plus 12 credits not used in any previous degree program as part of the PhD required credits, only if they can prove by a master's POS that these credits were not required for their master's. Students who withdraw from a master's in order to start a PhD, lose all credits except the 12 allowed to be brought forward.

Admission Requirements: Admission to the PhD program in the Division is based on undergraduate and/or graduate GPA's, scores on the GRE (Graduate Record Exam) or GMAT (Graduate Management Aptitude Test), letters of recommendation, a letter of intent, work and academic experiences, and the availability of faculty to supervise the academic area of interest. Citizens of Mexico applying to the PhD program may substitute the EXAMI III that is required by CONACYT of all applicants for a fellowship from the Mexican government.

The program does not have a minimum cut-off score for either the GRE or the GMAT. International applicants must have a TOEFL score of at least 550 on the paper test, 213 on the computer-based TOEFL, and 83 on the iBT (Internet-based) version of TOEFL. Applicants are not required to submit a TOEFL score if (1) they graduated from a college or university in a country whose native language is English, or (2) if they have had immigrant status (permanent residency) in the U.S. for at least 18 months. Test results should be reported to the Graduate College directly by ETS.

Deadlines for application to the PhD program are January 1 and March 1 of each year for entry into the program fall semester. To be considered in the January or March admissions meeting, applications must be complete by the first day of the respective month.

Students entering the program must have a bachelor's or master's degree in education or an appropriate subject filed (e.g., anthropology, economics, history, philosophy or sociology). Students applying to the PhD program with a BA degree or students with a master's-level degree in an unrelated discipline (e.g., fine arts, physical sciences, or business) will complete a Master's of arts in Passing in Social and Philosophical Foundations. In selecting qualified applicants, a candidate's background, career aspirations that are consistent with program goals, and a willingness to devote primary attention to courses and experiences on campus are very important.

Admissions information (and application forms) for this and other graduate programs is available online at http://education.asu.edu.

## Educational Psychology (MA) EDPSYCHMA

MARY LOU FULTON COLLEGE OF EDUCATION, TEMPE
Contact: http://education.asu.edu/ | dpe@asu.edu | EDB 302 | 480/965-3384 | 0611
Official Degree Awarded: Educational Psychology (MA)
Program Description: Each student's program is prepared in consultation with the supervisory committee, consisting of a chair and two or more faculty members. Applicants to the MA in Educational Psychology much indicate which specialization they wish to study. Areas of specialization are 1) Learning, 2) Lifespan Developmental Psychology, and 3) Measurement, Statistics, and Methodological Studies.

## Program Requirements

1. 30 semester credit hours,
2. written comprehensive examination,
3. successful thesis defense.

## Admission Requirements:

- Graduate College application
- See your area of specialization on the Web site at http://education.asu.edu/prospective_students/graduate_studies for additional information.

Educational Technology (Art, Media and Engineering) (PhD) EDAMEPHD<br>MARY LOU FULTON COLLEGE OF EDUCATION, TEMPE<br>Contact: http://coe.asu.edu/psyched/edtech/ | coe.asu.edu/psyched | EDB 121| 480/965-7192 | 0611<br>Official Degree Awarded: Educational Technology (Arts, Media and Engineering) (PhD)<br>Program Description: Educational Technology (Art, Media and Engineering)(PhD)

## Educational Psychology (MEd) EDPSYCHMED

MARY LOU FULTON COLLEGE OF EDUCATION, TEMPE
Contact: http://education.asu.edu | dpe@asu.edu | EDB 302 | 480/965-3384 | 0611
Official Degree Awarded: Educational Psychology (MEd)
Program Description: Educational Psychology offers a Master of Education degree for persons who wish to further prepare themselves as classroom teachers or for other positions related to instruction. Students completing this program are not expected to continue into the PhD in Educational Psychology.

Program Requirements: A minimum of 36 semester hours and a comprehensive examination are required.
Educational Psychology Core:

Introduction to Research and Evaluation
Learning and Instruction
Child Development
Psychology of the Adolescent

Focus Studies:

Three or four courses related to a topic chosen by the student.

## Admission Requirements:

- Graduate College application with transcripts from a previously attended institution.
- Individual Resume. This document should include your higher education background, classroom teaching, other employment experiences, public service affiliation with professional organizations, awards, presentations, publications, and descriptions of non-academic interests.
- Statement of Goals. This one or two-page narrative should identify the career path that you wish to pursue, indicate how your preparation to date contributes to the plan, and tell how a degree in educational psychology can attain your goals.
- Test Scores. Have your scores on the GRE sent to the Graduate College, Arizona State University, PO Box 871003, Tempe, AZ 85287-1003. In addition to the GRE score requirement, a TOEFL score is required of students whose native language is not English.

For further information, go to http://education.asu.edu.

## Educational Technology (Grad Certificate) EDEDTGRCT

MARY LOU FULTON COLLEGE OF EDUCATION, TEMPE
Contact: http://coe.asu.edu/psyched/edtech/ | dpe@asu.edu | 302 Payne | 480/965-3384 | 0611
Official Degree Awarded: Educational Technology (certificate) (CERT)
Program Description: The Graduate Certificate in Educational Technology is designed for individuals interested in gaining proficiency in the design, development and evaluation of instructional systems as well as learning how to utilize various educational technology applications to support learning and performance.

Program Requirements: The certificate consists of 15 semester hours of course work. 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)<br>EDT 501 Foundations and Issues in Educational Technology<br>EDT 502 Design and Development of Instruction<br>EDT 503 Instructional Media Design

Students must complete one elective course, chosen with their advisor, and a three-semester hour capstone course: EDT 504 Development of Computer-Based Instruction.

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 (a) hold a bachelor's degree or equivalent from a regionally accredited institution, and (b) have a cumulative junior/senior undergraduate GPA of 3.00 or higher.

All materials listed below must be submitted to the executive committee via the Division of Psychology in Education's admissions secretary:

- Graduate Certificate in Educational Technology Program Application for Admission
- One official copy of all college or university transcripts
- Curriculum vitae or résumé

It is the applicant's responsibility to ensure that all materials arrive; incomplete applications will not be considered.
information regarding admission requirements, see http://coe.asu.edu/candi.

## Educational Technology (MEd) EDTECHMED

MARY LOU FULTON COLLEGE OF EDUCATION, TEMPE
Contact: http://education.asu.edu | dpe@asu.edu | EDB 302 | 480/965-3384 | 0611
Official Degree Awarded: Educational Technology (MEd)
Program Description: The Educational Technology Master's program has a strong focus on instructional design, development, and evaluation, as well as current and emerging trends and technologies. These include human performance technology, training, Web-based learning, distance learning, online learning, technology integration, multimedia learning, and interactive learning environments.

Program Requirements: A minimum of 30 credit hours beyond a bachelor's degree is required. Each student develops a program of study in consultation with a faculty advisor.

Required Courses (18 credit hours):
Foundations and Issues in Educational Technology
Design and Development of Instruction
Instructional Media Design
Development of Computer-Based Instruction
Theoretical Views of Learning
Internship (or Practicum)
Elective Courses: 12 credit hours of elective courses from a variety of specialty areas such as instructional design, various technologies, media development, technology integration, distance education, performance improvement, and training. A comprehensive examination is also required

Admission Requirements: Academic requirements for admission to the EDT master's program include:

1. A four-year undergraduate grade point average (GPA) of 3.00 or above, and
2. A score of either 500 or above on the Graduate Record Examination (GRE) verbal section or a scaled score of 400 or above on the Miller Analogies Test (MAT),
3. A score of 550 (paper-based) or 213 (computer-based) or 79 (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,
4. Statement of Professional Goals. Find this form at http://education.asu.edu/about/academic_units/psyched/psyched_forms.dot.
5. Two references. Complete and sign the top portion of each form before giving to the persons who will provide your recommendations. Recommenders may, if they wish, attach original letters on letterhead stationery. Reference forms can be found at http://education.asu.edu/about/academic_units/psyched/psyched_forms.dot.
6. Current resume.

## Educational Technology (PhD) EDTECHPHD

MARY LOU FULTON COLLEGE OF EDUCATION, TEMPE
Contact: http://education.asu.edu | dpe@asu.edu | EDB 302 | 480/965-3384 | 611
Official Degree Awarded: Educational Technology (PhD)

Program Description: The focus of the PhD 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 PhD degree 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.

Program Requirements: A minimum of 84 semester hours beyond the bachelor's degree. At least 54 of these hours must be taken at Arizona State University after admission to the PhD program. The following 48 credit hours of course work is required for all students in the Educational Technology doctoral program: Foundations and Issues in Educational Technology; Design and Development of Instruction; Instructional Media Design; Development of Computer-Based Instruction; Educational Evaluation; Theoretical Views of Learning; Introduction to Data Analysis; Multiple Regression/Correlation; Research in Educational Technology; Advanced Instructional Development; Advanced Educational Technology Research; and Dissertation. 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 a Graduate College application, transcripts and GRE results. Academic requirements for admission to the Educational Technology doctoral program include: A four-year undergraduate grade-point average (GPA) of 3.20 or above; scores of 500 or above on both the verbal reasoning and quantitative reasoning sections of the Graduate Record Examination (GRE); a score of 4 or above on the analytical writing section of the GRE; a score of 600 (paperbased) or above on the Test of English as a Foreign Language (TOEFL) or 100 iBT is also required for students who do not speak English as their first language. In addition, a statement of professional goals, two professional references, and a resume are needed.

## Elementary Education (MA) EDELEMMA

MARY LOU FULTON COLLEGE OF EDUCATION, TEMPE
Contact: http://coe.asu.edu/candi | cnigrad@asu.edu | ED 434 | 4809654602 | 1911
Official Degree Awarded: Curriculum and Instruction (Elementary Education) (MA)
Program Description: Designed as a research degree, the Master of Arts prepares students wishing to continue on to a doctorate. The concentration in elementary education offers advanced coursework in research methodology, theory and practice in the area of elementary education. This concentration encompasses the study of education and care of children through the primary grades. The program integrates professional knowledge and understanding with research skills, demonstrated in the completion of the required thesis.

Program Requirements: A minimum of 30 semester hours of credit and a thesis is required for the Master of Arts (MA) in Curriculum and Instruction. Curriculum and Instruction MA students are assigned an advisor at the time of their admission. The advisor assists in selecting the Graduate Committee and serves as chair of the student's Graduate Committee. Each MA degree candidate must form a Graduate Committee in consultation with the advisor and complete a thesis, under the direction of the thesis advisor. The Graduate Program Committee must be formed prior to completing 12 semester hours of credit in the program. Because of the research component, students enrolling in the MA degree typically need more than 30 hours to complete the degree. Each MA candidate will complete a thesis after completing at least 24 hours in the program. Six semester hours of thesis are required along with a minimum of 24 semester hours of approved coursework.

Admission Requirements: The following are required: application to the Graduate College, transcripts, letter of intent/statement of purpose and three letters of recommendation from individuals who can speak to the applicant's potential for success in a graduate programs. Additional materials may be required to gain admission into certain programs/cohorts. For specific information regarding admission requirements, see http://coe.asu.edu/candi.

## Elementary Education (MEd) EDELEMMED

MARY LOU FULTON COLLEGE OF EDUCATION, TEMPE
Contact: http://coe.asu.edu/candi | cnigrad@asu.edu | ED 434 | 4809654602 | 1911
Official Degree Awarded: Curriculum and Instruction (Elementary Education) (MEd)
Program Description: The Master of Education degree (MEd) in Curriculum and Instruction with a concentration in elementary education is a degree program designed to facilitate development of practitioner knowledge, skills and understanding for teachers in elementary classrooms. Practitioners are usually classroom teachers or individuals preparing to teach, who will focus on developing classroom practices based on current research, the integration of subject matter content in elementary classrooms and a thoughtful examination of their own teaching practices in relation to student learning.

The concentration in elementary education encompasses the study of education and care of children through the primary grades. The program requires students to develop a deeper understanding of the research, theories and methods required of a successful practitioner in the elementary schools of today; including a more advanced understanding of diverse learners in culturally diverse settings.

For students looking for elementary teacher certification, the college offers the Teacher Education and Certification Highway + Masters program (TEACH + ME). TEACH + ME is a masters degree program for individuals who want to teach in elementary school settings (K-8).

Candidates who complete the program receive a MEd in Curriculum and Instruction with a concentration in elementary education and an Institutional Recommendation (IR) for certification in elementary education (K-8). For more information, access http://education.asu.edu/prospective_students/graduate_studies/teachme.dot.

Program Requirements: A minimum of 45 semester hours of graduate credit is required for the MEd in Curriculum and Instruction. Each student is assigned a graduate advisor to design the program of study. Students in this program will complete either a comprehensive examination, a research project or an applied project as a culminating activity after completing at least 24 of the 45 semester hours listed on the program of study. Students must choose their culminating activity (written examination, research project or applied project) in consultation with their faculty advisor before completing their program of study. Students who choose to complete an applied project must enroll in "Teacher as Researcher" the semester prior to completing the applied project, and they must meet with their graduate advisor for approval of the applied project. For more information, refer to the Curriculum and Instruction MEd Student Handbook.

Admission Requirements: The following are required: application to the Graduate College, transcripts, letter of intent/statement of purpose and three letters of recommendation from individuals who can speak to the applicant's potential for success in a graduate programs. Additional materials may be required to gain admission into certain programs/cohorts. For specific information regarding admission requirements, access http://education.asu.edu.

## English Education (PhD) EDENGLPHD

MARY LOU FULTON COLLEGE OF EDUCATION, TEMPE
Contact: http://coe.asu.edu/candi | cnigrad@asu.edu | Farmer Building 434|4809654602 | 1911
Official Degree Awarded: Curriculum and Instruction (English Education) (PhD)
Program Description: The Interdisciplinary PhD in Curriculum and Instruction with a concentration in English education is administered through the Division of Curriculum and Instruction with classes in both the College of Education and the College of Liberal Arts and Sciences at ASU. Students receive training and mentoring in five related disciplines: linguistics, second language teaching, rhetoric and composition, research techniques, and the nature of learning. In addition to core requirements, students are involved in seminars and internships.

The program produces teacher trainers and researchers in English education through coursework and mentoring in such areas as:

1. Philosophy and sociology of American education, including such current issues as national and state standards and high stakes testing,
2. English linguistics and issues concerning usage and the teaching of grammar,
3. Subject matter of special interest to secondary level teachers, e.g., literature that appeals to adolescents and will help them develop into lifelong readers, and the development of young people's writing and reading skills for a variety of purposes,
4. The development of critical skills in relation to the Internet and other mass media,
5. Techniques of teaching and political and education issues related to multiculturalism and the teaching of English as a second language,
6. Skills and techniques needed to conduct and report on research as well as to understand other people's research.

The philosophy of our curriculum is based on the belief that doctoral students should receive a graduate experience of classes, seminars, internships and research experiences that make them aware of the basic precepts and controversies in both the historic and current fields of English education.

Program Requirements:

## English Department Concentration (33 hours)

These hours should include at least one graduate class, seminar, or internship taken from each of the English education faculty members (Blasingame, Nelson, and Nilsen). ENG 606 Advanced Studies in English Education may be repeated for credit when the specific subjects differ. The internships are divided into three projects of two hours each and should include a research experience, supervising student teachers, taking partial responsibility for teaching an undergraduate English education class, or a special project designed by the student and his or her mentor. The classes should include at least one course in rhetorical analysis, one in literary criticism and one in linguistics.

Cognate Study (12 hours)
Students take work related to English education and the subject of their proposed dissertation. A class in learning theory is recommended. Other courses could be in linguistics, rhetoric and rhetorical theory, literary criticism, teaching English as a second language, popular culture, theater, communications theory, adolescent psychology, educational administration, language and literacy, and child drama, or another area that the PhD committee accepts as relevant to the student's goals.

## College of Education (15 hours)

These classes must include the Interdisciplinary Research Seminar in Curriculum and Instruction, which should be taken in the first or second semester. Also required are a graduate class in Curriculum Theory and Practice, an Introduction to Quantitative Methods of Research, an Introduction to Qualitative Methods of Research, and a course in adolescent psychology.

The PhD program requires 93 credit hours, a dissertation, and written and oral comprehensive examinations.

Classes in Research and Inquiry (9 hours)
These additional nine hours of research and inquiry can be chosen either from the English Department or from the College of Education and should relate specifically to the kind of research the student anticipates doing for the dissertation.

Dissertation (24 hours)
At least 12 hours of dissertation credit must be earned after a student has been advanced to candidacy.

Admission Requirements: Admission to the program is open only to those with a minimum of two years' experience teaching English in grades 6-14.

The following are required: application to the Graduate College, transcripts, letter of intent/statement of purpose, curriculum vita (resume), statement of research interests, a writing sample (approximately ten pages long), GRE scores and three letters of recommendation from individuals who can speak to the applicant's potential for success in a graduate programs. Additional materials may be required to gain admission into certain programs/cohorts. For specific information regarding admission requirements, see http://coe.asu.edu/candi. Admission to the program is contingent upon the commitment from an approved mentor in the concentration to advise and mentor the applicant.

# English as a Second Language - Tempe Campus (MA) EDESLMA 

MARY LOU FULTON COLLEGE OF EDUCATION, TEMPE
Contact: http://coe.asu.edu/candi | cnigrad@asu.edu | ED 434 | 4809654602 | 1911
Official Degree Awarded: Curriculum and Instruction (English as a Second Language) (MA)
Program Description: The Master of Arts Degree in Curriculum and Instruction is intended for students wishing to conduct original research in US school settings and continue on for the PhD. The MA concentration in English as a second language is designed to provide coursework related to teaching school-aged English learners in US settings (SLA theory, English learner programs and methods, and language assessment) along with coursework in research methods to be used in the design and implementation of the thesis. Note: This degree is not the same as the MTESL degree offered through the English Department.

Program Requirements: A minimum of 30 semester hours of credit and a thesis is required for the Master of Arts (MA) in Curriculum and Instruction. Curriculum and Instruction MA students are assigned an advisor at the time of their admission. The advisor assists in selecting the Graduate Committee and serves as chair of the student's Graduate Committee. Each MA degree candidate must form a Graduate Committee in consultation with the advisor and complete a thesis, under the direction of the thesis advisor. The Graduate Program Committee must be formed prior to completing 12 semester hours of credit in the program. Because of the research component, students enrolling in the MA degree typically need more than 30 hours to complete the degree. Each MA candidate will complete a thesis after completing at least 24 hours in the program. Six credits of thesis are required along with a minimum of 24 semester hours of approved coursework.

Admission Requirements: The following are required: application to the Graduate College, transcripts, letter of intent/statement of purpose and three letters of recommendation from individuals who can speak to the applicant's potential for success in a graduate programs. Additional materials may be required to gain admission into certain programs/cohorts. For specific information regarding admission requirements, see http://coe.asu.edu/candi.

## English as a Second Language - Tempe Campus (MEd) EDESLMED

MARY LOU FULTON COLLEGE OF EDUCATION, TEMPE
Contact: http://coe.asu.edu/candi | cnigrad@asu.edu | Farmer Building 434 | 4809654602 | 1911
Official Degree Awarded: Curriculum and Instruction (English as a Second Language) (MEd)
Program Description: The Master of Education degree (MEd) in Curriculum and Instruction with a concentration in ESL is intended for students who are currently teaching English learners, at the K-12 levels of education. This degree is designed for practitioners to facilitate development of advanced level professional knowledge of research, theory and practice in the area of teaching English learners in school settings. The MEd in English as a second language is designed to provide coursework related to teaching English learners in US settings (SLA theory, English learner programs and methods, and language assessment). Note: This degree is not the same as the MTESL degree offered through the English Department.

Program Requirements: A minimum of 30 semester hours of graduate credit is required for the MEd in Curriculum and Instruction. Each student is assigned a graduate advisor to design the program of study. Students in this program will complete either a comprehensive examination, a research project or an applied project as a culminating activity after completing at least 24 of the 30 semester hours listed on the program of study. Students must choose their culminating activity (written examination, research project or applied project) in consultation with their faculty advisor before completing their program of study. Students who choose to complete an applied project must enroll in ""Teacher as Researcher"" the semester prior to completing the applied project, and they must meet with their graduate advisor for approval of the applied project. For more information, refer to the Curriculum and Instruction MEd Student Handbook.

Admission Requirements: The following are required: application to the Graduate College, transcripts, letter of intent/statement of purpose and three letters of recommendation from individuals who can speak to the applicant's potential for success in a graduate programs. Additional materials may be required to gain admission into certain programs/cohorts. For specific information regarding admission requirements, see http://coe.asu.edu/candi.

# Higher and Postsecondary Education (EdD) EDPOSTEDD 

MARY LOU FULTON COLLEGE OF EDUCATION, TEMPE
Contact: http://education.asu.edu | delps@asu.edu | Farmer Building 120|4809656357|2411

Official Degree Awarded: Higher and Postsecondary Education (EdD)
Program Description: The Doctorate in Higher and Postsecondary Education (EdD) program is currently being revised. Questions about the EdD should be directed to Dr. Caroline S. Turner at csturner@asu.edu.

Program Requirements: The program requires:

- 90 semester credit hours
- written comprehensive examination
- successful defense of the dissertation

Admission Requirements: Graduate College application and transcripts from previously attended institutions.

# Higher and Postsecondary Education (MEd) EDPOSTMED 

MARY LOU FULTON COLLEGE OF EDUCATION, TEMPE
Contact: http://education.asu.edu | delps@asu.edu | Farmer Building 120|4809656357 | 2411
Official Degree Awarded: Higher and Postsecondary Education (MEd)
Program Description: The Master of Education degree (MEd) 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:

1. a variety of course delivery formats for students, which help expedite degree attainment,
2. the Graduate Student Success Seminar, which is offered at the beginning of the program. This features MEd peer instructors to help build relationships, create your professional e-portfolio, and to develop skills for student success,
3. offers courses that integrate theory to practice through relevant research, models, applied skills,
4. offers creative practicum experience to advance skills and professional development,
5. collaborates with university learning partners across to fund graduate student through management internship opportunities, and
6. culminates with an applied project (nonthesis) that demonstrates the student's learning and development for in job applications, professional growth, and lifelong learning.

Program Requirements: The M.Ed. program requires 30 semester hours of graduate work beyond the Bachelor's degree. 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 Capstone and graduation. All of the program of study requirements for the Master's of Education Degree in the Higher and Postsecondary Education Program must be completed within a period of six (6) years.

Admission Requirements: For admission to the M.Ed. program, the college offers rolling admissions and requires the following criteria from applicants:

- Application and fee to the Graduate College,
- Letter of intent and resume,
- Official undergraduate transcripts,
- GRE scores if your undergraduate GPA is less than a 3.00,
- M.Ed. Coordinator reserves the right to interview any applicant.

Please visit the Educational Leadership and Policy Studies Admission Procedures web page for detailed information on submitting an application.

Additionally, the M.Ed. in Higher and Postsecondary Education will be 30 credit hours versus 37 credit hours. New program/curriculum changes will be posted when available.

## Indian Education (EdD) EDINDEDD

MARY LOU FULTON COLLEGE OF EDUCATION, TEMPE
Contact: http://coe.asu.edu/candi | cnigrad@asu.edu | ED 434 | 4809654602 | 1911
Official Degree Awarded: Curriculum and Instruction (Indian Education) (EdD)
Program Description: The EdD degree concentration in Indian education is an integral component of the interdisciplinary EdD program in Curriculum and Instruction. Consistent with the mission of the division's EdD program, while recognizing the particular needs of the field and graduate students who are interested in pursuing advanced studies in the area of Indian education, the EdD concentration in Indian education prepares exemplary professional practitioners, scholars, researchers, and teacher educators in the area of Indian education. The program provides focused and systematic yet varied opportunities for students in theory, research, inquiry, mentoring and practice that are compatible with the needs and expectations of those interested in advanced studies in one or more areas of Indian education; generates and contributes to the advancement of new knowledge and development of Indian education; and provides opportunities for developing scholars, researchers and practitioners to collaborate with others in addressing critical issues and implementing best practices in diverse educational schools and communities serving Native American learners.

Program Requirements: The minimum requirements for the Doctor of Education degree program are:

- Core ( 15 semester hours)
- Concentration (48 semester hours)
- Internship (six semester hours)
- Dissertation and Research (24 semester hours)

During the first two years of the EdD program, students must complete a total of at least 24 hours of course work in four consecutive semesters that may include summer. At the end of each internship, the student will compile documentation of his/her experience to his/her advisor and committee. This documentation may be part of the doctoral portfolio. The written and oral comprehensive examinations will take place when students have completed all course work in an approved program of study and before they begin full-time work on their dissertation.

Admission Requirements: All applicants must submit an online Graduate College application.
Application, transcripts, and three letters of recommendation from individuals within academic/professional affiliations must be submitted. These letters of recommendation should address your ability to successfully complete a graduate degree program in Curriculum and Instruction. For more information, see http://www.coe.asu.edu/programs.html.

## Indian Education (MA) EDINDMA

MARY LOU FULTON COLLEGE OF EDUCATION, TEMPE
Contact: http://coe.asu.edu/candi | cnigrad@asu.edu | Farmer Building 434|4809654602 | 1911
Official Degree Awarded: Curriculum and Instruction (Indian Education) (MA)
Program Description: The Master of Arts degree (MA) in Curriculum and Instruction with a concentration in Indian education is a research degree program that requires a research core, an Indian education concentration core, electives and a thesis. Required courses in the research core are Introduction to Research and Evaluation in Education and Conducting Educational Research in

Indigenous Communities. This program emphasizes innovative research and sound inquiry that is sensitive and responsive to native peoples, the communities and worldviews. The program addresses the role of working collaboratively to enhance knowledge and acknowledge the richness and uniqueness of indigenous education. The MA degree requires the completion of a master's thesis, which is the culminating activity.

Program Requirements: A minimum of 30 semester hours of credit and a thesis is required for the Master of Arts (MA) in Curriculum and Instruction. Curriculum and Instruction MA students are assigned an advisor at the time of their admission. The advisor assists in selecting the Graduate Committee and serves as chair of the student's Graduate Committee. Each MA degree candidate must form a Graduate Committee in consultation with the advisor and complete a thesis, under the direction of the thesis advisor. The Graduate Program Committee must be formed prior to completing 12 semester hours of credit in the program. Because of the research component, students enrolling in the MA degree typically need more than 30 hours to complete the degree. Each MA candidate will complete a thesis after completing at least 24 hours in the program. Six credits of thesis are required along with a minimum of 24 semester hours of approved coursework.

Admission Requirements: The following are required: application to the Graduate College, transcripts, letter of intent/statement of purpose and three letters of recommendation from individuals who can speak to the applicant's potential for success in a graduate programs. Additional materials may be required to gain admission into certain programs/cohorts. For specific information regarding admission requirements, see http://coe.asu.edu/candi.

## Indian Education (MEd) EDINDMED

MARY LOU FULTON COLLEGE OF EDUCATION, TEMPE
Contact: http://coe.asu.edu/candi | cnigrad@asu.edu | ED 434 | 4809654602 | 1911
Official Degree Awarded: Curriculum and Instruction (Indian Education) (MEd)
Program Description: The Master of Education degree (MEd) in Curriculum and Instruction with a concentration in Indian education is designed for practitioners to facilitate development of advanced level professional knowledge of research, theory and practice in the area of indigenous education. The degree includes advanced courses in Indian education, including History of American Indian Education, and Foundations of Instruction for Indigenous Classrooms. This program emphasizes innovative and sound inquiry that is sensitive and responsive to Native peoples, the communities and worldviews. The program addresses the role of working collaboratively to enhance knowledge and acknowledge the richness and uniqueness of indigenous education.

Program Requirements: A minimum of 30 semester hours of graduate credit is required for the MEd in Curriculum and Instruction. Each student is assigned a graduate advisor to design the program of study. Students in this program will complete either a comprehensive examination, a research project or an applied project as a culminating activity after completing at least 24 of the 30 semester hours listed on the program of study. Students must choose their culminating activity (written examination, research project or applied project) in consultation with their faculty advisor before completing their program of study. Students who choose to complete an applied project must enroll in "Teacher as Researcher" the semester prior to completing the applied project, and they must meet with their graduate advisor for approval of the applied project. For more information, refer to the Curriculum and Instruction MEd Student Handbook.

Admission Requirements: The following are required: application to the Graduate College, transcripts, letter of intent/statement of purpose and three letters of recommendation from individuals who can speak to the applicant's potential for success in a graduate programs. Additional materials may be required to gain admission into certain programs/cohorts. For specific information regarding admission requirements, see http://coe.asu.edu/candi.

## Language and Literacy (EdD) EDLANGEDD

MARY LOU FULTON COLLEGE OF EDUCATION, TEMPE
Contact: http://coe.asu.edu/candi | cnigrad@asu.edu | ED 434 | 4809654602 | 1911
Official Degree Awarded: Curriculum and Instruction (Language and Literacy) (EdD)
Program Description: The language and literacy concentration in the Doctor of Education (EdD) program in Curriculum and Instruction at Mary Lou Fulton College of Education provides opportunities for students to develop a scholarly focus in language and literacy education. Focus areas include: language and literacy education, educational linguistics, bilingualism, second
language acquisition, heritage language studies, classroom discourse, language policy, reading, writing, children's literature, emergent literacy, adolescent literacy, biliteracy, gender and literacy, new literacies and technoliteracies. The language and literacy EdD is designed to develop scholarly practitioners and leaders in the fields of language and literacy education.

Program Requirements: The EdD requires 93 semester hours, a dissertation, and written and oral comprehensive examinations. An individualized program of study is developed for each student under the guidance of the advisor and the Doctoral Committee. The program of study is designed to be consistent with the goals of the student and the requirements of the university.

The minimum requirements for the Doctor of Education degree program are:

Core: 15 semester hours

COE 502 Introduction to Quantitative Research
COE 503 Introduction to Qualitative Research
DCI 791 Ed.D. Doctoral Seminar
DCI 701 Curriculum Theory and Practice
An advanced level research course

Concentration: 48 semester hours

Major concentration: 30 hours

Minor concentration: 18 semester hours

Language and Literacy Seminars: Each semester for the first four semesters in the program, students are required to take the one-hour language and literacy doctoral seminar.

Internship: 6 semester hours

The internship experience is designed to provide students with an opportunity to engage in university teaching, research and/or other professional experiences. Students earn six hours of university credit for these experiences.

Dissertation and Research: 24 semester hours

In this culminating study, the student pursues an educational problem or issue of concern, grounding this effort in research and scholarship. The culminating study may take the form of either a traditional dissertation or a scholarly applied project. Examples of a scholarly applied project include: a set of curriculum materials, a computerized database for instruction, a film or videotape series, or a program and materials for staff development. The scholarly applied project must be accompanied by a formal written report, including: a rationale justified theoretically and with research; an explication of the theoretical grounds for the perspective and content of the project (as well as issues raised within that content); a review of the literature related to that content; a comprehensive documentation of the development of the project; and a full discussion of the local and wider social implications of applying what is produced by the project.

Admission Requirements: The following are required:

1. application to the Graduate College,
2. transcripts,
3. letter of intent/statement of purpose,
4. curriculum vita (resume),
5. statement of research interests,
6. writing sample (approximately ten pages in length),
7. GRE scores and three letters of recommendation from individuals who can speak to the applicant's potential for success in a graduate programs.

Additional materials may be required to gain admission into certain programs/cohorts. For specific information regarding admission requirements, http://coe.asu.edu/candi.

Admission to the program is contingent upon the commitment from an approved mentor in the concentration to advise the applicant.

## Language and Literacy (MA) EDLANGMA

MARY LOU FULTON COLLEGE OF EDUCATION, TEMPE
Contact: http://coe.asu.edu/candi | cnigrad@asu.edu | ED 434 | 4809654602 | 1911
Official Degree Awarded: Curriculum and Instruction (Language and Literacy) (MA)
Program Description: This MA program offers students opportunities to develop expertise in contemporary issues and pedagogical methods related to language and literacy, teaching and research, such as content literacy, critical literacy, children's literature, culture and literacy, and gender. MA students also investigate both applied and theoretical issues in language and literacy. Students may use this program as preparation for doctoral work in language and literacy."

Program Requirements: A minimum of 30 semester hours of credit and a thesis is required for the Master of Arts (MA) in Curriculum and Instruction. Curriculum and Instruction MA students are assigned an advisor at the time of their admission. The advisor assists in selecting the Graduate Committee and serves as chair of the student's Graduate Committee. Each MA degree candidate must form a Graduate Committee in consultation with the advisor and complete a thesis, under the direction of the thesis advisor. The Graduate Program Committee must be formed prior to completing 12 semester hours of credit in the program. Because of the research component, students enrolling in the MA degree typically need more than 30 hours to complete the degree. Each MA candidate will complete a thesis after completing at least 24 hours in the program. Six credits of thesis are required along with a minimum of 24 semester hours of approved coursework.

Admission Requirements: The following are required: application to the Graduate College, transcripts, letter of intent/statement of purpose and three letters of recommendation from individuals who can speak to the applicant's potential for success in a graduate programs. Additional materials may be required to gain admission into certain programs/cohorts. For specific information regarding admission requirements, see http://coe.asu.edu/candi.

## Language and Literacy (MEd) EDLANGMED

MARY LOU FULTON COLLEGE OF EDUCATION, TEMPE
Contact: http://coe.asu.edu/candi | cnigrad@asu.edu | Farmer Building 434 | 4809654602 | 1911
Official Degree Awarded: Curriculum and Instruction (Language and Literacy) (MEd)
Program Description: The Master of Education degree (MEd) 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, literacy, teaching and learning, such as content literacy, critical literacy, children's literature, gender, culture and literacy, language and literacy processes, multilingual/multicultural literacy and assessment.

Program Requirements: A minimum of 30 hours of graduate credit is required for the MEd in Curriculum and Instruction. Each student is assigned a graduate advisor to design the program of study. Students in this program will complete either a comprehensive examination, a research project or an applied project as a culminating activity after completing at least 24 of the 30 credit hours listed on the program of study. Students must choose their culminating activity (written examination, research project or applied project) in consultation with their faculty advisor before completing their program of study. Students who choose to complete an applied project must enroll in "Teacher as Researcher" the semester prior to completing the applied project, and they must meet with their graduate advisor for approval of the applied project. For more information, refer to the Curriculum and Instruction MEd Student Handbook.

Admission Requirements: The following are required: application to the Graduate College, transcripts, letter of intent/statement of purpose and three letters of recommendation from individuals who can speak to the applicant's potential for success in a graduate programs. Additional materials may be required to gain admission into certain programs/cohorts. For specific information regarding admission requirements, see http://coe.asu.edu/candi.

## Language and Literacy (PhD) EDLANGPHD

MARY LOU FULTON COLLEGE OF EDUCATION, TEMPE
Contact: http://coe.asu.edu/candi | cnigrad@asu.edu | Farmer Building 434 | 4809654602 | 1911
Official Degree Awarded: Curriculum and Instruction (Language and Literacy) (PhD)
Program Description: The concentration in language and literacy in the Interdisciplinary PhD Program in Curriculum and Instruction at ASU provides opportunities for research and study in language and literacy education: educational linguistics, bilingualism, second language acquisition, heritage language studies, classroom discourse , language policy, reading, writing, children's literature, emergent literacy, adolescent literacy, biliteracy, gender and literacy, new literacies and technoliteracies. The language and literacy PhD concentration is designed to develop scholars in language and literacy education.

Program Requirements: The PhD requires 93 semester hours, a dissertation, and written and oral examinations.
The following domains comprise the Interdisciplinary language and literacy PhD program:

Area of Concentration: 30 semester hours are required pertaining to language and literacy education.

Cognate Study: 12 semester hours are taken outside the students declared concentration to broaden their understanding of the conceptual base and issues underlying the study of curriculum and instruction.

Inquiry and Analysis: 15 semester hours of empirical analysis and inquiry foundations are required in advanced design and data analysis in quantitative and/or qualitative research methods.

Language and Literacy Doctoral Seminars: Each semester for the first four semesters in the program, students are required to take the one-hour language and literacy seminar on linguistics, early literacy, adolescent/adult literacy, and language policy/politics.

Core Coursework: Six semester hours of courses (Interdisciplinary Research Seminar in Curriculum and Instruction and Curriculum Theory and Practice) are required as the Curriculum and Instruction core.

Internships: Six semester hours of research and university teaching internships are required to broaden the training and experience of students.

Dissertation and Independent Research: Twenty-four semester units of dissertation and independent research leading to completion of an approved dissertation are required.

The language and literacy concentration provides opportunities for research and study in one or more of the following: language and literacy education, educational linguistics, bilingualism, second language acquisition, language diversity, children's literature, classroom discourse analysis, gender and literacy, emergent literacy, adolescent literacy, biliteracy, language policy, and other language education topics.

Admission Requirements: The following are required: application to the Graduate College, transcripts, letter of intent/statement of purpose, curriculum vita (resume), statement of research interests, a writing sample (approximately ten pages long), GRE scores and three letters of recommendation from individuals who can speak to the applicant's potential for success in a graduate programs. Additional materials may be required to gain admission into certain programs/cohorts. For specific information regarding admission requirements, see http://coe.asu.edu/candi. Admission to the program is contingent upon the commitment from an approved mentor in the concentration to advise and mentor the applicant.

## Learning (PhD) EDPSYLEPHD

MARY LOU FULTON COLLEGE OF EDUCATION, TEMPE
Contact: http://education.asu.edu/ | dpe@asu.edu | EDB 302 | 480/965-3384 | 0611

Official Degree Awarded: Educational Psychology (Learning) (PhD)
Program Description: The Learning concentration of the PhD in Educational Psychology focuses on theoretical and empirical issues in the cognitive and learning sciences, and their educational applications and implications. Faculty interests include parent and teacher education, cognition, motivation and self-regulation, and literacy. The concentration prepares students for professional positions in the academy, school districts, departments of education, and industry. Learning stresses student involvement in professional activities. Students work with faculty on research of mutual interest, present their work at national conferences, and submit papers to peer-reviewed journals.

Program Requirements: The program requires a minimum of 84 semester hours beyond the bachelor's degree. At least 54 of these hours must be taken at Arizona State University. PhD Degree ( 84 credits; 54 credits beyond the Master's).

Learning Core: Psychology of Reading; Higher-Order Cognition; Motivation; Learning Science Lab; Internship in Undergraduate Teaching.

Interdisciplinary Core: Introduction to Data Analysis; Multiple Regression/Correlation Methods.
Specialization: Reading and Conference; Research Practicum; Self Regulation.
Electives to be determined by student and advisor. All doctoral candidates must complete a comprehensive examination. Prior to admission to candidacy, the student must satisfy a publication requirement: a written report of a research study is accepted for (a) publication in a refereed journal of the quality of the journals published by the American Psychological Association (APA), or the American Educational Research Association (AERA) or (b) presentation at an annual conference of a national organization of the quality of APA or AERA. A written comprehensive examination and successful completion of the dissertation is required.

Admission Requirements: The Learning doctoral program is a limited-admission program. In making their decision, faculty members consider several items, including: undergraduate GPA; scores on the verbal and quantitative sections of the Graduate Record Examination (GRE); references from two university faculty or other individuals who can judge an applicants' academic potential; the statement of professional goals and interests. A score of 600 or above on the Test of English as a Foreign Language (TOEFL) is also required for students who do not speak English as their first language. For more information please contact the department: http://education.asu.edu/prospective_students/graduate_studies/psyched_learning.dot.

## Life Span Developmental Psychology (PhD) EDPSYLDPHD

MARY LOU FULTON COLLEGE OF EDUCATION, TEMPE
Contact: http://education.asu.edu | dpe@asu.edu | EDB 302 | 480/965-3384 | 0611
Official Degree Awarded: Educational Psychology (Lifespan Development Psychology) (PhD)
Program Description: Life Span developmental psychology (LDP) is a concentration within the Educational Psychology program. The LDP concentration offers a program of study that reflects the field's increasingly interdisciplinary nature. The focus is on the application of scholarship in understanding real-world challenges and the cultural nature of development. The target populations studied include children and adults within the contexts of families and schools. An applied developmental science model is followed, with the aim of using research to inform policies and programs that further the positive development of individuals. Faculty research interests include immigrant families' adaptations, family life and home-institution connections, aging and intergenerational relationships, family literacy, family-school relations, peer relations, and educational equity. Graduates of the program find work at universities and community colleges, state and local departments of education, K-12 schools, and with various community agencies.

Program Requirements: Requirements for the PhD degree consist of:

1. a minimum of 84 hours of course work specified in a student's Program of Study,
2. comprehensive exams, and
3. successful defense of a Dissertation.

There is a 10 -year time limit for PhD students, starting at the time of admission. Students entering the PhD program with a Masters degree in a related discipline and with 30 semester hours of graduate course work will be expected to earn a total of 84 hours past the B.A. including the transferred Masters hours; of these 84 hours, 54 must be earned at ASU. Students can use a block of 30 credits from a previously awarded master's degree plus 12 credits not used in any previous degree program as part of the PhD required credits, only if they can prove by a master's POS that these credits were not required for their master's. Students who withdraw from a master's in order to start a PhD, lose all credits except the 12 allowed to be brought forward.

Admission Requirements: The Graduate Degree Application is to be submitted online to the Division of Graduate Studies. The deadlines are Oct. 15 for spring admission and Feb. 15 for fall admission. The application and details about requirements are on the Internet at www.asu.edu/graduate/admissions. Additional Materials: statement of academic and career goals; resume; three letters of recommendation; and other items as listed on the Web site. Forms for these items are on the Internet at http://education.asu.edu.

## Mathematics Education (EdD) EDMATHEDD

MARY LOU FULTON COLLEGE OF EDUCATION, TEMPE
Contact: http://coe.asu.edu/candi | cnigrad@asu.edu | ED 434 | 4809654602 | 1911
Official Degree Awarded: Curriculum and Instruction (Mathematics Education) (EdD)
Program Description: The mission of the EdD in Curriculum and Instruction with a concentration in mathematics education is to prepare exemplary professional practitioners, scholars, researchers and teacher educators in the area of mathematics education; to provide focused, systematic and varied opportunities for students in theory, research, inquiry and practice that are compatible with the needs and expectations of those interested in advanced study in the many areas pertinent to mathematics education; to generate, use and disseminate knowledge about learning and teaching mathematics in $\mathrm{K}-16$; and to provide opportunities for developing scholars, researchers and practitioners to collaborate with others to solve critical research and practice issues in mathematics education for students, teachers and administrators in diverse educational communities.

Program Requirements: The EdD requires 93 semester hours, a dissertation, and srittene and oral comprehensive examinations.
An individualized program of study is developed for each student under the guidance of the advisor and the Doctoral Committee. The program of study is designed to be consistent with the goals of the student and the requirements of the university.

The minimum requirements for the Doctor of Education degree program are:

Core: 15 semester hours

COE 502 Introduction to Quantitative Research
COE 503 Introduction to Qualitative Research
DCI 791 Ed.D. Doctoral Seminar
DCI 701 Curriculum Theory and Practice
An advanced level research course

Concentration: 48 semester hours)

Major Concentration: 30 hours

Minor Concentration: 18 semester hours

Internship: 6 semester hours

The internship experience is designed to provide students with an opportunity to engage in university teaching, research and/or other professional experiences. Students earn six hours of university credit for these experiences.

Dissertation and Research: 24 semester hours

In this culminating study, the student pursues an educational problem or issue of concern, grounding this effort in research and scholarship. The culminating study may take the form of either a traditional dissertation or a scholarly applied project. Examples of a scholarly applied project include: a set of curriculum materials, a computerized database for instruction, a film or videotape series, or a program and materials for staff development. The scholarly applied project must be accompanied by a formal written report that includes: a rationale justified theoretically and with research; an explication of the theoretical grounds for the perspective and content of the project (as well as issues raised within that content); a review of the literature related to that content; a comprehensive documentation of the development of the project; and a full discussion of the local and wider social implications of applying what is produced by the project.

Admission Requirements: The following are required: application to the Graduate College, transcripts, letter of intent/statement of purpose, curriculum vita (resume), statement of research interests, a writing sample (approximately ten pages in length), GRE scores and three letters of recommendation from individuals who can speak to the applicant's potential for success in a graduate programs. Additional materials may be required to gain admission into certain programs/cohorts. For specific information regarding admission requirements, see http://coe.asu.edu/candi. Admission to the program is contingent upon the commitment from an approved mentor in the concentration to advise the applicant.

## Mathematics Education (MA) EDMATHMA

MARY LOU FULTON COLLEGE OF EDUCATION, TEMPE
Contact: http://coe.asu.edu/candi | cnigrad@asu.edu | ED 434 | 4809654602 | 1911
Official Degree Awarded: Curriculum and Instruction (Mathematics Education) (MA)
Program Description: The Master of Arts degree (MA) 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. This program is designed for the mathematics educator who plans to pursue additional graduate work in mathematics education.

Program Requirements: A minimum of 30 semester hours of credit and a thesis is required for the Master of Arts (MA) in Curriculum and Instruction. Curriculum and Instruction MA students are assigned an advisor at the time of their admission. The advisor assists in selecting the Graduate Committee and serves as chair of the student's Graduate Committee. Each MA degree candidate must form a Graduate Committee in consultation with the advisor and complete a thesis, under the direction of the thesis advisor. The Graduate Program Committee must be formed prior to completing 12 semester hours of credit in the program. Because of the research component, students enrolling in the MA degree typically need more than 30 hours to complete the degree. Each MA candidate will complete a thesis after completing at least 24 hours in the program. Six credits of thesis are required along with a minimum of 24 semester hours of approved coursework.

Admission Requirements: The following are required: application to the Graduate College, transcripts, letter of intent/statement of purpose and three letters of recommendation from individuals who can speak to the applicant's potential for success in a graduate programs. Additional materials may be required to gain admission into certain programs/cohorts. For specific information regarding admission requirements, see http://coe.asu.edu/candi.

## Mathematics Education (MEd) EDMATHMED

MARY LOU FULTON COLLEGE OF EDUCATION, TEMPE
Contact: http://coe.asu.edu/candi | cnigrad@asu.edu | ED 434 | 4809654602 | 1911
Official Degree Awarded: Curriculum and Instruction (Mathematics Education) (MEd)
Program Description: The Master of Education degree (MEd) in Curriculum and Instruction with a concentration in mathematics education is a practitioner's degree program designed to facilitate development of advanced level professional knowledge, skills
and understanding. Students in this program explore issues related to teaching and learning in mathematics education and study these issues in the context of their own classroom. This program is designed for the professional classroom math educator.

Program Requirements: A minimum of 30 hours of graduate credit is required for the MEd in Curriculum and Instruction. Each student is assigned a graduate advisor to design the program of study. Students in this program will complete either a comprehensive examination, a research project or an applied project as a culminating activity after completing at least 24 of the 30 credit hours listed on the program of study. Students must choose their culminating activity (written examination, research project or applied project) in consultation with their faculty advisor before completing their program of study. Students who choose to complete an applied project must enroll in "Teacher as Researcher" the semester prior to completing the applied project, and they must meet with their graduate advisor for approval of the applied project. For more information, refer to the Curriculum and Instruction MEd Student Handbook.

Admission Requirements: The following are required:

1. application to the Graduate College,
2. transcripts,
3. letter of intent/statement of purpose and three letters of recommendation from individuals who can speak to the applicant's potential for success in a graduate programs.

Additional materials may be required to gain admission into certain programs/cohorts. For specific information regarding admission requirements, see http://coe.asu.edu/candi.

## Mathematics Education (PhD) (Curriculum and Instruction - Grades K-12) EDMATHPHD

MARY LOU FULTON COLLEGE OF EDUCATION, TEMPE
Contact: http://coe.asu.edu/candi | cnigrad@asu.edu | Farmer Building 434 | 480/965-4602 | 1911
Official Degree Awarded: Curriculum and Instruction (Mathematics Education) (PhD)
Program Description: The PhD in Curriculum and Instruction with a concentration in mathematics education provides opportunities for research and study in the teaching and learning of mathematics in the middle school, high school and higher education. Candidates may concentrate in the study of students' mathematical thinking, the design of learning and teaching environments, and the development and application of technologies for mathematics learning. Program mentors hail from the College of Education and from the Department of Mathematics and Statistics.

Program Requirements: The PhD requires 93 credit hours, a dissertation, and written and oral comprehensive examinations.
The following six domains comprise the mathematics education PhD program:

Mathematics Education Concentration: 27 semester hours)

While the majority of these hours must be spent in mathematics education, a sizable proportion may include coursework in closely related fields such as science education, human development, educational technology and graduate mathematics.

Inquiry and Analysis: 15 semester hours

Advanced design and data analysis in quantitative and/or qualitative research methods.

Core Requirements: 6 semester hours

Interdisciplinary Research Seminar in Curriculum and Instruction and Curriculum Theory and Practice.
Cognate Study: 12 semester hours

To broaden the student's understanding of the conceptual base and issues underlying the study of curriculum and instruction. Students take related work outside their declared areas of concentration. Cognate studies can be drawn from a broad range of offerings across the university.

Internships: 6 semester hours

Research and university teaching internships are required to broaden the training and experience of students.

Dissertation and Independent Research: 24 semester units

Independent research and dissertation leading to completion of an approved dissertation are required.

Admission Requirements: The following are required:

1. application to the Graduate College,
2. transcripts,
3. letter of intent/statement of purpose,
4. curriculum vita (resume),
5. statement of research interests,
6. a writing sample (approximately ten pages long),
7. GRE scores, and
8. three letters of recommendation from individuals who can speak to the applicant's potential for success in a graduate programs.

Additional materials may be required to gain admission into certain programs/cohorts. For specific information regarding admission requirements, see http://coe.asu.edu/candi.

## Measurement Statistics Methodological Study (PhD) EDPSYMSPHD

MARY LOU FULTON COLLEGE OF EDUCATION, TEMPE
Contact: http://education.asu.edu | dpe@asu.edu | EDB 302 | 480/965-3384 | 0611
Official Degree Awarded: Educational Psychology (Measurement, Statistics and Methodological Studies) (PhD)
Program Description: Students in the PhD program in Measurement Statistics Methodological Study (MSMS) focus their study on quantitative and qualitative research methodologies, educational statistics, psychometrics, and evaluation. Students specializing in MSMS will generally direct their professional efforts toward development and evaluation of techniques for the assessment of educational or psychological phenomena, measurement of educational outcomes, design and interpretation of research studies, statistical methods for analyzing research data, or evaluation of educational programs. Graduates are employed in a variety of positions, such as professors in colleges or universities, data analysts in the public or private agencies, measurement specialists for government agencies or private companies, or researchers and evaluators for schools or other institutions.

Program Requirements: The PhD program in Measurement, Statistics and Methodological Studies requires a minimum of 84 semester hours beyond the bachelor's degree. At least 54 of these hours must be taken at Arizona State University after admission to the PhD program. The length of time required to complete the program varies from student to student. Students entering the program with a bachelor's degree normally take at least four years. Students entering with a master's degree in a related area typically take at least three years to complete the program. Students develop a program of study in consultation with faculty advisor and the chair of the student's doctoral committee. A comprehensive examination and successful defense of the dissertation are required.

Admission Requirements: The Graduate Degree Application is to be submitted online to the Graduate College. Additional Materials: GRE scores: a statement of academic and career goals; resume; three letters of recommendation. Forms for these items are on the Internet at http://education.asu.edu/about/academic_units/psyched/psyched_forms.dot.

For more information, see http://research.ed.asu.edu/main.html.

## Physical Education (PhD) EDPHYEDPHD

MARY LOU FULTON COLLEGE OF EDUCATION, TEMPE
Contact: http://coe.asu.edu/candi | cnigrad@asu.edu | ED 434 | 4809654602 | 1911
Official Degree Awarded: Curriculum and Instruction (Physical Education) (PhD)
Program Description: The PhD in Curriculum and Instruction with a concentration in physical education actively involves students in research at all stages of doctoral study. Students are expected to have a strong foundation in physical education as research experiences are carried out with students in schools and university. Students will be prepared to research student engagement, activity and fitness at all levels.

Program Requirements: The PhD requires 93 credit hours, a dissertation, and written and oral comprehensive examinations.
The following domains comprise the Physical Education PhD Program:

Area of Concentration: Thirty semester hours pertaining to physical education. Although the majority of these hours must be spent in physical education, a sizable proportion may include coursework in closely related fields such as education, exercise and wellness, and kinesiology.

Cognate Study: Twelve semester hours are taken to broaden the student's understanding of the conceptual base and issues underlying the study of curriculum and instruction. Students take related work outside their declared areas of concentration. Students are expected to choose courses that have a clear link to their dissertation efforts. Cognate studies can be drawn from a broad range of offerings across the university.

Inquiry and Analysis: Fifteen semester hours of empirical analysis and inquiry foundations are required in advanced design and data analysis in quantitative and/or qualitative research methods.

Core Requirements in Curriculum and Instruction: Six semester hours of courses (Interdisciplinary Research Seminar in Curriculum and Instruction and Curriculum Theory and Practice) are required as the Curriculum and Instruction core.

Practicum and Integrative/Professional Development Seminars: Six semester hours of research and university teaching internships are required to broaden the training and experience of students.

Dissertation and Independent Research: Twenty-four semester hours of independent research and dissertation leading to completion of an approved dissertation are required.

Admission Requirements: The following are required:

1. application to the Graduate College,
2. transcripts,
3. letter of intent/statement of purpose,
4. curriculum vita (resume),
5. statement of research interests,
6. a writing sample (approximately ten pages long),
7. GRE scores, and
8. three letters of recommendation from individuals who can speak to the applicant's potential for success in a graduate programs.

Additional materials may be required to gain admission into certain programs/cohorts. For specific information regarding admission requirements, see http://coe.asu.edu/candi. Admission to the program is contingent upon the commitment from an approved mentor in the concentration to advise and mentor the applicant.

# School Psychology (PhD) EDPSYSPPHD 

MARY LOU FULTON COLLEGE OF EDUCATION, TEMPE
Contact: http://education.asu.edu | dpe@asu.edu | EDB 302 | 480/965-3384 | 0611
Official Degree Awarded: Educational Psychology (School Psychology) (PhD)
Program Description: School Psychology is a doctoral level program in the Division of Psychology in Education. Students earn the Doctor of Philosophy degree (Ph.D.) in educational psychology with a concentration in school psychology. The goal of the School Psychology Program is the development of doctoral level scientist-practitioners who have strong research and applied skills and who bring an empirical, problem-solving perspective to their work. ASU, the Mary Lou Fulton College of Education, and the Division of Psychology in Education support school psychology doctoral training and research at a level that makes apprenticeship and close supervision available to students.In addition to a broad-base of psychological knowledge and specialized preparation in school psychology, the school psychology program includes course work and study in learning and instruction, human development, ethics and law, measurement, research design and statistics. Course work is integrated with laboratory and fieldwork components. It may also be complemented by courses in other programs and departments (e.g., clinical psychology, counseling psychology and special education). Students are afforded opportunities to become involved in research projects before they develop their dissertation proposal. The school psychology program at ASU is a full-time program which is conducted during the typical workday week. For more information, see
http://education.asu.edu/prospective_students/graduate_studies/school_psychology.dot.

## Program Requirements:

- $84+$ semester credit hours
- written comprehensive examination
- successful defense of the dissertation
- complete a one year internship

Admission Requirements: In addition to the Graduate College application, students must include a personal statement, a summary of related experiences, and three letters of recommendation. For more detailed information, see
http://education.asu.edu/prospective_students/graduate_studies/school_psychology.dot.

## Science Education (EdD) EDSCIEDD

MARY LOU FULTON COLLEGE OF EDUCATION, TEMPE
Contact: http://coe.asu.edu/candi | cnigrad@asu.edu | ED 434 | 4809654602 | 1911
Official Degree Awarded: Curriculum and Instruction (Science Education) (EdD)
Program Description: The science education concentration of the EdD in Curriculum and Instruction program prepares practitioners and science education professionals to participate in various aspects of the educational community. Those who participate in this concentration engage in a focused and systematic yet varied program of study that draws upon important theoretical frameworks, various modes of research, and diverse epistemologies found in the different domains of science education. The unique content focus of this concentration ensures that students are knowledgeable about science as they generate, use and disseminate knowledge pertaining to the science education environment. Inherent in all experiences in this concentration is the focus on collaborations and partnerships among those in the science education community. Such partnerships ultimately ensure that critical problems in the field are addressed in a manner that represents robust and sound practices.

Program Requirements: This program requires 93 credit hours, a dissertation, and written and oral comprehensive examinations.
The minimum requirements for the Doctor of Education degree (EdD) program are:

Core: 15 semester hours

Concentration: 48 semester hours (major area 30 semester hours; minor area, 18 semester hours)

Internship: 6 semester hours

Dissertation and Research: 24 semester hours (12, and only 12, hours must be dissertation)

During the first two years of the EdD program, students must complete a total of at least 24 hours of coursework in four consecutive semesters that may include summer. At the end of each internship, the student will compile documentation of his/her experience to his/her advisor and committee. This documentation may be part of the doctoral portfolio. The written and oral comprehensive examinations will take place when students have completed all coursework in an approved program of study and prior to beginning fulltime work on their dissertation.

Admission Requirements: The following are required:

1. application to the Graduate College,
2. transcripts,
3. letter of intent/statement of purpose,
4. curriculum vita (resume),
5. statement of research interests,
6. a writing sample (approximately ten pages long),
7. GRE scores, and
8. three letters of recommendation from individuals who can speak to the applicant's potential for success in a graduate programs.

Additional materials may be required to gain admission into certain programs/cohorts. For specific information regarding admission requirements, see http://coe.asu.edu/candi. Admission to the program is contingent upon the commitment from an approved mentor in the concentration to advise the applicant.

## Science Education (MA) EDSCIMA

MARY LOU FULTON COLLEGE OF EDUCATION, TEMPE
Contact: http://coe.asu.edu/candi | cnigrad@asu.edu | Farmer Building 434 | 480/965-4602 | 1911
Official Degree Awarded: Curriculum and Instruction (Science Education) (MA)
Program Description: This program is designed to cultivate an understanding of science education. Students in this program participate in core science education courses, and then have the opportunity to examine one aspect of science education in-depth. This program is designed for the science educator who plans to pursue additional graduate work in science education.

Program Requirements: A minimum of 30 semester hours of credit and a thesis is required for the Master of Arts (MA) in Curriculum and Instruction. Curriculum and Instruction MA students are assigned an advisor at the time of their admission. The advisor assists in selecting the Graduate Committee and serves as chair of the student's Graduate Committee. Each MA degree candidate must form a Graduate Committee in consultation with the advisor and complete a thesis, under the direction of the thesis advisor. The Graduate Program Committee must be formed prior to completing 12 semester hours of credit in the program. Because of the research component, students enrolling in the MA degree typically need more than 30 hours to complete the degree. Each MA candidate will complete a thesis after completing at least 24 hours in the program. Six credits of thesis are required along with a minimum of 24 semester hours of approved coursework.

Admission Requirements: The following are required:

1. application to the Graduate College,
2. transcripts,
3. letter of intent/statement of purpose,
4. curriculum vita (resume),
5. statement of research interests,
6. a writing sample (approximately ten pages long),

GRE scores, and
8. three letters of recommendation from individuals who can speak to the applicant's potential for success in a graduate programs.

Additional materials may be required to gain admission into certain programs/cohorts. For specific information regarding admission requirements, see http://coe.asu.edu/candi.

## Science Education (MEd) EDSCIMED

MARY LOU FULTON COLLEGE OF EDUCATION, TEMPE
Contact: http://coe.asu.edu/candi | cnigrad@asu.edu | ED 434 | 480/965-4602 | 1911
Official Degree Awarded: Curriculum and Instruction (Science Education) (MEd)
Program Description: The Master of Education degree (MEd) in Curriculum and Instruction with a concentration in science education is a practitioner's degree program designed to facilitate development of advanced level professional knowledge, skills and understanding. Students in this program explore issues related to teaching and learning in science education, and study these issues in the context of their own classroom. This program is designed for the professional classroom science educator.

Program Requirements: A minimum of 30 hours of graduate credit is required for the MEd in Curriculum and Instruction. Each student is assigned a graduate advisor to design the program of study. Students in this program will complete either a comprehensive examination, a research project or an applied project as a culminating activity after completing at least 24 of the 30 credit hours listed on the program of study. Students must choose their culminating activity (written examination, research project or applied project) in consultation with their faculty advisor before completing their program of study. Students who choose to complete an applied project must enroll in "Teacher as Researcher" the semester prior to completing the applied project, and they must meet with their graduate advisor for approval of the applied project. For more information, refer to the Curriculum and Instruction MEd Student Handbook.

Admission Requirements: The following are required:

1. application to the Graduate College,
2. transcripts,
3. letter of intent/statement of purpose,
4. curriculum vita (resume),
5. statement of research interests,
6. a writing sample (approximately ten pages long),
7. GRE scores, and
8. three letters of recommendation from individuals who can speak to the applicant's potential for success in a graduate programs.

Additional materials may be required to gain admission into certain programs/cohorts. For specific information regarding admission requirements, see http://coe.asu.edu/candi.

## Science Education (PhD) EDSCIPHD

MARY LOU FULTON COLLEGE OF EDUCATION, TEMPE
Contact: http://coe.asu.edu/candi | cnigrad@asu.edu | ED 434 | 480/965-4602 | 1911
Official Degree Awarded: Curriculum and Instruction (Science Education) (PhD)
Program Description: The science education concentration in the PhD program provides opportunities for research and study in the teaching and learning of science in the middle school, high school and higher education. Candidates may concentrate in the study of students' science thinking, the design of learning and teaching environments, and the development and application of technologies for science learning. Program mentors hail from the Mary Lou Fulton College of Education and from the departments and schools of Chemistry and Biochemistry, Earth and Space Exploration, Life Sciences and Physics.

## Program Requirements:

Area of Concentration: 30 semester hours pertaining to science education; a sizable proportion may include coursework in closely related fields such as science education, human development, educational technology, and graduate science.

Cognate Study: 12 semester hours to broaden the student's understanding of the conceptual base and issues underlying the study of curriculum and instruction.

Inquiry and Analysis: 15 semester hours of empirical analysis and inquiry foundations are required in advanced design and data analysis in quantitative and/or qualitative research methods.

Core Requirements: 6 semester hours of courses (Interdisciplinary Research Seminar in Curriculum and Instruction and Curriculum Theory and Practice).

Practicum and Integrative/Professional Development Seminars: 6 semester hours of research and University teaching internships to broaden the training and experience of students.

Dissertation and Independent Research: 24 semester units of independent research and dissertation leading to completion of an approved dissertation are required. Twelve (and only 12) hours of dissertation can be included in the program of study.

Admission Requirements: The following are required:

1. application to the Graduate College,
2. transcripts,
3. letter of intent/statement of purpose,
4. curriculum vita (resume),
5. statement of research interests,
6. a writing sample (approximately ten pages long),
7. GRE scores, and
8. three letters of recommendation from individuals who can speak to the applicant's potential for success in a graduate programs.

Additional materials may be required to gain admission into certain programs/cohorts. For specific information regarding admission requirements, see http://coe.asu.edu/candi.Admission to the program is contingent upon the commitment from an approved mentor in the concentration to advise and mentor the applicant.

## Secondary Education (EdD) EDSECONEDD

MARY LOU FULTON COLLEGE OF EDUCATION, TEMPE
Contact: http://coe.asu.edu/candi | cnigrad@asu.edu | ED 434 | 480/965-4602 | 1911
Official Degree Awarded: Curriculum and Instruction (Secondary Education) (EdD)
Program Description: Consistent with the mission of the division's EdD program but recognizing the particular needs of the field and graduate students who are interested in pursuing advanced studies in the area of secondary education, the mission of the EdD in Curriculum and Instruction concentration in secondary education is to prepare exemplary professional practitioners, scholars, researchers and teacher educators in the area of secondary education; to provide focused and systematic yet varied opportunities for students in theory, research, inquiry, mentoring and practice that are compatible with the needs and expectations of those interested in advanced studies in one or more areas of secondary education; to generate, use and disseminate knowledge about teaching adolescents and young adults; and to provide opportunities for developing scholars, researchers and practitioners to collaborate with others in solving critical problems and implementing best practices in diverse educational communities.

Program Requirements: The EdD requires 93 semester hours, a dissertation, and written and oral comprehensive examinations.
The minimum requirements for the Doctor of Education degree (EdD) program are:

## Core: 15 semester hours

Concentration: 48 semester hours, 30 in the major area, 18 in the minor area

Internship: 6 semester hours

Dissertation and Research: 24 semester hours

During the first two years of the EdD program, students must complete a total of at least 24 hours of coursework in four consecutive semesters that may include summer. At the end of each internship, the student will compile documentation of his/her experience to his/her advisor and committee. This documentation may be part of the doctoral portfolio. The written and oral comprehensive examinations will take place when students have completed all coursework in an approved program of study and prior to beginning fulltime work on their dissertation.

Admission Requirements: The following are required:

1. application to the Graduate College,
2. transcripts,
3. letter of intent/statement of purpose,
4. curriculum vita (resume),
5. statement of research interests,
6. a writing sample (approximately ten pages long),
7. GRE scores, and
8. three letters of recommendation from individuals who can speak to the applicant's potential for success in a graduate programs.

Additional materials may be required to gain admission into certain programs/cohorts. For specific information regarding admission requirements, see http://coe.asu.edu/candi. Admission to the program is contingent upon the commitment from an approved mentor in the concentration to advise the applicant.

## Secondary Education (MA) EDSECONMA

MARY LOU FULTON COLLEGE OF EDUCATION, TEMPE
Contact: http://coe.asu.edu/candi | cnigrad@asu.edu | ED 434 | 480/965-4602 | 1911
Official Degree Awarded: Curriculum and Instruction (Secondary Education) (MA)
Program Description: The Master of Arts (MA) in Curriculum and Instruction with a concentration in secondary education provides philosophical perspectives common in higher education. Students are exposed to critical thinking on issues including gender, culture, theoretical views of learning and minority education within the scope of secondary education. Students in this program study the American educational system and are introduced to formal research.

Program Requirements: A minimum of 30 semester hours of credit and a thesis is required for the Master of Arts (MA) in Curriculum and Instruction. Curriculum and Instruction MA students are assigned an advisor at the time of their admission. The advisor assists in selecting the Graduate Committee and serves as chair of the student's Graduate Committee. Each MA degree candidate must form a Graduate Committee in consultation with the advisor and complete a thesis, under the direction of the thesis advisor. The Graduate Program Committee must be formed prior to completing 12 semester hours of credit in the program. Because of the research component, students enrolling in the MA degree typically need more than 30 hours to complete the degree. Each MA candidate will complete a thesis after completing at least 24 hours in the program. Six credits of thesis are required along with a minimum of 24 semester hours of approved coursework.

Admission Requirements: Application to the Graduate College, transcripts, letter of intent/statement of purpose and 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/cohorts. For specific information regarding admission requirements, see http://coe.asu.edu/candi.

## Secondary Education (MEd) EDSECONMED

## MARY LOU FULTON COLLEGE OF EDUCATION, TEMPE

Contact: http://coe.asu.edu/candi | cnigrad@asu.edu | Farmer Building 434 | 4809654602 | 1911
Official Degree Awarded: Curriculum and Instruction (Secondary Education) (MEd)
Program Description: The Master of Education degree (MEd) in Curriculum and Instruction with a concentration in secondary education program provides students with an in-depth knowledge of methods of teaching and content knowledge application. The program develops professional educators who are reflective practitioners dedicated to the scholarship of teaching in secondary education. This degree is considered a practitioner's degree that facilitates a higher level of successful teaching practices and content knowledge.

For students looking for teacher certification, the college offers the INtegrated Certification In Teacher Education (INCITE) program. INCITE is a master's degree program for individuals who want to teach in secondary school settings (7-12).

Candidates who complete the program receive an MEd in Curriculum and Instruction with a concentration in secondary education and an Institutional Recommendation (IR) from ASU for secondary certification in their subject area. Course work qualifies candidates for a Middle Grade Endorsement if student teaching is completed in grades 5-9. For more information, access http://education.asu.edu./prospective_students/graduate_studies/incite.dot.

Program Requirements: A minimum of 39 hours of graduate credit is required for the MEd in Curriculum and Instruction. Each student is assigned a graduate advisor to design the program of study. Students in this program will complete either a comprehensive examination, a research project or an applied project as a culminating activity after completing at least 24 of the 39 credit hours listed on the program of study. Students must choose their culminating activity (written examination, research project or applied project) in consultation with their faculty advisor before completing their program of study. Students who choose to complete an applied project must enroll in "Teacher as Researcher" the semester prior to completing the applied project, and they must meet with their graduate advisor for approval of the applied project. For more information, refer to the Curriculum and Instruction MEd Student Handbook.

Admission Requirements: The following are required: application to the Graduate College, transcripts, letter of intent/statement of purpose and three letters of recommendation from individuals who can speak to the applicant's potential for success in a graduate programs. Additional materials may be required to gain admission into certain programs/cohorts. For specific information regarding admission requirements, access http://education.asu.edu.

## Severe/Multiply Disabled (MEd) EDDISMED

MARY LOU FULTON COLLEGE OF EDUCATION, TEMPE
Contact: http://coe.asu.edu/candi | cnigrad@asu.edu | ED 434 | 480/965-4602 | 1911
Official Degree Awarded: Special Education (Severely/Multiply Disabled) (MEd)
Program Description: The Master of Education Degree (MEd) in Special Education is a practitioner's degree program designed to facilitate development of advanced level professional knowledge, skills and understanding. The mission of the Special Education Program at Arizona State University is to produce and transmit knowledge focused on the education of exceptional individuals. This mission is accomplished through teaching, research, and service.

Program Requirements: A minimum of 36 semester hours of course work approved by the graduate committee are required. Each MEd degree candidate will complete a written comprehensive examination or a comprehensive applied project after finishing at least 24 of the 36 semester hours listed on the program of study.

Admission Requirements: Applicants must submit a Graduate College online application. Application, transcripts, and three letters of recommendation from individuals within academic/professional affiliations must be submitted. These letters of
recommendation should address your ability to successfully complete a graduate degree program in Curriculum and Instruction. For more information, see http://www.coe.asu.edu/programs.html.

## Social Studies Education (MA) EDSOCSTMA

## MARY LOU FULTON COLLEGE OF EDUCATION, TEMPE

Contact: http://coe.asu.edu/candi | cnigrad@asu.edu | ED 434 | 4809654602 | 1911
Official Degree Awarded: Curriculum and Instruction (Social Studies Education) (MA)
Program Description: The MA in Curriculum and Instruction wiht a concentration in social studies education provides philosophical perspectives common in higher education. Students are exposed to critical thinking in social studies and related content areas. Social studies is the integrated study of the social sciences and humanities to promote civic competence. Within the program, social studies provides coordinated, systematic study drawing upon such disciplines as anthropology, archaeology, economics, geography, history, law, philosophy, political science, psychology, religion and sociology, as well as appropriate content from the humanities, mathematics and natural sciences. The primary purpose of the Social Studies Education program is to educate about research and the analysis of developing curriculum knowledge to achieve desired results regarding student knowledge, skills, attitudes, perspectives and student performance expectations that are essential to a sound social studies curriculum.

Program Requirements: A minimum of 30 semester hours of credit and a thesis is required for the Master of Arts (MA) in Curriculum and Instruction. Curriculum and Instruction MA students are assigned an advisor at the time of their admission. The advisor assists in selecting the Graduate Committee and serves as chair of the student's Graduate Committee. Each MA degree candidate must form a Graduate Committee in consultation with the advisor and complete a thesis, under the direction of the thesis advisor. The Graduate Program Committee must be formed prior to completing 12 semester hours of credit in the program. Because of the research component, students enrolling in the MA degree typically need more than 30 hours to complete the degree. Each MA candidate will complete a thesis after completing at least 24 hours in the program. Six credits of thesis are required along with a minimum of 24 semester hours of approved coursework.

Admission Requirements: The following are required: application to the Graduate College, transcripts, letter of intent/statement of purpose and three letters of recommendation from individuals who can speak to the applicant's potential for success in a graduate programs. Additional materials may be required to gain admission into certain programs/cohorts. For specific information regarding admission requirements, see http://coe.asu.edu/candi.

## Social Studies Education (MEd) EDSOCSTMED

MARY LOU FULTON COLLEGE OF EDUCATION, TEMPE
Contact: http://coe.asu.edu/candi | cnigrad@asu.edu | Farmer Building 434 | 4809654602 | 1911
Official Degree Awarded: Curriculum and Instruction (Social Studies Education) (MEd)
Program Description: The Master of Education degree (MEd) in Curriculum and Instruction with a concentration in social studies education is a practitioner's degree program designed to facilitate development of advanced level professional knowledge, skills and understanding. This program provides students with an in-depth knowledge of methods of teaching and content knowledge in social studies. This degree is considered to be a practitioner's degree that facilitates a higher level of successful teaching practices and content knowledge.

Program Requirements: A minimum of 30 hours of graduate credit is required for the MEd in Curriculum and Instruction. Each student is assigned a graduate advisor to design the program of study. Students in this program will complete either a comprehensive examination, a research project or an applied project as a culminating activity after completing at least 24 of the 30 credit hours listed on the program of study. Students must choose their culminating activity (written examination, research project or applied project) in consultation with their faculty advisor before completing their program of study. Students who choose to complete an applied project must enroll in "Teacher as Researcher" the semester prior to completing the applied project, and they must meet with their graduate advisor for approval of the applied project. For more information, refer to the Curriculum and Instruction MEd Student Handbook.

Admission Requirements: The following are required: application to the Graduate College, transcripts, letter of intent/statement of purpose and three letters of recommendation from individuals who can speak to the applicant's potential for success in a graduate programs. Additional materials may be required to gain admission into certain programs/cohorts. For specific information regarding admission requirements, see http://coe.asu.edu/candi.

## Social and Philosophical Foundations of Education (MA) EDSPFMA

MARY LOU FULTON COLLEGE OF EDUCATION, TEMPE
Contact: http://education.asu.edu | delps@asu.edu | Farmer Building 120 | 4809656357 | 2411
Official Degree Awarded: Social and Philosophical Foundations of Education (MA)
Program Description: Students seeking an M.A. in Social and Philosophical Foundations of Education have the opportunity to specialize in one of the following areas: Philosophy of Education, Sociology of Education, Anthropology of Education, American Indian Education Policy, History of Education and Comparative and International Education. Due to the interdisciplinary nature of work in the social and philosophical foundations of education, students many take coursework in related social sciences and the humanities.

The program of graduate studies in Social and Philosophical Foundations of Education prepares students for:

1. Ph.D. programs in social science or Education, Philosophy, and History,
2. K-12 teaching with stronger influence on and understanding of school, district, and state education policy. Teachers also gain methodology and theoretical applications that can result in a more successful and critical-thinking pedagogy,
3. Leadership roles in district and state level curriculum development and the conceptualization of educational programs and reforms.

Program Requirements: A minimum of 30 hours of coursework, 6 hours of which are earned for a master's thesis, or its equivalent and a comprehensive examination are required. The Graduate College allows students to substitute other experiences for the thesis. For example, students may prepare publishable research papers and present their findings to their peers and faculty in specially arranged colloquia. The equivalency requirement will be worked out by the student's committee. In addition, courses in Social and Philosophical Foundations, choosing both a concentration and a cognate discipline (e.g. sociology, anthropology, philosophy). Additional course work in education is recommended.

Admission Requirements: A Graduate College application, letter of intent, résumé, transcripts, and three letters of recommendation from individuals within academic/professional affiliations must be submitted. GRE scores are not required. Official transcripts must be sent to the Graduate College admissions office. International applicants must have a TOEFL score (as required by the Graduate College admissions office), of at least 550 on the paper test; 213 on the computer-based; or 83 on the online version.

## Special Education (EdD) EDSPEDEDD

MARY LOU FULTON COLLEGE OF EDUCATION, TEMPE
Contact: http://coe.asu.edu/candi | cnigrad@asu.edu | Farmer Building 434 | 4809654602 | 1911
Official Degree Awarded: Curriculum and Instruction (Special Education) (EdD)
Program Description: The EdD in Curriculum and Instruction with a concentration in special education prepares exemplary professional practitioners, scholars, researchers and teacher educators in the area of special education; to provide focused and systematic yet varied opportunities for students in theory, research, inquiry, mentoring and practice that are compatible with the needs and expectations of those interested in advanced studies in one or more areas of special education; to generate, use and disseminate knowledge about teaching populations with special needs from birth through adulthood; and to provide opportunities for developing scholars, researchers and practitioners to collaborate with others in solving critical problems and implementing best practices in diverse educational communities.

This program will benefit students who have had experiences in one or more areas of special education in public or private organizations, including: classroom teachers; curriculum, instruction or assessment supervisors or specialists; staff developers; or
administrators who desire to gain in-depth knowledge, skills, and perspectives that would permit them to advance to higher-level positions in their professional careers in schools, educational agencies, or institutions of higher education.

Program Requirements: The EdD requires 93 semester hours, a dissertation, and written and oral comprehensive examinations.

## Core Courses in the Division/College: (15 semester hours)

COE 502 Introduction to Quantitative Research
COE 503 Introduction to Qualitative Research
DCI 701 Curriculum Theory and Practice
DCI 791 EdD Doctoral Seminar
An advanced level research methods course

Concentration Area Courses: 48 semester hours

Major Courses in Special Education: 30 semester hours

SPE 703 Conducting Research with Special Populations
SPE 791 Special Topics in Special Education
SPE 791 Research Seminars in Special Education
DCI 791 Research in Teacher Learning
DCI 791 Andragogy: Teaching Adult Learners

Other graduate-level courses related to principles of learning, adolescent development, curriculum, issues, history, practice, instruction, teaching and/or assessment within or related to special education, education in public or private agencies, and preparing professionals for teaching special populations, broadly defined.

Minor Concentration Area: 18 semester hours

Courses may be in subject areas or fields such as those listed below and other courses as approved by the student's advisor and Doctoral Program Committee. Possible minor concentration areas include but are not limited to:

Multicultural Education
Counseling and Guidance
Curriculum Theory
Early Childhood Education
Educational Administration
Educational Psychology
Educational Technology
Language and Literacy
Mathematics Education
Science Education
Psychology
Research and Statistics
It is strongly recommended that students have at least one faculty member on their Doctoral Program Committee who represents or is recognized as being a scholar in the minor concentration area selected.

Internship and/or Practicum: 6 semester hours

Students are to complete a minimum of six semester credit hours in Internship or Practicum experiences, generally three credits each. The Internship experience is defined as opportunities for students to engage in university teaching, research and/or other professional experiences under the direct mentorship of one or more faculty or a recognized expert in the field.

Research and Dissertation Study: 24 semester hours maximum

SPE 792: Research (Maximum 12 semester hours)
SPE 799: Dissertation (Minimum of 12 semester hours)

In the culminating study, the student inquires into and addresses an educational problem or issue of concern, grounding this effort in scholarship, research and substantive evidence of findings and conclusions. The product of the culminating study may take the form of either a traditional dissertation or a substantial product of a scholarly applied project.

Residency: During the first two years of the EdD program, students must complete a total of at least 24 hours of coursework in four consecutive semesters that may include summer. This includes enrollment in the required EdD seminar (DCI 791).

Admission Requirements: The following are required:

1. application to the Graduate College,
2. transcripts,
3. letter of intent/statement of purpose,
curriculum vita (resume),
statement of research interests,
a writing sample (approximately ten pages long),
GRE scores, and
4. three letters of recommendation from individuals who can speak to the applicant's potential for success in a graduate programs.

Additional materials may be required to gain admission into certain programs/cohorts. For specific information regarding admission requirements, see http://coe.asu.edu/candi.

## Special Education (MA) EDSPEDMA

MARY LOU FULTON COLLEGE OF EDUCATION, TEMPE
Contact: http://coe.asu.edu/candi | cnigrad@asu.edu | ED 434 | 4809654602 | 1911
Official Degree Awarded: Special Education (MA)
Program Description: The Master of Arts (MA) in Special Education is a research degree program designed to facilitate advanced development of knowledge, skill and understanding of special education. The program is designed for students who are interested in developing and extending research competencies. Students graduating from this program will demonstrate the ability to conduct research related to special education and are prepared to pursue doctoral education in various areas of exceptionalities. The program structure includes coursework in special education, research and statistics.

Program Requirements: A minimum of 36 hours of credit and a thesis is required for the Master of Arts (MA) in Special Education. Special Education MA students are assigned an advisor at the time of their admission. The advisor assists in selecting the Graduate Committee and serves as chair of the student's Graduate Committee. Each MA degree candidate must form a Graduate Committee in consultation with the advisor and complete a thesis, under the direction of the thesis advisor. The Graduate Program Committee must be formed prior to completing 12 semester hours of credit in the program. Because of the research component, students enrolling in the MA degree typically need more than 36 hours to complete the degree. Each MA candidate will complete a thesis after completing at least 24 hours in the program. Six credits of thesis are required along with a minimum of 30 semester hours of approved coursework.Coursework will include a minimum of 15 hours in special education and a minimum of 12 hours in research. The research courses will include one research design course, one or more statistics or qualitative methods courses, and six hours of thesis.

Admission Requirements: The following are required: application to the Graduate College, transcripts, letter of intent/statement of purpose, degree option check sheet, summary of related experiences and three letters of recommendation from individuals who
can speak to the applicant's potential for success in a graduate programs. Additional materials may be required to gain admission into certain programs/cohorts. For specific information regarding admission requirements, see http://coe.asu.edu/candi.

## Special Education (MEd) EDSPE2MED

MARY LOU FULTON COLLEGE OF EDUCATION, TEMPE
Contact: http://coe.asu.edu/candi | cnigrad@asu.edu | ED 434|480/965-4602 | 1911
Official Degree Awarded: Special Education (MEd)
Program Description: The Master of Education (MEd) in Special Education is a practitioner's degree program designed to facilitate advanced development of knowledge, skill and understanding of special education. The MEd degree focuses on the development of "master teachers" in special education. Specific emphasis is offered in the areas of mild disabilities, the education of gifted learners and bilingual/multicultural exceptional learners. The program structure includes course work in methods of instruction, educational evaluation, behavior management, inclusive teaching and practices and the four content theme areas of: learning and instruction, diversity, foundations and practices and research and technology. A certification option in learning disabilities, behavioral disorders, and mental retardation is available in conjunction with the MEd

Program Requirements: A minimum of 36 semester hours of graduate credit is required for the MEd in Special Education. Each student is assigned a graduate advisor to design the program of study in consultation with the Graduate Committee. Students in this program will complete a comprehensive paper as a culminating activity after completing at least 27 to 30 of the 36 semester hours listed on the program of study. Students must complete a comprehensive paper proposal to their faculty advisor and graduate committee members before completing their program of study and beginning the final paper. Students should meet with their faculty advisor and graduate committee members regularly after the paper proposal is approved. For more information, refer to the Special Education Student Handbook. Students completing the teacher certification concentration will enroll for an additional 12 semester hours of student teaching to prepare for an Institutional Recommendation for Certification. The MEd with teacher certification requires a total of 45 semester hours

Admission Requirements: The following are required: application to the Graduate College, transcripts, letter of intent/statement of purpose, degree option check sheet, summary of related experiences and three letters of recommendation from individuals who can speak to the applicant's potential for success in a graduate programs. Additional materials may be required to gain admission into certain programs/cohorts. For specific information regarding admission requirements, see http://coe.asu.edu/candi.

## Special Education (PhD) EDSPECPHD

MARY LOU FULTON COLLEGE OF EDUCATION, TEMPE
Contact: http://coe.asu.edu/candi | cnigrad@asu.edu | ED 434 | 4809654602 | 1911
Official Degree Awarded: Curriculum and Instruction (Special Education) (PhD)
Program Description: The PhD concentration in special education, which is designed to produce teacher educators and researchers in special education, is an integral part of the Interdisciplinary PhD Degree Program in Curriculum and Instruction. The corresponding goals of the PhD program in special education are to:

1. produce research scholars who can add to the knowledge base underlying special education,
2. provide experts in the design, implementation, and evaluation of special education personnel preparation programs at the preservice and inservice levels,
3. provide students with comprehensive training that meets professionally recognized standards for the preparation of leadership personnel in special education and a related discipline, and
4. provide students with the skills necessary to meet their research, teaching, and service activities associated with faculty positions at a full range of institutions of higher education or other professional roles.

Program Requirements: The PhD requires 93 semester hours, a dissertation, and written and oral comprehensive examinations. Our doctoral curriculum typically requires three years of graduate study including at least a year-long residency on campus. Each year of study involves coursework pertaining to theory, research and practice in special education. The curriculum provides students with a core set of courses, seminars, internships and research experiences to ensure that they meet professionally
recognized standards for the preparation of leadership personnel in special education and in related disciplines; however, the curriculum is unique in that it builds upon this core by integrating a set of experiential research, teaching and service activities into students' programs of study.

Our doctoral curriculum program of study is divided into six basic domains:

1. core requirements in special education,
2. core requirements in a related discipline,
3. empirical foundations,
4. core requirements in curriculum and instruction,
5. practicum and integrative/professional development seminars, and
6. dissertation and independent research.

Each student's program of study includes a series of experiences to enhance his/her mastery of their current and future research, teaching and service responsibilities as a professional in special education.

## Core Requirements in Six Domains

Domain 1: Core Requirements in Special Education. Our special education program requirement consists of 30 semester hours focusing on coursework pertaining to assessment, intervention, consultation and specific problem areas in the field of special education.

Domain 2: Core Requirements in a Related Discipline. These requirements consist of 12 semester hours in which doctoral students are provided crossover training opportunities in related disciplines that meet the professionally recognized standards for doctoral study in those disciplines. The course and field experience requirements in each of the related disciplines are specific to the discipline.

Domain 3: Empirical Foundations. Our empirical analysis and inquiry foundations requirement consists of 15 semester hours beginning with Basic Statistical Analysis and Intermediate Statistical Analysis. Three other courses are also required: (1) Introduction to Qualitative Research; (2) Introduction to Quantitative Research; and (3) a course from the following list: Statistical Computing and Consulting Problems, Advanced Statistical Analysis, Categorical and Nonparametric Data Analysis, Graphical and Exploratory Data Analysis, Advanced Qualitative Analysis. In specific circumstances, other advanced inquiry and analysis courses may be applied to meet this requirement.

Domain 4: Core Requirements in Curriculum and Instruction. The curriculum and instruction core requirement consists of six semester hours: (1) DCI 791 Interdisciplinary Research Seminar in Curriculum and Instruction, and (2) DCI 701 Curriculum Theory and Practice.

Domain 5: Practicum and Integrative/Professional Development Seminars. Our practicum requirement consists of at least six semester hours of research and university teaching three two-credit hour internships. The purpose of the internships is to broaden the training and experiences of students. In addition, doctoral students are encouraged to participate in the Preparing Future Faculty Program offered by the Graduate College. This program consists of two semester hours of faculty roles, responsibilities and participation in an ongoing series of integrative and collaborative seminars coordinated with the Graduate College. Students have the opportunity to develop and participate in interdisciplinary research, teaching, and service activities.

Domain 6: Dissertation and Independent Research. Our dissertation and independent r
Admission Requirements: The following are required:

1. application to the Graduate College,
2. transcripts,
3. letter of intent/statement of purpose,
4. curriculum vita (resume),
5. statement of research interests,
6. a writing sample (approximately ten pages long),
7. GRE scores, and
8. three letters of recommendation from individuals who can speak to the applicant's potential for success in a graduate programs.

Additional materials may be required to gain admission into certain programs/cohorts. For specific information regarding admission requirements, see http://coe.asu.edu/candi. Admission to the program is contingent upon the commitment from an approved mentor in the concentration to advise and mentor the applicant.

## Teacher Leadership and Development (EdD) EDTLDEDD

## MARY LOU FULTON COLLEGE OF EDUCATION, TEMPE

Contact: http://coe.asu.edu/candi | cnigrad@asu.edu | ED 434 | 4809654602 | 1911
Official Degree Awarded: Curriculum and Instruction (Teacher Leadership and Development) (EdD)
Program Description: The mission of the EdD in Curriculum and Instruction with a concentration in teacher leadership and development is to prepare exemplary professional practitioners as scholars, researchers and teacher educators for leadership roles that influence the education profession. Areas of enhanced competence include inquiry into teaching, learning and leading, reflection on classroom practices that impact student learning, and the creation of innovative initiatives designed to positively impact local and national education communities.

Program Requirements: This program requires 93 credit hours, a dissertation, and written and oral comprehensive examinatins.

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Core (15 semester hours):
COE 502 Introduction to Quantitative Research (3)
COE }503\mathrm{ Introduction to Qualitative Research (3)
DCI }701\mathrm{ Curriculum Theory and Practice (3)
EDP 540 Theoretical Views of Learning (3)
DCI 703 Research in Teacher Development/Leadership (3)
Concentration (48 semester hours):
Major Concentration (30 semester hours)
DCI 791 Professional Practice through Teaching Standards (3)
DCI 791 Developing/Analyzing Professional Growth through Mentoring (3)
DCI 791 Professional Skills in Teacher Leadership (3)
SPF 601 Culture and Schooling (3)
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Electives (18 semester hours) to be approved by committee based on student's prior study and future goals.

Possible electives include:
DCI 791 Andragogy: Teaching Adult Learners
DCI 691 Curriculum Change
EPA/EDA 691 Policy, Leadership and Values Systems
DCI 791 Program/Systems Evaluation
DCI 791 Research in Teacher Learning
DCI 791 Theory and Applied Practices for Adult

Admission Requirements: The following are required: application to the Graduate College, transcripts, letter of intent/statement of purpose, curriculum vita (resume), statement of research interests, a writing sample (approximately ten pages long), GRE scores and three letters of recommendation from individuals who can speak to the applicant's potential for success in a graduate programs. Additional materials may be required to gain admission into certain programs/cohorts. For specific information regarding admission requirements, see http://coe.asu.edu/candi. Admission to the program is contingent upon the commitment from an approved mentor in the concentration to advise the applicant.

## Teaching and Learning (MEd) EDDCIMED

MARY LOU FULTON COLLEGE OF EDUCATION, TEMPE
Contact: http://best.asu.edu | best@asu.edu | Payne 101G | 480/965-4339 | 0211
Official Degree Awarded: Curriculum and Instruction (Teaching and Learning) (MEd)
Program Description: The M.Ed. in teaching and learning focuses on the development of professional learning communities and engagement in scholarship, inquiry and applied experiences designed to increase the theoretical knowledge and practice of teaching and learning. The emphasis is a developmental process within a teacher's professional growth on a continuum of lifelong learning. An individual completing this degree will have a foundation in teaching and learning and a choice of customized concentration in, or a broader knowledge base across, varying disciplines related to education.

Program Requirements: A total of 30 credit hours are required for this program.

## Core Courses (12)

DCI 512 Developing Strategies for Teaching Practice, or
DCI 530 Establishing a Mentoring Partnership
DCI 520 Teaching Standards Applied to Professional Practice
EDP 540 Theoretical Views of Learning, or
EDT 511 Technology Applications in Education
EDA 535 Learner Centered Leadership
Core courses offered in online or hybrid formats.

## Electives (12)

With your advisor, design a concentration consisting of courses within or across the Curriculum and Instruction, Education Leadership and Policy Studies, and Psychology in Education Divisions.

## Research Concentration (6)

DCI 510 Teacher as Researcher, or
COE/EDP 501 Introduction to Research and Evaluation
DCI/EDA/EDP 597 Applied Research and Reflection, or
(DCI/EDA/EDP 597 may only be taken in the student's final semester of study)

Admission Requirements: The following are required:

1. Application to the Graduate College.
2. Transcripts.
3. Letter of intent/statement of purpose.
4. Curriculum vitae (resume).
5. Statement of research interests.
6. Writing sample (approximately ten pages in length).
7. GRE scores.
8. 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/cohorts. For specific information regarding admission requirements, see http://coe.asu.edu/candi.

# Technology for Teaching and Learning (Grad Certificate) EDEDTTGRCT 

MARY LOU FULTON COLLEGE OF EDUCATION, TEMPE
Contact: http://coe.asu.edu/psyched/edtech/ | dpe@asu.edu | 302 Payne | 480/965-3384 | 0611
Official Degree Awarded: Technology for Teaching and Learning (certificate) (CERT)
Program Description: The graduate certificate in Technology for Teaching and Learning is open to all ASU degree-seeking and non-degree seeking graduate students but is geared towards classroom teachers who want to become highly skilled at successful integration of technology in the curriculum. Students 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 adopted by the National Council for Accreditation of Teacher Education (NCATE). This program offers all courses online as well as face-to-face.

Program Requirements: The Graduate Certificate in Technology for Teaching and Learning requires a minimum of 15 credit hours. Students are permitted to apply a maximum of 9 hours taken in the certificate program towards the Educational Technology MEd program with the prior approval from the Educational Technology MEd program.

Admission Requirements: The Graduate Certificate in Technology for Teaching and Learning is available to all ASU graduate students irrespective of their major and to non-degree graduate students provided they meet eligibility criteria. To be eligible for this program, the applicant must (a) hold a bachelor's degree or equivalent from a regionally accredited institution, and (b) have a cumulative junior/senior undergraduate GPA of 2.50 or higher. Students interested in earning this certificate must formally apply to the certificate program via the online Graduate Admissions Application.

## EDUCATIONAL INNOVATION AND TEACHER PREPARATION, SCHOOL OF

Early Childhood Education - Polytechnic Campus (MEd) EIEDCMED<br>SCHOOL OF EDUCATIONAL INNOVATION AND TEACHER PREPARATION, POLY<br>Contact: http://www.poly.asu.edu/education/grad/curriculum | polytechniceducation@asu.edu | Sutton 240|4807271103|0180

Official Degree Awarded: MEd Curriculum and Instruction (Early Childhood Education)
Early Childhood Education - Polytechnic campus (MEd)

## Instructional Media K-12 - Polytechnic Campus (MEd) ECMEDIAMED

SCHOOL OF EDUCATIONAL INNOVATION AND TEACHER PREPARATION, POLY
Contact: http://www.poly.asu.edu/education/ | polytechniceducation@asu.edu | Bldg 140 Sutton 240 | 4807271103 | 0180
Official Degree Awarded: Curriculum and Instruction (Instructional Media K-12 School Age) (MEd)
Program Description: The Master of Education (M.Ed.) degree in Curriculum and Instruction is a practitioner's degree program designed to facilitate development of advanced level professional knowledge, skills and understanding. The M.Ed., Instructional Media concentration provides advanced knowledge of curriculum, instructional practices, assessment and the use of technology in the classroom.

Program Requirements: The degree requires 30 credit hours and an applied project. The program is comprised of 10 specific courses ( 30 hours), including five concentration courses, two elective courses, one theoretical foundation course, one research course and one capstone course.

Admission Requirements: In addition to the Graduate College application, make sure when you select your degree program that it is designated as a Polytechnic campus program. Apply to the Advanced Studies Program by submitting the following items:
signed application for admission; letter of intent stating why you are interested in the program and how it will meet your professional goals; current resume; three professional letters of recommendation addressing experiences with children and/or families; and three official (sealed) transcripts with institution's name and degree granted date. All application materials need to be sent to the Graduate College's admission office.

# Mathematics Education - Polytechnic Campus (MEd) EIMATHMED 

SCHOOL OF EDUCATIONAL INNOVATION AND TEACHER PREPARATION, POLY
Contact: http://www.poly.asu.edu/education/grad/curriculum | polytechniceducation@asu.edu | Sutton 240|4807271103|0180
Official Degree Awarded: MEd Curriculum and Instruction (Mathematics Education)

Mathematics Education - Polytechnic campus (MEd)

## Physical Education - Polytechnic Campus (MPE) ECPHYEDMPE

SCHOOL OF EDUCATIONAL INNOVATION AND TEACHER PREPARATION, POLY
Contact: http://www.poly.asu.edu/education/ | polytechniceducation@asu.edu | Bldg 140 Sutton 240 | 4807271103 | 0180
Official Degree Awarded: Physical Education (MPE)
Program Description: Graduates of the M.P.E. program gain advanced knowledge of curriculum, instructional practices and administrative procedures in physical education and sports. Emphasis is placed on improving instructional effectiveness and developing quality sport and physical education programs in school settings.

Program Requirements: The degree requires 33 credit hours, including an applied project and a final written comprehensive exam. Physical Education Concentration: core studies, 21 hours; education cognate courses, 6 hours; electives, 6 hours. Physical Education Pedagogy: core studies, 21 hours; education cognate courses, 6 hours; electives, 6 hours. For more specific information, see http://www.poly.asu.edu/saas/education/printable/MPE\ POS.pdf.

Admission Requirements: In addition to the Graduate College application, make sure when you select your degree program that it is designated as a Polytechnic campus program. Apply to the Advanced Studies Program by submitting the following items: signed application for admission; letter of intent stating why you are interested in the program and how it will meet your professional goals; current resume; three professional letters of recommendation addressing experiences with children and/or families; and three official (sealed) transcripts with institution's name and degree granted date. All application materials need to be sent to the Graduate College's admission office.

## Professional Studies - Polytechnic Campus (MEd) ECPROSTMED

SCHOOL OF EDUCATIONAL INNOVATION AND TEACHER PREPARATION, POLY
Contact: http://www.poly.asu.edu/education/ | polytechniceducation@asu.edu | Bldg 140 Sutton 240 | 4807271103 | 0180
Official Degree Awarded: Curriculum and Instruction (Professional Studies) (MEd)
Program Description: This master's degree is grounded in the research and theory of curriculum and instruction, but also allows the student the opportunity to design a program based on his/her professional needs. Students can therefore create a plan of study that incorporates a variety of content and discipline areas that are related to his/her teaching position or future career goals. These individualized programs may include the acquisition of more in-depth content knowledge or skills development, as well as the coursework needed to complete one or more of the following endorsements: Reading Specialist K-12; Provisional SEI Endorsement K-12; Full SEI Endorsement K-12; Middle Grade 5-9; Gifted Education K-12; Early Childhood Endorsement PreK -3.

Program Requirements: The degree requires 30 credit hours and an applied project. Area of Concentration: 21 hours; Research: three hours; Theoretical Foundations: three hours; Applied Research: three hours. Students in this program may also complete course work required for postbaccalaureate teacher certification.

Admission Requirements: In addition to the Graduate College application, make sure when you select your degree program that it is designated as a Polytechnic campus program. Apply to the Advanced Studies Program by submitting the following items: signed application for admission; letter of intent stating why you are interested in the program and how it will meet your professional goals; current resume; three professional letters of recommendation addressing experiences with children and/or families; and three official (sealed) transcripts with institution's name and degree granted date. All application materials need to be sent to the Graduate College's admission office.

## Science Education (MEd) EISCIMED

SCHOOL OF EDUCATIONAL INNOVATION AND TEACHER PREPARATION, POLY
Contact: http://www.poly.asu.edu/education/grad/curriculum | polytechniceducation@asu.edu | Sutton 240|4807271103|0180
Official Degree Awarded: MEd Curriculum and Instruction (Science Education)

Science Education - Polytechnic campus (MEd)

## Special Education (MEd) ECSPEDMED

SCHOOL OF EDUCATIONAL INNOVATION AND TEACHER PREPARATION, POLY
Contact: http://www.poly.asu.edu/education/ | polytechniceducation@asu.edu | Bldg 140 Sutton 240 | 4807271103 | 0180
Official Degree Awarded: Special Education (MEd)
Program Description: The Master of Education Degree (M.Ed.) in Special Education provides advanced knowledge of disabilities, curriculum, behavior intervention, inclusive instructional practices, assessment and family involvement.

Program Requirements: The degree requires 30 credit hours and an applied project. The program is comprised of 10 specific courses ( 30 hours), including six concentration courses, one elective course, one theoretical foundation course, one research course and one capstone course.

Admission Requirements: In addition to the Graduate College application, make sure when you select your degree program that it is designated as a Polytechnic campus program. Apply to the Advanced Studies Program by submitting the following items: signed application for admission; letter of intent stating why you are interested in the program and how it will meet your professional goals; current resume; three professional letters of recommendation addressing experiences with children and/or families; and three official (sealed) transcripts with institution's name and degree granted date. All application materials need to be sent to the Graduate College's admission office.

## ENGINEERING, IRA A. FULTON SCHOOL OF

## Aerospace Engineering (MS) ESAEROSPMS

IRA A. FULTON SCHOOL OF ENGINEERING, TEMPE
Contact: http://mae.fulton.asu.edu | mae@asu.edu | ECG 346 | 480/965-3291|6106
Official Degree Awarded: Aerospace Engineering (MS)
Program Description: The faculty in the Department of Mechanical and Aerospace Engineering (MAE) offer a graduate program leading to the Master of Science (MS) degree in Aerospace Engineering. A number of wide and diverse research areas may be pursued. All of the department's graduate programs stress a sound foundation leading to a specialized area of study. Additional information can be found in the MAE Guidelines at http://mae.fulton.asu.edu/graduate/graduate-studies.

Program Requirements: All candidates for the MS degree program in Aerospace Engineering are required to complete 30 semester hours. Additional courses may be assigned by the supervisory committee depending on the background of the candidate.

The Master of Science is the department's research master's degree program. The student is encouraged to select an advisor as soon as possible but in no case later than the middle of the first semester in residence. The name of the student's advisor must be filed with the department office. A change of advisor requires approval of the department chair.

The advisor, 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 with at least two being from MAE. Participation of individuals from institutions external to ASU is encouraged but these shall be nonvoting members. The advisor shall serve as the chair of the MSPC.

As soon as possible, but no later than the end of the student's first semester of residence, the student in consultation with the MSEPC, must file a program of study (POS) with the department. The MSEPC and the MAE chair must approve changes to the POS.

The POS must be in accordance with Graduate College and MAE requirements. The candidate must complete at least 30 semester hours of courses distributed as follows:

1. at least 12 semester hours of course work in the candidate's major area of interest.
2. at least six semester hours of upper-division mathematics, as defined in the MAE Guidelines http://mae.fulton.asu.edu/graduate/graduate-studies.
3. at least six semester hours of other graduate level course work outside the candidate's major area of interest; these must be restricted to mathematics, engineering and/or science.
4. at least six semester hours of MAE 599 Thesis.

In accordance with MAE academic standards, students are required to maintain a 3.00 cumulative GPA.
Admission Requirements: 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.

Deficiencies for admission to the graduate degree programs are specified at the time of admission. The verbal, quantitative, and written components of the Graduate Record Examination (GRE) are not required unless specified by the respective academic unit in which the major is offered. TOEFL scores must be submitted by international applicants before admission is considered. Applicants with TOEFL scores of 550 (213 on the computer-based examination) or higher may be regularly admitted without requiring further language study. Applicants with scores below 550 may be regularly admitted but must complete study in ASU's American English and Culture Program (AECP) before enrolling in course work in the academic program.

## Aerospace Engineering (MSE) ESAERSPMSE

IRA A. FULTON SCHOOL OF ENGINEERING, TEMPE
Contact: http://mae.fulton.asu.edu/ | mae@asu.edu | ECG 339 | 4809654979|6106
Official Degree Awarded: Aerospace Engineering (MSE)

Program Description: The faculty in the Department of Mechanical and Aerospace Engineering (MAE) offer a graduate program leading to the Master of Science in Engineering (MSE) degree in Aerospace Engineering. A number of wide and diverse research areas may be pursued. All of the Department's graduate programs stress a sound foundation leading to a specialized area of study. Additional information can be found in the MAE Guidelines at http://mae.fulton.asu.edu/graduate/graduate-studies.

Program Requirements: All candidates for the MSE degree program are required to complete 30 semester hours. Additional courses may be assigned by the supervisory committee depending on the background of the candidate.

The MSE is the department's professional degree; majors in Aerospace Engineering and Mechanical Engineering are available. The MSE degree requires a culminating event (i.e., project, presentation, written/oral examination); it is a nonthesis degree.

The student is encouraged to select an advisor as soon as possible but in no case later than the middle of the first semester in residence. The name of the student's advisor must be filed with the department office. A change of advisor requires approval of the department chair.

The advisor, 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 with at least two being from MAE. Participation of individuals from institutions external to ASU is encouraged but these shall be non-voting members. The advisor shall serve as chair of the MSEPC.

As soon as possible, but no later than the end of the student's first semester of residence, the student in consultation with the MSEPC, must file a program of study (POS) with the Department. The MSEPC and the MAE Chair must approve changes to the POS.

The POS must be in accordance with the Graduate College and MAE requirements. The candidate must complete at least 30 semester hours of courses distributes as follows:

1. at least 15 credit hours course work in the candidate's major area of interest.
2. at least six credit hours of upper-division mathematics, as defined in the MAE Guidelines at http://mae.fulton.asu.edu/graduate/graduate-studies
3. at least nine semester hours of other graduate level course work outside the candidate's major area of interest; these must be restricted to mathematics, engineering and/or science.

In accordance with MAE academic Standards, students are required to maintain a 3.00 cumulative grade point average.

In accordance with MAE academic Standards, students are required to maintain a 3.00 cumulative grade point average.
Admission Requirements: 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.

Deficiencies for admission to the graduate degree programs are specified at the time of admission. The verbal, quantitative and written components of the Graduate Record Examination (GRE) are not required unless specified by the respective academic unit in which the major is offered. TOEFL scores must be submitted by international applicants before admission is considered. Applicants with TOEFL scores of 550 ( 213 on the computer-based examination) or higher may be regularly admitted without requiring further language study. Applicants with scores below 550 may be regularly admitted but must complete study in ASU's American English and Culture Program (AECP) before enrolling in course work in the academic program.

## Aerospace Engineering (PhD) ESAERSPPHD

IRA A. FULTON SCHOOL OF ENGINEERING, TEMPE
Contact: http://mae.fulton.asu.edu | mae@asu.edu | ECG 339|4809654979 | 6106
Official Degree Awarded: Aerospace Engineering (PhD)
Program Description: The graduate programs in Mechanical and Aerospace Engineering (MAE) 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. The doctoral program emphasizes original research and provides students with a strong background for employment by academic institutions government laboratories and industrial research laboratories. Additional information can be found in the MAE Guidelines http://mae.fulton.asu.edu/graduate/graduatestudies.

Program Requirements: The program of study should be submitted as early as possible and must have the approval of the student's program committee (PC), MAE Chair, and the dean of the Graduate College. All candidates for the PhD degree program are required to complete 84 semester hours.

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 discretion of the PC and MAE Chair, students may apply up to 30 semester hours from a previously awarded master's degree toward their doctoral program of study.

The PhD degree is directed toward original research. The student is required to write and defend a dissertation that describes an original contribution within the chosen discipline. The research results should be suitable for publication in the archival literature. The department currently offers majors in Aerospace Engineering and Mechanical Engineering.

University regulations note the possibility of having two separate supervisory committees, a Program Committee and a Dissertation Committee. In MAE these will normally be one and the same and will be designated as the PC.

The PC shall consist of at least five ASU faculty with the majority being from MAE, but at least one being from outside the department. Furthermore, the PC should have the following character:

1. advisor (PC chair); must be a member of the MAE graduate faculty with an endorsement to chair, 2. two or three additional faculty in the student's general area of research,
2. at least one faculty outside the student's general area of research (e.g., mathematics, physics or other engineering disciplines).

A change in the PC requires approval of the department chair.
The POS must be in accordance with Graduate College and MAE requirements. A minimum of 84 semester hours is required for the PhD degree. Twelve (and only 12) of these hours must be dissertation. Of the 84 semester hours, at least 30 hours (which may include research credit) of the approved PhD program and 12 dissertation hours must be completed after admission to the student's PhD program. Distribution of the 84 hours follows:

1. at least 18 credit hours course work in the candidates major area of interest,
2. at least six credit hours of upper-division mathematics, as defined in the MAE Guidelines http://mae.fulton.asu.edu/graduate/graduate-studies,
3. at least nine credit hours of other graduate level course work outside the candidate's major area of interest; these must be restricted to mathematics, engineering and/or science,
4. 12 - and only 12 - semester hours of MAE 799 dissertation to be completed after admission to the PhD program,
5. additional research hours (MAE 792) may be utilized to meet the total 84 credit hour requirement.

In accordance with MAE academic standards, students are required to maintain a 3.25 cumulative grade point average.
Admission Requirements: Applicants must apply to the ASU Graduate College.

## Bioengineering (MS) ESBIOENMS

IRA A. FULTON SCHOOL OF ENGINEERING, TEMPE
Contact: http://hdbe.fulton.asu.edu | bmerec@asu.edu | ECG 334 | 480/965-3028 | 9709
Official Degree Awarded: Bioengineering (MS)
Program Description: The Bioengineering faculty within the Harrington Department of Bioengineering offer a graduate program leading to the MS degree in Bioengineering.

Areas of study include neural engineering, molecular, cellular and tissue engineering, biomedical imaging and informatics, rehabilitation engineering and biomaterials. The Harrington Department of Bioengineering awards both thesis and nonthesis Master of Science degrees to those students who meet the criteria for successful graduate study.

The Harrington Department of Bioengineering offers a joint Bachelor of Science in Engineering (BSE) and nonthesis Master of Science (MS) in the Bioengineering degree program. The program allows up to nine credit hours of graduate-level course work taken as technical electives during the senior year applied toward both the undergraduate and graduate degrees.

Program Requirements: All candidates pursuing an MS degree in Bioengineering are required to complete an approved program of study consisting of the minimum required semester hours, including research and thesis, if applicable. Special course requirements for the different areas of study are established by the faculty and are available from the Harrington Department of

Bioengineering. Candidates whose undergraduate degree is in a field other than bioengineering may be required to complete more than the required semester hours of the program of study.

Program Requirements for Thesis MS:

Bioengineering course work (9 credits)
Mathematical electives (6 credits)
General electives ( 9 credits)
Bioengineering seminar (3 credits)
Thesis (6 credits)
Degree requirements total 33 credits

Program Requirements for NonThesis MS:

Bioengineering course work (15 credits)
Mathematical electives (6 credits)
General electives ( 9 credits)
Bioengineering seminar (3 credits)
Applied project (3 credits)
Degree requirements total 36 credits

Admission Requirements: In addition to the general requirements for admission to the Graduate College, applicants must submit the following directly to the Graduate College:

1. official GRE scores,
2. official TOEFL scores (if applicable),
3. a statement of purpose,
4. resume or CV,
5. three letters of recommendation.

The application deadline for fall admission is January 15 of the same year (i.e., a student wishing to enroll for fall 2009 will need to apply by January 15, 2009).

The application deadline for spring admission is August 31 of the previous year (i.e., a student wishing to enroll for spring 2009 will need to apply by August 31, 2008).

## Bioengineering (PhD) ESBIOENPHD

IRA A. FULTON SCHOOL OF ENGINEERING, TEMPE
Contact: http://hdbe.fulton.asu.edu | bmerec@asu.edu | ECG 334 | 480/965-3028 | 9709
Official Degree Awarded: Bioengineering (PhD)
Program Description: The Bioengineering faculty within the Harrington Department of Bioengineering offer a graduate program leading to the PhD degree in Philosophy.

Areas of study include neural engineering, molecular, cellular and tissue engineering, biomedical imaging and informatics, rehabilitation engineering, and biomaterials. The PhD degree in Bioengineering is conferred upon evidence of excellence in research resulting in a scholarly dissertation that is a contribution to knowledge.

Program Requirements: PhD students must complete the following course work (minimum of 84 semester hours), a dissertation, and pass oral and written examinations.

## Required Bioengineering Courses

Doctoral students are required to complete the following core curriculum of 9 credits:
BME 598 Engineering Models for Physiological for Engineers (4)
BME 598 Modeling for Molecular/Cellular Engineering (4)
BME 598 Scientific Communication (1)

All students must complete the two courses listed in one of the following tracks (8 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/BMI591: Introduction to Biomedical Informatics (4)
BME598/BMI591: Introduction to Biomedical Imaging Informatics (4)

## Technical Electives

No fewer than 12 semester hours of coursework (as determined by the student's supervisor committee) must be selected from the list of 400-700 level courses that are not selected as required Bioengineering courses. These courses are subject to approval by the student's supervisor committee on the program of study. No more than one of these courses may be 400 level.

## Research/Dissertation

The student must register for a total of 52 semester hours of research and dissertation; 12 of these semester hours must be dissertation hours.

## Seminar

Graduate students are required to register for a minimum of three credits of BME 591 (seminar).

## Total Requirement

A minimum of 84 semester hours is the total course/seminar/research/dissertation requirement. Total hours determined by the student's supervisor committee.

Admission Requirements: In addition to the general requirements for admission to the Graduate College, applicants must submit the following directly to the Graduate College:

1. official GRE scores,
2. official TOEFL scores (if applicable),
3. a statement of purpose,
4. resume or CV,
5. three letters of recommendation.

The application deadline for fall admission is January 15 of the same year (i.e., a student wishing to enroll for fall 2009 will need to apply by January 15, 2009).

The application deadline for spring admission is August 31 of the previous year (i.e., a student wishing to enroll for spring 2009 will need to apply by August 31, 2008.)

# Biomedical Informatics (MS) ESBIOINFMS 

IRA A. FULTON SCHOOL OF ENGINEERING, DTPHX

Contact: http://sci.asu.edu \| sci.advising@asu.edu \| ABC Building I, 425 N. 5th Street | 480/965-3199|8809

Official Degree Awarded: Biomedical Informatics (MS)
Program Description: The Biomedical Informatics degree program integrates technological expertise in informatics, computer sciences, biosciences and mathematical statistics with a knowledge of the clinical environment in the healthcare 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.

Program Requirements: The program of study must contain a minimum of 30 semester hours of approved graduate work and a thesis. A typical program of study will resemble the following:

```
Semester I
BMI }501\mathrm{ Introduction to Biomedical Informatics (3)
BMI 502 Foundations of Biomedical Informatics Methods I (3)
BMI Elective (3)
Semester II
BMI 505 Foundations of Biomedical Informatics Methods II (3)
BMI 540 Problem Solving in Biomedical Informatics (3)
BMI Elective (3)
Semester III
BMI Elective (3)
BMI 599 Thesis (3)
Semester IV
BMI Elective (3)
BMI 599 Thesis (3)
```

Admission Requirements: Students interested in applying to this program must submit a Graduate College online application. An applicant to the MS degree program in Biomedical Informatics should have earned a bachelor's degree in computer science, biology, physiology, psychology, nursing, statistics, engineering or a related field. 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 170), 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 and depth of preparation in their field are the primary factors affecting admission. Every applicant must submit scores for the Graduate Record Exam (GRE) or any other graduate-level entry exam. An international student must also submit Test of English as a Foreign Language (TOEFL) scores.

## Biomedical Informatics (PhD) ESBMIPHD

IRA A. FULTON SCHOOL OF ENGINEERING, DTPHX
Contact: http://sci.asu.edu | sci.advising@asu.edu | ABC Building I, 425 N. 5th Street | 602/827-2537|8809
Official Degree Awarded: Biomedical Informatics (PhD)
Program Description: The faculty in the Department of Biomedical Informatics (within the School of Computing and Informatics) offers a graduate program leading to the PhD degree 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 coursework in an area of focus and emphasis on independent research are intended to place these students at the leading edge of the field. Our strong collaborative relationships
with a variety of health care organizations as well as the bioscience industry and governmental agencies provide an unparalleled opportunity for doctoral students to explore and contribute to advances in bioinformatics, informatics related to imaging, clinical medicine, and public health, with special foci on cross-cutting areas such as cognitive science, data mining, predictive modeling, embedded sensors and simulation.

Program Requirements: Due to the diverse academic backgrounds of students requesting admission into this program, many will find it necessary to take some coursework in preparation. However, all students will take the following:

## Minimum credit hours: 84

Required courses: 39-45 credits

BMI 501 Introduction to Biomedical Informatics (3 cr.)

Students must also complete a dissertation and pass an oral comprehensive examination. BMI 502 Foundations of Biomedical Informatics Methods I (3 cr.)
BMI 505 Foundations of Biomedical Informatics Methods II (3 cr.)
BMI 515 Advanced Biostatistical Methods (3 cr.)
BMI 540 Problem Solving in Biomedical Informatics (3 cr.)
BMI 792 Research (12-18 cr.)
BMI 799 Thesis (12 cr.)

Elective courses (these include but are not limited to): 39-45 Credits

BMI 511 Decision Support and Evidence-based Practice (3 cr.)
BMI 541 Cognitive Decision Making in Health Care (3 cr.)
BMI 516 Understanding Biomedical Data (3 cr.)
BMI 555 Medical Information Management (3 cr.)
BMI 520 Modeling Gene Regulatory Networks (3 cr.)
Others from CURRENT COURSES AND EXISTING PROGRAMS

Students must also complete a dissertation and pass an oral comprehensive examination.

Admission Requirements: Student's interested in applying to this program must submit the Graduate College online application. An applicant to the Ph.D. program in Biomedical Informatics should have earned a Bachelor's Degree in Computer Science, Biology, Physiology, Psychology, Nursing, Statistics, Engineering, a clinical discipline (ie. medicine), or a related field. We will also consider student applicants who have earned degrees in other unrelated fields with appropriate academic backgrounds. However, all applicants must have basic competencies in college calculus, general biology, anatomy and physiology, statistics, and computer programming. The applicant's undergraduate GPA and depth of preparation in their field are the primary factors affecting admission. Every applicant must submit scores for the Graduate Record Examination (GRE) (verbal, quantitative, and analytical required; the subject test is optional) or any other graduate level entry exam. An international student must also submit Test of English as a Foreign Language (TOEFL) scores.

## Chemical Engineering (MS) ESCHEMEMS

IRA A. FULTON SCHOOL OF ENGINEERING, TEMPE
Contact: http://che.fulton.asu.edu | http://che.fulton.asu.edu/contact | ECG 202 | 4809653313 | 6006

## Official Degree Awarded: Chemical Engineering (MS)

Program Description: The faculty in the Department of Chemical Engineering offer a graduate program leading to the MS 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, and water purification. A Graduate Student Handbook, detailing information on graduate studies in Chemical Engineering, is available online at http://che.fulton.asu.edu/graduate/resources-forms. Students should contact the department for additional details.

Program Requirements: All candidates for the MS in Chemical Engineering are required to complete an approved program of study consisting of 33 required semester hours and a thesis. The required coursework for this degree is divided into the following categories:

Chemical Engineering Core Requirements: Students are required to take 15 semester 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\mathrm{ (3): Advanced Applied Mathematical Analysis in Chemical Engineering
CHE }533\mathrm{ (3): Transport Processes I
CHE }543\mathrm{ (3): Thermodynamics of Chemical Systems
CHE }544\mathrm{ (3): Chemical Reactor Engineering
CHE }598\mathrm{ (3): Research Methods
```

Technical Electives: Master's 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.
**400-level courses in departments outside of Chemical Engineering 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 because it is similar to ECE 383. Any questions on course validity for the technical elective requirement should be addressed to the student's committee chair and/or the graduate coordinator.
**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 semester hours of research (CHE 592) and/or thesis (CHE 599). This total must include six semester 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 MS degree, regardless of how many times it is taken.

Total: 33 credits
Candidates whose undergraduate degree was in a field other than chemical engineering may be required to complete more than 33 semester hours.

Admission Requirements: Applicants to the MS (Master of Science) are required to submit the following:

1. Graduate College online admissions application,
2. Application fee -- $\$ 65 /$ domestic degree application; $\$ 80 /$ international degree application,
3. Three letters of recommendation from faculty or professionals who can comment on your research and scholarly capabilities,
4. GRE scores,
5. Official TOEFL scores (International Students only) note that our department requires a minimum of 600 (PBT)/100 (IBT) for admissions consideration,
6. Current resume,
7. Statement of purpose, describing your research interests and reasons for seeking a degree in our department,
8. Official transcripts from all prior institutions attended.

Please view the following link for specific admissions procedures: http://che.fulton.asu.edu/graduate/admissions.
Note that students applying for the MS in Chemical Engineering may have an undergraduate BS degree in a major field other than chemical engineering. The qualifications of transition students are reviewed by the department graduate admissions committee, and a special program is designed for successful applicants. In general, applicants should have had, or should be prepared to take, calculus through differential equations and physics. Transition students are expected to complete essential courses from the undergraduate chemical engineering program to prepare themselves for the graduate courses. Transition students should contact the graduate coordinator for an evaluation of the undergraduate transcript.

## Chemical Engineering (MSE) ESCHEMEMSE

IRA A. FULTON SCHOOL OF ENGINEERING, TEMPE
Contact: http://che.fulton.asu.edu | http://che.fulton.asu.edu/contact | ECG 202 | 4809653313 | 6006
Official Degree Awarded: Chemical Engineering (MSE)
Program Description: The faculty in the Department of Chemical Engineering offer a professional program leading to the Master of Science in Engineering (MSE) degree with a major 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 coursework 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 MSE degree program. The first is a general MSE, where students follow the same course outline as required by the MS degree, except that they will substitute thesis/research hours with additional elective coursework. The second is a MSE 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 coursework. Note that financial assistance is not available to students who elect a MSE degree program.

Program Requirements: In general, all candidates for the MSE are required to complete 33 semester 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 MSE program options are outlined below:

Option 1: Master of Science in Engineering Degree (General MSE) in Chemical Engineering (Non-Thesis)
Students who choose this option follow the requirements for the Master of Science Degree (see MS program requirements), but will replace the thesis/research credits with additional credit hours of coursework. In addition, MSE students must take three credit hours of seminar. This degree requires a total of 33 semester hours.

After completing the coursework, 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: Master of Science in Engineering Degree (MSE) in Chemical Engineering with a specialization in Semiconductor Processing and Manufacturing (Non-thesis)

The Master of Science in Engineering degree, with a major in Chemical Engineering and a specialization in semiconductor processing and manufacturing, involves a total of 33 semester hours. After completing the coursework, 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 (3) Semiconductor Material Processing<br>CHE 598 (3) Deposition and Etching<br>EEE 591 (3) Fundamentals of Solid State Devices<br>IEE 570 or IEE 572 (3) Advanced Quality Control Design of Engineering Experiments<br>MSE 598 (3) Materials Issues in Semiconductor Processing

6 credits of chemical engineering electives at the 520 level or higher
6 credits of technical electives at the 500 level or higher
3 credits of a technical elective at the 400 level or higher
Seminar: In addition to the 30 credits listed above, three credits of the 1-unit graduate seminar (CHE 591) are required. Online students can substitute an additional technical elective ( 500 level or higher) for this requirement.

Total: 33 credits.
Admission Requirements: Applicants to the MSE (Master of Science in Engineering) are required to submit the following:

1. Graduate College online admissions application,
2. Application fee,
3. Three letters of recommendation from faculty or professionals who can comment on your research and scholarly capabilities,
4. Official TOEFL scores (international students only) *note that our department requires a minimum of 600 (PBT)/100 (IBT) for admissions consideration,
5. Current resume,
6. Statement of purpose, describing your research interests and reasons for seeking a degree in our department,
7. Official transcripts from all prior institutions attended.

Please view the following link for specific admissions procedures: http://che.fulton.asu.edu/graduate/admissions.
Students applying for the MSE in Chemical Engineering may have an undergraduate BS degree in a major field other than chemical engineering. The qualifications of transition students are reviewed by the department graduate admissions committee, and a special program is designed for successful applicants. Deficiencies for admission to the MSE are specified at the time of admission.

## Chemical Engineering (PhD) ESCHEMEPHD

IRA A. FULTON SCHOOL OF ENGINEERING, TEMPE
Contact: http://che.fulton.asu.edu | http://che.fulton.asu.edu/contact | ECG 202 | 4809653313 | 6006
Official Degree Awarded: Chemical Engineering (PhD)
Program Description: The faculty in the Department of Chemical Engineering offer a graduate program leading to the PhD 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, and water purification. A Graduate Student Handbook, detailing information on graduate studies in Chemical Engineering, is available online at http://che.fulton.asu.edu/graduate/resources-forms. Students should contact the department for additional details.

Program Requirements: The Doctor of Philosophy (PhD) in Chemical Engineering requires completion of 84 semester hours, a dissertation, and written and oral comprehensive examinations. These semester hours include core/elective coursework, research/dissertation and seminar credits. Below are the specific requirements:

1. Chemical Engineering Core: The PhD program requires 15 semester hours of graduate-level Chemical Engineering courses. The following five courses (comprising these 15 hours) are required for all students:
CHE 527 (3): Advanced Applied Mathematical Analysis in Chemical Engineering
CHE 533 (3): Transport Processes I
CHE 543 (3): Thermodynamics of Chemical Systems
CHE 544 (3): Chemical Reactor Methods
CHE 598 (3): Research Methods
2. Technical Electives: In addition to the 15 hours of core above, the PhD program requires 12 semester hours of technical electives from within or outside the Department of Chemical Engineering. CHE courses meeting this requirement must be at the 520 level or higher; 400 -level and 590 courses (from CHE or outside departments) may not be used to fulfill this requirement (although they may be used to satisfy no. 5 below). Students should consult with their supervisory committees in selecting appropriate technical elective courses.
3. 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 program of study. Moreover, students can only take CHE 799 once they have passed the comprehensive exam and been admitted to candidacy.
4. 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 program of study.
5. 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 the Department of Chemical Engineering or other departments. CHE 590 (Reading and Conference) hours may also be used to fulfill this area. Note that 400-level courses in departments 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 because it is similar to ECE 383. Elective courses used to meet this requirement must be approved as part of the student's program of study.

Total: 84 credit hours (including 15 hours core, 12 hours technical electives, 24 hours research/dissertation, 5 hours seminar, and 28 hours additional research/electives)

If a student has earned a master's degree in Chemical Engineering or in a similarly named program with equivalent course requirements (either from ASU or elsewhere), he/she may transfer up to 30 semester hours toward the PhD degree with the approval of his/her supervisory committee (students without master's degrees can also transfer earned graduate-level hours). However, the specific requirements of the 84 credit hours of coursework described above must still be met. Hence, if a student transfers in 30 semester hours, but none of these credits fulfill the Chemical Engineering core requirements, that student will still need to take the appropriate coursework to fulfill these requirements. Students who transfer in 30 hours are required to complete a minimum of 54 hours after being admitted to the PhD program at ASU. In some cases students transferring in 30 hours may need to take more than the minimum 54 to meet all of the requirements of the program.

Admission Requirements: Applicants to the PhD (Doctor of Philosophy) are required to submit the following:

1. Graduate College online admissions application.
2. Application fee,
3. Three letters of recommendation from faculty or professionals who can comment on your research and scholarly capabilities.
4. GRE scores.
5. Official TOEFL scores (international students only) * note that our department requires a minimum of 600 (PBT)/100 (IBT) for admissions consideration.
6. Current resume.
7. Statement of purpose, describing your research interests and reasons for seeking a degree in our department.
8. Official transcripts from all prior institutions attended.

Please view the following link for specific admissions procedures: http://che.fulton.asu.edu/graduate/admissions.
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, United States citizens normally will have a minimum grade point average (GPA) of 3.2 out of a total possible 4.0 or equivalent. Foreign applicants normally will be in the top $10 \%$ of their graduating class. Students entering with master's degrees are required to have a minimum GPA in their master's degree coursework of a 3.5 out of a possible 4.0.

## Civil/Environmental Engineering (MS) ESCIVILMS

IRA A. FULTON SCHOOL OF ENGINEERING, TEMPE
Contact: http://cee.fulton.asu.edu/graduate/graduate-studies | cee@asu.edu | 480/965-0595 | 5306

Official Degree Awarded: Civil and Environmental Engineering (MS)
Program Description: The faculty in the Ira A. Fulton School of Engineering offer a graduate program leading to the Master of Science (MS) degree with a major in Civil and Environmental 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 and in the department's Graduate Handbook. Students are admitted to one of the following specialty areas: construction engineering, geotechnical engineering, environmental engineering, structural engineering, transportation engineering and water resources engineering.

Program Requirements: This program requires 30 credit hours and a thesis. All candidates for the MS degree are required to complete 24 semester hours of approved graduate course work. Additional courses may be assigned by the graduate supervisory committee depending on the background of the candidate. In addition, the students are required to register for and complete a minimum of six semester hours of thesis. A final oral examination in the defense of the thesis work is required for all students.

Admission Requirements: 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 (SAC) or by a committee chaired by the SAC. 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 department's Web site.

Applicants must take the Graduate Record Examination (GRE) and have the scores sent to Graduate College. TOEFL scores must be submitted by international applicants and applicants whose maternal language is not English. Applicants with TOEFL scores of 550 (83 on the Internet-based test, 213 on the computer-based examination) or higher may be regularly admitted without requiring further language study. Applicants with scores below 550 may be regularly admitted but must complete study in ASU's American English and Culture Program (AECP) before enrolling in course work in the academic program. Applicants required to take the TOEFL exam and seeking a teaching assistantship must demonstrate proficiency in spoken English; a score of 55 or better on the SPEAK examination is required.

## Civil/Environmental Engineering (MSE) ESCIVILMSE

## IRA A. FULTON SCHOOL OF ENGINEERING, TEMPE

Contact: http://cee.fulton.asu.edu | cee@asu.edu | ECG 252 | 4809653589 | 5306

## Official Degree Awarded: Civil and Environmental Engineering (MSE)

Program Description: The faculty in the Ira A. Fulton School of Engineering offer a professional program leading to the Master of Science in Engineering (MSE) degree with a major in Civil and Environmental 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 and in the department's Graduate Handbook. Students are admitted to one of the following specialty areas: construction engineering, geotechnical engineering, environmental engineering, structural engineering, transportation engineering and water resources engineering.

Program Requirements: All candidates for the MSE degree are required to complete 30 semester hours of approved graduate course work. Additional courses may be assigned by the graduate supervisory committee depending on the background of the candidate. A final comprehensive examination is required for all students. Details of this examination for the different specialty areas can be obtained at the Graduate Studies section of the department's Web site.

Admission Requirements: 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 (SAC) or by a committee chaired by the SAC. 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 department's Web site.

Applicants must take the Graduate Record Examination (GRE) and have the scores sent to Graduate College. TOEFL scores must be submitted by international applicants and applicants whose maternal language is not English. Applicants with TOEFL scores of 550 ( 83 on the Internet-based test, 213 on the computer-based examination) or higher may be regularly admitted without requiring further language study. Applicants with scores below 550 may be regularly admitted but must complete study in ASU's American English and Culture Program (AECP) before enrolling in course work in the academic program.

## Civil/Environmental Engineering (PhD) ESCIVILPHD

IRA A. FULTON SCHOOL OF ENGINEERING, TEMPE
Contact: http://www.eas.asu.edu/~civil/ | cee@asu.edu | 4809653589 | 5306

## Official Degree Awarded: Civil and Environmental Engineering (PhD)

Program Description: The faculty in the Ira A. Fulton School of Engineering offer a graduate program leading to the PhD degree in Civil and Environmental 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 department's Graduate Handbook. Students are admitted to one of the following specialty areas: construction engineering, geotechnical engineering, environmental engineering, structural engineering, transportation engineering and water resources engineering.

Program Requirements: All candidates for the PhD degree are required to complete 84 approved graduate credit hours (of these 30 hours can be from the masters 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 semester hours of research and 12 (and only 12) semester hours of dissertation work. This degree also requires a comprehensive examination and approval of the dissertation prospectus for the student to be eligible for doctoral candidacy. After entering candidacy, students complete their research, write and defend their dissertation. A final oral examination in the defense of the dissertation work is required for all students.

Admission Requirements: Applicants are expected to satisfy all requirements for admission to the Graduate College. Entry into this program normally requires a master's degree with a major 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 Specialty Area Coordinator (SAC) or by a committee chaired by the SAC. A minimum requirement is an overall undergraduate GPA of 3.00 ( 4.00 scale ) and a minimum GPA of 3.2 in the graduate coursework.

A student whose undergraduate or masters 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 PhD degree program are specified at the time of admission and details can be obtained at the Graduate Studies section of the department's Web site.
Applicants must take the Graduate Record Examination (GRE) and have the scores sent to Graduate College. TOEFL scores must be submitted by international applicants and applicants whose maternal language is not English. Applicants with TOEFL scores of 550 ( 83 on the Internet-based test, 213 on the computer-based examination) or higher may be regularly admitted without requiring further language study. Applicants with scores below 550 may be regularly admitted but must complete study in ASU's American English and Culture Program (AECP) before enrolling in course work in the academic program. Applicants required to take the TOEFL exam and seeking a teaching assistantship must demonstrate proficiency in spoken English; a score of 55 or better on the SPEAK examination is required.

# Computer Science (Biomedical Informatics)(MS) ESCSBIOIMS 

IRA A. FULTON SCHOOL OF ENGINEERING, TEMPE
Contact: http://cse.asu.edu | cse@asu.edu | Brickyard \#528 | 480/965-3190 | 8809
Official Degree Awarded: Computer Sciences (Biomedical Informatics) (MS)
Program Description: Computer Science (Biomedical Informatics)(MS)

## Computer Science (MCS) ESCOMSC MCS

IRA A. FULTON SCHOOL OF ENGINEERING, TEMPE

Contact: http://sci.asu.edu | sci.advising@asu.edu | BYENG 553 | 480/965-3190 | 8809
Official Degree Awarded: Computer Science (MCS)
Program Description: The faculty in the Department of Computer Science and Engineering offer a professional program leading to the Master of Computer Science (MCS) degree. The MCS program provides a professionally oriented, graduate-level education in computer science and engineering. The 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 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 and software engineering.

Program Requirements: Each student defines a potentially unique program of study subject to approval by the department and the Graduate College. The program of study must contain a minimum of 30 semester hours of approved graduate-level work. At least 18 of these hours must be CSE 500-level credits at ASU (excluding CSE 598 courses). At least 27 hours must be for formal course work (including CSE 591 but excluding credits for independent projects). No credits for CSE 590 Reading and Conference or CSE 599 Thesis are allowed on a program of study for the MCS degree. MCS students must complete a project portfolio from three courses they took and receive a "B" or higher grade. Student's must pass a written comprehensive examination.

All MCS students must take at least three semester hours in each of the following three areas: foundations, systems and applications. At least two of the three area courses must be at the 500 level (not 598). The classes listed as 400 level must be taken as CSE 598. Please see the area courses section on the department Web page http://sci.asu.edu/graduate/concentrations.php for a partial list of courses in each area. The department may prescribe additional courses based on the background of the candidate.

Admission Requirements: Applicants must submit a Graduate College online application. An applicant for the MCS program should normally have a baccalaureate degree in computer science, computer engineering or a closely related area. The applicant's undergraduate GPA, GRE (verbal, quantitative and analytical) score, and depth of preparation in computer science and engineering are the primary factors affecting admission. The GRE subject test in computer science is optional. An international student must also submit the results of the TOEFL. The application deadline for admission in the fall semester is December 1, and August 1 for the spring semester. The deadlines for financial aid are the same as the application deadlines.

## Computer Science (MS) ESCOMSCMS

IRA A. FULTON SCHOOL OF ENGINEERING, TEMPE
Contact: http://sci.asu.edu | sci.advising@asu.edu | BYENG 553 | 480/965-3190 | 8809
Official Degree Awarded: Computer Science (MS)
Program Description: Each student defines a potentially unique program of study in conjunction with an advisor, subject to the approval of the department and the Graduate College. The program of study must contain a minimum of 30 semester hours of approved graduate-level work, including six semester hours of CSE 599 Thesis. For the arts, media, and engineering concentration, students substitute two hours of AME 599. At least 18 semester hours must be CSE 500 -level credits at ASU
(excluding CSE 598 courses but including CSE 599). At least 21 semester hours must be for formal course work (including CSE 591 but excluding CSE 590, CSE 599, and similar credits for independent projects).

For the arts, media, and engineering concentration, students take nine semester hours through the Arts, Media and Engineering Program as part of the 21 semester hours. All MS students must take at least three semester hours in each of the following three areas: foundations, systems, and applications. At least two of the three courses must be at the 500- level (not 598). The classes listed as 400 -level must be taken as CSE 598. See area courses sections on department Web page for a partial list of courses in each area. Every MS student is required to take at least nine semester hours of courses in their thesis area, possibly including courses from the list of area courses, and possibly including three credits hours of independent study. No foreign language credit is required.

Program Requirements: The faculty in the Department of Computer Science and Engineering (within the School of Computing and Infomatics) offer a graduate program leading to the MS degree in Computer Science.

Areas of study and research areas include 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 and software engineering. In addition, the department conducts research closely with the Center for Cognitive Ubiquitous Computing; Center for Research in Arts, Media, and Engineering; and Partnership for Research in Stereo Modeling in various aspects of computer science.

Admission Requirements: Students interested in applying to this program must submit the Graduate College online application. An applicant for the MS program should normally have a baccalaureate degree in computer science, computer engineering or a closely related area. The applicant's undergraduate GPA and depth of preparation in computer science and engineering are the primary factors affecting admission. Every applicant must submit scores for the Graduate Record Examination (GRE) (verbal, quantitative and analytical required; the subject test in computer science is optional). An international student must also submit Test of English as a Foreign Language (TOEFL) scores. The application deadline for admission in the fall semester is December 1 , and the deadline for admission in the spring semester is August 1 . Deadlines for financial aid are the same as the admission deadlines.

## Computer Science (PhD) ESCOMSCPHD

## IRA A. FULTON SCHOOL OF ENGINEERING, TEMPE

Contact: http://sci.asu.edu | sci.advising@asu.edu | BYENG 553Brick Yard on Mill Ave 208 | 480/965-3190 | 8809
Official Degree Awarded: Computer Science (PhD)
Program Description: The faculty in the Department of Computer Science and Engineering (within the School of Computing and Infomatics) offer a graduate program leading to the PhD degree in Computer Science.

Areas of study and research areas include 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 and software engineering. In addition, the department conducts research closely with the Center for Cognitive Ubiquitous Computing; Center for Research in Arts, Media and Engineering; and Partnership for Research in Stereo Modeling in various aspects of computer science.

Program Requirements: The PhD program requires 84 credit hours, and dissertation, and written and oral comprehensive examinations.

Students must:

1. complete every deficiency course with a GPA of 3.00 or higher before or concurrent to completion of the ninth hour of graduate credit,
2. file an approved tentative program of study before the end of the first semester in the graduate program,
3. file a new approved tentative program of study before beginning work in any course that deviates from the previously approved tentative program of study,
4. select a faculty advisor to serve as chair of the supervisory committee,
5. select a supervisory committee, in consultation with the faculty advisor, and submit an online final program of study.

When the course work in the program of study is complete and the final program of study is approved by the Graduate College, the comprehensive examination can be completed.

Students then enroll in CSE 792 Research with approval from the supervisory committee to work on the dissertation proposal.
After the dissertation prospectus is approved, apply for admission to candidacy and enroll in CSE 799 Dissertation to complete the work agreed upon in the dissertation prospectus.

In the final semester, students file an application for graduation with the Graduation Office of the Registrar.
Deliver one bound copy of the dissertation to the graduate advisor and deliver one bound copy to the faculty advisor. The bookstore delivers two bound copies directly to the library. As a courtesy, determine which members of the supervisory committee would like a bound copy of the dissertation.

Admission Requirements: Students interested in applying to this program must submit the Graduate College online application. An applicant for the PhD program should have the equivalent of a baccalaureate major in computer science, computer engineering or a closely related area. Most applicants should have earned the master's degree, but applicants with exceptional attainments in their baccalaureate are admitted directly into the PhD program. The primary factors affecting admission include the applicant's GPA, depth of preparation in computer science and engineering, GRE (verbal, quantitative, analytical and computer science) scores, a statement of purpose and three letters of recommendation. An international student must submit TOEFL scores. The application deadline for admission in the fall semester is December 1, and the deadline for admission in the spring semester is August 1. The deadlines for financial aid are the same as the admission deadline.

## Computer Science - Art, Media and Engineering (MS) ESAMECSMS

IRA A. FULTON SCHOOL OF ENGINEERING, TEMPE
Contact: http://www.sci.asu.edu | sci.advising@asu.edu | Brick Yard on Mill Ave 553 | 480/965-3190 | 8809
Official Degree Awarded: Computer Science (Arts, Media and Engineering) (MS)
Program Description: The Arts, Media and Engineering (AME) program emphasizes research on the integration of the human physical experience with computation and digital media. AME researchers produce experiential media systems and models that evolve human ability, facilitate learning, enhance scientific discovery, empower creativity, assist the disadvantaged and improve quality of life. Within these application areas, researchers explore sensing, perception and modeling, interaction and feedback, and experiential construction and knowledge creation. The purpose of the AME concentration in Computer Science and Engineering is to train hybrid engineering-arts graduates who get their inspiration from the arts and their methodology from computer science and engineering. The students will specialize in transdisciplinary media development.

Program Requirements: The program requires 30 hours and a thesis.
Admission Requirements: Students interested in applying to an AME concentration must:

1. Submit the Graduate College online application, selecting the home department degree program and coordinating AME concentration,
2. Send sealed transcripts and three letters of recommendation to the Graduate Admissions Office:

Graduate College
Arizona State University
Administration B-Wing, Room 285
PO Box 871003
Tempe AZ 85287-1003
3. If required by the department, submit GRE scores directly to the Graduate College.
4. International students are required to submit a TOEFL score to the Graduate College.
5. Visit the department's Web site to determine whether supplemental application materials are required. If so, send them directly to the department.
6. Determine the department's application deadline. Observe the earlier of the department's deadline or Feb. 1, 2008 (AME's application deadline). Departments also may have audition deadlines, etc. Please observe all department application requirements.
7. Send the following items directly to AME, even if duplicates have been sent to the department:
A. Statement of Purpose
B. Curriculum Vitae

Arts, Media and Engineering Program
Attn: Education Coordinator
Arizona State University
PO Box 878709
Tempe AZ 85287-8709
The statement of purpose must fulfill any requirements of the department 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 AME Program. For further information on how this statement can be expanded upon by students interested in Research Assistantships or IGERT fellowships within AME, please visit the financial aid page.

Please submit a current CV with your statement of purpose.

## Computer Science - Art, Media and Engineering (PhD) ESAMECSPHD

IRA A. FULTON SCHOOL OF ENGINEERING, TEMPE
Contact: http://www.sci.asu.edu | sci.advising@asu.edu | Brick Yard on Mill Ave 208 | 480/965-3190 | 8809
Official Degree Awarded: Computer Science (Arts, Media and Engineering) (PhD)
Program Description: The Arts, Media and Engineering (AME) program emphasizes research on the integration of the human physical experience with computation and digital media. AME researchers produce experiential media systems and models that evolve human ability, facilitate learning, enhance scientific discovery, empower creativity, assist the disadvantaged and improve quality of life. Within these application areas, researchers explore sensing, perception and modeling, interaction and feedback, and experiential construction and knowledge creation. The purpose of the Computer Science/AME concentration is to train hybrid engineering-arts graduates who get their inspiration from the arts and their methodology from computer science and engineering. The students will specialize in transdisciplinary media development.

Program Requirements: Of the 84 total hours required for PhD in Computer Science and Engineering, 36 hours of this concentration focus on Arts, Media and Engineering. The PhD also requires a dissertation and successful completion of written and oral comprehensive exams.

Admission Requirements: Students interested in applying to an AME concentration must:

1. Submit the Graduate College online application, selecting the home department degree program and coordinating AME concentration,
2. Send sealed transcripts and three letters of recommendation to the Graduate Admissions Office:

Graduate College
Arizona State University
Administration B-Wing, Room 285
PO Box 871003
Tempe AZ 85287-1003
3. If required by the department, submit GRE scores directly to the Graduate College.
4. International students are required to submit a TOEFL score to the Graduate College.
5. Visit the department's Web site to determine whether supplemental application materials are required. If so, send them directly to the department.
6. Determine the department's application deadline. Observe the earlier of the department's deadline or Feb. 1, 2008 (AME's application deadline). Departments also may have audition deadlines, etc. Please observe all department application requirements.
7. Send the following items directly to AME, even if duplicates have been sent to the department:
A. Statement of Purpose
B. Curriculum Vitae

Arts, Media and Engineering Program
Attn: Education Coordinator
Arizona State University
PO Box 878709
Tempe AZ 85287-8709
The statement of purpose must fulfill any requirements of the department 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 AME Program. For further information on how this statement can be expanded upon by students interested in Research Assistantships or IGERT fellowships within AME, please visit the financial aid page.

Please submit a current CV with your statement of purpose.

## Computer Science - Information Assurance (MCS) ESCSEI MCS

IRA A. FULTON SCHOOL OF ENGINEERING, TEMPE
Contact: http://sci.asu.edu/about/cse.php | cse@asu.edu | Brickyard Rm 552 | 480/965-3190 | 8809
Official Degree Awarded: Computer Science (Information Assurance) (MCS)
Program Description: This program 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.

Program Requirements: The Computer Science (MS) degree program with a concentration in information assurance must contain a minimum of 30 semester hours of approved graduate-level work (six hours of CSE 599 Thesis). At least 24 hours must be for formal course work (including CSE 591 but excluding CSE 590 and CSE 599).

All students must take at least three credit hours in each of the following three areas: Foundations, Systems and Applications. At least two out of the three area courses must be at the 500 -level (but not CSE 598). The classes listed as 400 -level must be taken as CSE 598. In addition, the MS thesis must have a major portion of the content in the information assurance area.

Admission Requirements: Students interested in applying to this program must submit the Graduate College online application. An applicant for the MS program should normally have a baccalaureate degree in computer science, computer engineering or a closely related area. The applicant's undergraduate GPA and depth of preparation in computer science and engineering are the primary factors affecting admission. Every applicant must submit scores for the Graduate Record Examination (GRE) (verbal,
quantitative and analytical required; the subject test in computer science is optional). An international student must also submit Test of English as a Foreign Language (TOEFL) scores. The application deadline for admission in the fall semester is December 1, and the deadline for admission in the spring semester is August 1. Deadlines for financial aid are the same as the admission deadlines.

## Computer Science - Information Assurance (MS) ESCSEIAMS

IRA A. FULTON SCHOOL OF ENGINEERING, TEMPE
Contact: http://sci.asu.edu | sci.advising@asu.edu | BYENG 553 | 480/965-3190 | 8809
Official Degree Awarded: Computer Science (Information Assurance) (MS)
Program Description: The Computer Science - Information Assurance Master of Science program 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.

Program Requirements: Computer Science- Information Assurance (MS) degree must contain a minimum of 30 semester hours of approved graduate-level work (six hours of CSE 599 Thesis. At least 24 hours must be for formal course work (including CSE 591 but excluding CSE 590 and CSE 599).

All MS students must take at least three credit hours in each of the following three areas: Foundations, Systems and Applications. At least two out of the three area courses must be at 500 levels (not CSE 598). The classes listed as 400 levels must be taken as CSE 598. Please see the area courses section on the department Web page, http://sci.asu.edu/graduate/concentrations.php for a list of courses in each area. In addition, the MS thesis must have a major portion of the content in the information assurance area. Admission Requirements: Students interested in applying to this program must submit the Graduate College online application. An applicant for the MS program should normally have a baccalaureate degree in computer science, computer engineering or a closely related area. The applicant's undergraduate GPA and depth of preparation in computer science and engineering are the primary factors affecting admission. Every applicant must submit scores for the Graduate Record Examination (GRE) (verbal, quantitative and analytical required; the subject test in computer science is optional). An international student must also submit Test of English as a Foreign Language (TOEFL) scores. The application deadline for admission in the fall semester is December 1, and the deadline for admission in the spring semester is August 1 . Deadlines for financial aid are the same as the admission deadlines.

## Computer Science - Information Assurance (PhD) ESCSEIAPHD

IRA A. FULTON SCHOOL OF ENGINEERING, TEMPE
Contact: http://www.sci.asu.edu | sci.advising@asu.edu | BYENG 553 | 480/965-3190 | 8809
Official Degree Awarded: Computer Science (Information Assurance) (PhD)
Program Description: The Computer Science - Information Assurance (PhD) program 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.

Program Requirements: Computer Science - Information Assurance ( PhD ) degree must contain a minimum of 84 semester hours of approved graduate-level work, 12 hours (and only 12 hours) of CSE 799 Dissertation. A minimum of 18 credits in Information Assurance and related areas are required (including CSE 591 but excluding CSE 790 and CSE 799). Additional credit hours are to be in Computer Science coursework and 18 hours of research (CSE 792).

All PhD students must take at least three credit hours in each of the following three areas: Foundations, Systems and Applications. All three area courses must be at 500 levels (not CSE 598). Please see the area courses section on the department Web page (http://sci.asu.edu/graduate/concentrations.php) for a list of courses in each area. Students must pass a written comprehensive examination.

Admission Requirements: An applicant for the PhD program should have the equivalent of a baccalaureate major in computer science, computer engineering or a closely related area. Most applicants should have earned the master's degree, but applicants with exceptional attainments in their baccalaureate are admitted directly into the PhD program. The primary factors affecting admission include the applicant's GPA, depth of preparation in computer science and engineering, GRE (verbal, quantitative, analytical and computer science) scores, a statement of purpose and three letters of recommendation. An international student must submit TOEFL scores. The application deadline for admission in the fall semester is December 1, and the deadline for admission in the spring semester is August 1. The deadlines for financial aid are the same as the admission deadline.

## Construction (MS) ESCONSTMS

IRA A. FULTON SCHOOL OF ENGINEERING, ONLINE
Contact: http://construction.asu.edu | dewsc_graduate@asu.edu | USE 118|480/965-3616 | 0204
Official Degree Awarded: Construction (MS)
Program Description: The faculty in the Del E. Webb School of Construction offer a graduate program leading to the MS degree in Construction. Concentrations are available in construction management and facilities 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 baccalaureate 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) concentration supports the needs of the student desiring a career in the maintenance, operation, renovation or decommissioning of existing facilities. The (construction) management concentration allows students seeking upper-level management positions in various sectors of the construction industry to improve their competency in project, program and company management areas.

Program Requirements: The program of study consists of the following: thesis option-30 semester hours of graduate study culminating in a thesis and an oral defense; or nonthesis option-36 semester hours of graduate study culminating in an applied project.

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 two 400 -level courses to be part of the program of study. Students may not use 400 -level deficiency courses to satisfy degree requirements.

Admission Requirements: Applicants are expected to satisfy all requirements for admission to the Graduate College. In addition, applicants are expected to be competent in basic construction topics. Admission is based on an evaluation of the student's academic and professional background; scores from the verbal, quantitative, and analytical writing portions of the GRE; letters of recommendation; a personal statement; and a current resume. Furthermore, students whose native language is not English must also submit a TOEFL score of at least 550 .

## Construction (PhD) ESCONPHD

IRA A. FULTON SCHOOL OF ENGINEERING, TEMPE
Contact: http://construction.asu.edu | dewsc_graduate@asu.edu | USE 118 | 480/965-3616 | 0204

Official Degree Awarded: Construction (PhD)
Program Description: The purpose of this 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-PhD student dynamic. The Dell E. Webb School of Construction is distinctively positioned to provide students with an interdisciplinary educational and research experience at the PhD 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.

Program Requirements: "The PhD degree in Construction will require three to four years of full-time study and research beyond the master's degree. Generally, students will be admitted into the PhD degree program at or near the completion of their master's degree. However, students can be admitted post bachelor's degree or post 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 core construction courses, elective courses, a qualifying examination, a comprehensive examination, the successful defense of a dissertation prospectus, admission to candidacy and a successful dissertation defense.
Admission Requirements: Students who hold a bachelor's or a master's degree in a related field from a regionally accredited university or equivalent are eligible to apply for admission to the program. 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 are expected to satisfy all requirements for admission to the Graduate College. In addition, applicants are expected to be competent in construction topics. Admission is based upon research interests; an evaluation of the student's academic and professional background; scores from the verbal, quantitative and analytical writing portions of the GRE; letters of recommendation; a personal statement from each applicant describing their career goals and research objectives; and a current resume. Furthermore, students whose native language is not English must also submit a TOEFL score of at least 550 .

## Electrical Engineering (MSE) ESEEMSE

IRA A. FULTON SCHOOL OF ENGINEERING, TEMPE
Contact: http://ee.fulton.asu.edu | askee@asu.edu | ERC 552 | 4809653424 | 5706
Official Degree Awarded: Electrical Engineering (MSE)
Program Description: The Electrical Engineering faculty in the Ira A. Fulton School of Engineering offer a professional program leading to the Master of Science in Engineering (MSE) degree with a major 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 classes in any combination of on-campus and online modes.

A dual degree, the MBA/MSE EE, is available as an online option. For more information, visit the W. P. Carey School of Business MBA site (http://wpcarey.asu.edu/mba/online/program/dual-degree.cfm) and the Ira A. Fulton School of Engineering GOEE site (http://cpd.asu.edu/online/?page=online_mba_mse_ee).

Program Requirements: "The MSE 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 5 EEE courses
At most 4 400-level courses
At least 3 EEE 500-level courses
At least 2 courses outside the area of specialization
At most 1 Reading and Conference (EEE 590) or Technology Venture Clinic (EEE 584) or Entrepreneurship (FSE 598)
A final comprehensive examination in the area of specialization completes the MSE 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 the Accreditation Board of Engineering and Technology (ABET) to a master's program in electrical engineering is based upon a number of factors. A minimum requirement is an undergraduate grade point average of 3.0 (out of 4.0) 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 3.5 grade point average in the last two years of undergraduate study and score at least 720 on the quantitative portion of the Graduate Record Examination (GRE) and a good score on the writing portion. In addition, an applicant whose native language is not English must demonstrate proficiency in the English language by scoring at least 550 on the written Test of English as a Foreign Language (TOEFL), 213 on the computer-based TOEFL (CBT), or 83 on the Internet-based TOEFL (iBT).

The admissions deadline for the fall semester is the preceding December 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.

## Electrical Engineering (PhD) ESEEPHD

## IRA A. FULTON SCHOOL OF ENGINEERING, TEMPE

Contact: http://ee.fulton.asu.edu | askee@asu.edu | ERC 552 | 4809653424 | 5706
Official Degree Awarded: Electrical Engineering (PhD)
Program Description: The PhD degree 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:

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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
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Program Requirements: PhD students are required to complete 84 semester 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 from EE
Research or Omnibus: 12 hours, can be 400 level and above
Research: 12 hours
Dissertation: 12 hours

The 84 hours include 30 semester hours for the master's degree, a required 18 semester hours of PhD class work, 12 hours of research (EEE 792), and 12 hours (and only 12 hours) of dissertation (EEE 799).

The additional 12 hours can be more hours of research (EEE792) or can be class work as determined by the supervisory committee. At least half (nine hours) of the minimum requirement of 18 semester hours of PhD course work must be in Electrical Engineering. Reading and Conference (EEE 790) can be used for no more than three semester hours toward the required 18, but does not count towards the nine hours of 500 -level EE 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 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 by the department and is available on the department 's web page at: http://ee.fulton.asu.edu.

Admission Requirements: In general, a student must have a least a 3.0 grade point average (out of 4.0) in all undergraduate course work and at least a 3.5 grade point average in all graduate course work for admission to the PhD program. A student must usually hold a master's degree before being admitted to the PhD program. Direct PhD admission is available for students graduating from an ABET-accredited electrical engineering program with a GPA of 3.6 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 score of 4.0 or better on the writing portion is considered desirable. In addition, an applicant whose native language is not English must demonstrate proficiency in the English language by scoring at least 550 on the written Test of English as a Foreign Language (TOEFL), 213 on the computer-based TOEFL (CBT), or 83 on the Internet-based TOEFL (iBT). International students seeking teaching assistantships must demonstrate proficiency in spoken English by scoring at least 24 on the speaking portion of the iBT or 50 on the ASU administered SPEAK Test.

The admissions deadline for the fall semester is the preceding December 31; for the spring semester, the preceding July 31.

## Electrical Engineering - Art, Media and Engineering (MS) ESAMEMS

## IRA A. FULTON SCHOOL OF ENGINEERING, TEMPE

Contact: http://ee.fulton.asu.edu | askee@asu.edu | ERC 552 | 4809653424 | 5706
Official Degree Awarded: Electrical Engineering (Arts, Media and Engineering) (MS)
Program Description: The Department of Electrical Engineering at Arizona State University in collaboration with the Herberger College of the Arts (HCA) has established a concentration in Arts, Media and Engineering. This concentration is available both for the MS and the PhD. Students admitted in this program take two-thirds of their course, research and thesis credits from the Department of Electrical Engineering and one-third of the credits from the Arts, Media and Engineering program.

The Arts, Media and Engineering program (AME) represents an ambitious interdisciplinary research community at ASU that is focused on the parallel development of media hardware, software, content and theory. The AME is a joint effort of the Herberger College of the Arts (HFA) and of the Ira A. Fulton School of Engineering. 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 facilitates knowledge. For more information, access http://ame.asu.edu.
Program Requirements: The MS in Electrical Engineering with a concentration in AME requires 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 3.0 (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 3.5 (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 scoring at least 550 on the written Test of English as a Foreign Language (TOEFL), 213 on the computer-based TOEFL (CBT), or 83 on the Internet-based TOEFL (iBT). International students seeking teaching assistantships must demonstrate proficiency in spoken English by scoring at least 24 on the speaking portion of the iBT or 50 on the ASU administered SPEAK Test. Applicants should submit materials that reflect the hybrid nature of the arts/engineering degree.

## Electrical Engineering - Art, Media and Engineering (PhD) ESAMEPHD

IRA A. FULTON SCHOOL OF ENGINEERING, TEMPE
Contact: http://ee.fulton.asu.edu | askee@asu.edu | ERC 552 | 4809653424 | 5706
Official Degree Awarded: Electrical Engineering (Arts, Media and Engineering) (PhD)
Program Description: The Department of Electrical Engineering at Arizona State University in collaboration with the Herberger College of the Arts (HCA) has established a concentration in Arts, Media and Engineering. This concentration is available both for the MS and the PhD. Students admitted in this program take two-thirds of their course, research and thesis credits from the Department of Electrical Engineering and one-third of the credits from the Arts, Media and Engineering program.

The Arts, Media and Engineering program (AME) represents an ambitious interdisciplinary research community at ASU that is focused on the parallel development of media hardware, software, content and theory. The AME is a joint effort of the Herberger College of the Arts (HFA) and of the Ira A. Fulton School of Engineering. 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 facilitates knowledge. For more information, access http://ame.asu.edu.

Program Requirements: The PhD in Electrical Engineering with a concentration in AME requires 84 credit hours, a dissertation, and written and oral comprehensive examinations. Ten courses are required, typically seven from EEE and three from AME. Twelve hours of research are required, typically eight credits from EEE and four from AME. In addition, twelve hours of thesis are required, typically eight credits from EEE and four from AME. A qualifying examination, a comprehensive examination, and the dissertation defense are required.

Admission Requirements: Applicants with a master's degree who wish to be considered for the PhD program must have a minimum GPA of 3.5 (on a four-point 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 3.6 (on a four-point scale) in the last two years of undergraduate course work and have graduated from an ABET-accredited undergraduate program.

In addition, an applicant whose native language is not English must demonstrate proficiency in the English language by scoring at least 550 on the written Test of English as a Foreign Language (TOEFL), 213 on the computer-based TOEFL (CBT), or 83 on the Internet-based TOEFL (iBT). International students seeking teaching assistantships must demonstrate proficiency in spoken English by scoring at least 24 on the speaking portion of the iBT or 50 on the ASU administered SPEAK Test. Applicants should submit materials that reflect the hybrid nature of the arts/engineering degree.

## Engineering Science (Enterprise Systems Innovation and Management) (MSE) ESIEEMSE

Official Degree Awarded: Engineering Science (Enterprise Systems Innovation and Management) (MSE)
Program Description: The ASU Ira A. Fulton School of Engineering offers the Enterprise Systems Innovation and Managements (ESIM) 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 innovation and strategy innovation within the enterprise. In addition to Enterprise management, asset, design and business model innovation.

The Enterprise Systems Innovation and Management program (http://asuengineeringonline.com/online/?page=online_mse_esim ) allows professionals the opportunity to enhance their leadership abilities, 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 the 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.

## Program Requirements:

1. Students must complete a total of 30 semester hours equaling 10 courses to earn a Masters of Science in Engineering degree
2. Students must complete a three-credit hour applied project (CSE 593), three credits of applied engineering mathematics, three credits of engineering management/business
3. 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 a practice-oriented project (Applied Project). Additional requirements may exist for some academic units.

## Admission Requirements:

1. Applicants must submit the Graduate College online application,
2. The MSE in Engineering Science with the concentration in Enterprise Systems Innovation and Management requires an undergraduate grade point average of 3.00 on a 4.00 scale for the last 60 undergraduate credit hours,
3. 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 limited to the following: BS in Business, BS in Mathematics, BS in Engineering,
4. 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,
5. GRE is not required,
6. Applicants from a country whose native language is not English must provide evidence of English proficiency according to the guidelines defined by the ASU Graduate College.

## Engineering Science (Software Engineering) (MSE) ESIEEMSE

## IRA A. FULTON SCHOOL OF ENGINEERING, ONLINE

Contact: http://cpd.asu.edu | asu.cpd@asu.edu | BYENG 310 | 480/965-1740|4411
Official Degree Awarded: Engineering Science (Enterprise Systems Innovation and Management) (MSE)
Program Description: The MSE 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 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 work place.

## Program Requirements:

1. Students must complete a total of 30 credit hours equaling 10 courses to earn a Masters of Science in Engineering degree.
2. Students must complete a three-credit hour applied project (CSE 593), three credits of applied engineering mathematics, three credits of engineering management/business.
3. 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 a practice-oriented project (Applied Project). Additional requirements may exist for some academic units.

## Admission Requirements:

1. Applicants must submit the Graduate College online application,
2. Bachelor of Science in Computer or Electrical Engineering or a related field,
3. Grade point average of 3.00 (on a 4.00 scale) in the last 60 units of the undergraduate transcript (or for the last 12 units of the post-baccalaureate transcript),
4. GRE is not required,
5. Applicants from a country whose native language is not English must provide evidence of English proficiency according to the guidelines defined by the ASU Graduate College.

## Industrial Engineering (MSE) ESINDENMSE

IRA A. FULTON SCHOOL OF ENGINEERING, ONLINE
Contact: http://ie.fulton.asu.edu/ | ie@asu.edu | GWC 502 | 480/965-3424 | 5906
Official Degree Awarded: Industrial Engineering (MSE)
Program Description: The faculty in the Ira A. Fulton School of Engineering offers a professional program leading to the Master of Science in Engineering (MSE) degree with a major in Industrial 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 program 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.

Program Requirements: The 30 credit hours program requires four core courses, four area courses, two electives, and a written comprehensive examination.

Four core courses:

```
IEE 505
IEE 545, 566, or }56
IEE 572 or 578
IEE 574 or 575
Four area courses
Two elective courses
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A final comprehensive examination on three of the four core courses is required. A student who maintains a 3.75 grade point average on the four core courses is exempt from the written comprehensive examination.

Admission Requirements: For full consideration a complete application is required by the specified deadline. Check the department's Web site for more information (http://ie.fulton.asu.edu).

Application to the Graduate College
Statement of purpose
Three letters of recommendations
General Graduate Record Examination (GRE)

Submit all application materials to the Graduate College, PO BOX 871003, Tempe, AZ 85287-1003.
At the time of the application review, the following prerequisite courses will be evaluated in the student's transcripts to see if the student has met the minimum admission requirements.

ASU course numbers:
CSE 110: Principles of Programming with Java
CSE 205: Concepts of Computer Science and Date Structures
IEE 380: Probability and Statistics for Engineering Problem Solving
IEE 385: Engineering Statistics with Probability
IEE 376: Operations Research Deterministic Techniques/Applications
MAT 242: Linear Algebra
Additionally, at the time of application, all students must have completed 12 credit hours of calculus mathematics.

## Industrial Engineering (PhD) ESINDENPHD

IRA A. FULTON SCHOOL OF ENGINEERING, TEMPE
Contact: http://ie.fulton.asu.edu | ie@asu.edu | GWC 502|4809656874|5906
Official Degree Awarded: Industrial Engineering (PhD)
Program Description: The faculty in the Department of Industrial Engineering offer a PhD degree in Industrial Engineering. The overall educational objective of graduate study in industrial engineering is to improve each student's ability to understand, analyze, resolve problems and perform original research. within complex organizations. Industrial engineers must develop qualitative and quantitative abilities to guide the design and operation of complete organizations.

The faculty in the Department of Industrial Engineering are internationally recognized for their innovative research projects funded through both the government and industry.

Program Requirements: The Doctor of Philosophy degree requires a minimum of 85 credit hours after the baccalaureate degree.

1. A minimum of 57 credit hours of graduate coursework
2. 12 credit hours of IEE 792: Research
3. 12 credit hours of IEE 799: Thesis
4. One credit hour of IEE 594: Conference and Workshop
5. One credit hour of IEE 700: Research Methods
6. One credit hour of IEE 784 :Teaching Internship
7. One credit hour of either IEE 790: Independent Study or IEE 584: Internship

As part of the degree requirements, students are required to successfully pass the qualifying examination after one year on the core courses outlined by the department at the start of the program.

A written and an oral comprehensive examination is required on or before completion of the 57 credit hours of coursework in the program of study. The candidate must also successfully pass the dissertation prospectus and the dissertation oral defense.

Admission Requirements: For full consideration a complete application is required by the specified deadline. Check the department's Web site.

## 1. Application to the Graduate College

2. Statement of purpose
3. Three letters of recommendation
4. General Graduate Record Examination (GRE)

Submit all application materials online to the Graduate College at http://graduate.asu.edu/.
At the time of the application review, the following prerequisite courses will be evaluated in the student's transcripts to see if the student has met the minimum admission requirements.

ASU course numbers:

> CSE 110 : Principles of Programming with Java
> CSE 205 : Concepts of Computer Science and Date Structures
> IEE 380 : Probability and Statistics for Engineering Problem Solving
> IEE 385 : Engineering Statistics with Probability
> IEE 376 : Operations Research Deterministic Techniques/Applications
> MAT 242 : Linear Algebra Additionally, at the time of application, all students must have completed 12 credit hours of calculus mathematics.

## Master of Engineering (MEng) ESENGRMENG

## IRA A. FULTON SCHOOL OF ENGINEERING, TEMPE

Contact: http://www.asuengineeringonline.com | asu.cpd@asu.edu | BY 310|4809651740|4411

## Official Degree Awarded: Engineering (MEng)

Program Description: When pursuing a Master of Engineering (MEng) degree, students can customize their learning experience by selecting a curriculum that addresses their academic and professional goals. The Master of Engineering degree is designed for working professionals and delivered entirely online to meet the unique needs of professional engineers. The Master of Engineering is a practice-oriented degree.

In the MEng 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 a traditional area of study such as electrical and mechanical engineering or one of the nontraditional areas of study such as embedded systems, modeling and simulation, software engineering, quality and reliability, systems engineering, semiconductor processing and manufacturing and microelectronics packaging.

Engineers who enter the Master of Engineering 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 Master of Engineering degree, which can be earned totally through distance learning delivery, is a 30 -credit-hour degree program that does not require GRE results, a thesis, or on-campus attendance.

Program Requirements: Students must complete a total of 30 credit hours equaling 10 courses to earn a Masters of Engineering degree. One half of all coursework, excluding the practice-oriented project, must be in engineering.

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 for the Masters of Engineering program.

Admission Requirements: Students interested in this program must submit the Graduate College online application.

1. Bachelor's degree with a background for the desired field of study,
2. A minimum GPA of 3.0 on a 4.0 scale for the last 60 units of the undergraduate transcript,
3. Graduates of non-U.S. institutions will have to satisfy admission requirements established by the ASU Graduate College,
4. GRE is not required.

# Materials Science and Engineering (MS) ESMATEMS 

IRA A. FULTON SCHOOL OF ENGINEERING, TEMPE
Contact: http://som.asu.edu | som-grad@asu.edu | ECG 303|480/727-9314|8706

Official Degree Awarded: Materials Science and Engineering (MS)
Program Description: The School of Materials offers a Master of Science (MS) degree in Materials Science and Engineering. This includes a thesis. This graduate program prepares students for professional careers in materials science and engineering and related fields in industry, government and educational institutions.

Program Requirements: A total of 32 semester hours are required for the Master of Science Degree (MS) in Materials Science and Engineering, as detailed below. This degree includes a thesis.

Core Courses (six semester hours): Students must take six semester hours of core courses selected from the list below. Note that the choice $4 b$, c requires both PHY 511 and 512 but only the latter may be counted as a technical elective. This selection is most appropriate for students who have some background in modern physics.

1. MSE 522 Structure and Mechanical Properties (3)
2. MSE 523 Advanced Thermodynamics (3)
3. MSE 524 Kinetics and Phase Transformations in Solids (3)

4a. MSE 525 Physics of Materials (3) or
4b,c. MSE 526, 527 Materials Physics I and II (PHY 511, 512) (6)

Technical Electives (18 semester hours). Students must take 18 semester hours of technical electives, with the following conditions:

1. Either IEE 570 (Advanced Quality Control) or IEE 572 (Design of Experiments) are highly recommended.
2. Up to six semester hours may be at the 400 or higher level.
3. Up to nine semester hours may be outside MSE, by approval.
4. Up to three semester hours of reading and conference may be taken in place of three semester-hour electives.

## Seminar

Students must take two semester hours of seminar (MSE 591), which is one semester hour per semester.

## Thesis

Students must take six semester hours thesis (MSE 599), complete a thesis and pass the thesis defense examination.

## Preparatory Courses

Students who do not have a background in materials science and engineering may have to take prerequisite or deficiency courses. Students should contact the graduate advisor to discuss any deficiencies.

## Faculty Supervisory Committee

Students select a supervisory committee consisting of three members from the roster of graduate faculty in the School of Materials, which includes both core and affiliate faculty. The majority of members should be full time faculty in the School of Materials. The committee may include research scientists, academic and industrial professionals and other non-ASU affiliated individuals, subject to approval by the school director and the Graduate College.

## Program of Study (iPOS)

The interactive program of study (iPOS) is an online form that all graduate study must submit. The form lists the course work taken and the course work to be taken to complete the credit and course requirements for the degree. When the program of study is filed, the Graduate College approves the faculty supervisory committee. A student is not eligible to apply for graduation until the iPOS has been approved by the Graduate College.

## Thesis

The master's thesis must be based on original and independent research conducted by the student, under the guidance of the graduate supervisory committee. The thesis should demonstrate the candidate's ability to address a major intellectual problem and to propose meaningful questions and hypotheses. The oral defense engages the supervisory committee and the candidate in a critical, analytical discussion of the research and findings of the study as well as a review of the relation of the thesis to the materials field. MS thesis defenses are open to all members of the university community. Announcements are sent to department faculty and students and the announcement is also printed in university newspapers.

## Graduation

The student is eligible for graduation when all course work is finished, the thesis has been approved and the defense has been passed and the Graduate College requirements for graduation have been met and the thesis is submitted to the ASU Bookstore for binding.

## Maximum Time Limit

All work offered toward the MS degree must be completed within six consecutive years. The six years begins with the first course included on the student's approved program of study. The six year maximum time limit applies to all semester credit hours appearing on the program of study, including nondegree and transfer credits.

More Information (http://som.asu.edu/)
Admission Requirements: Application requirements, procedures and deadlines are outlined in the School of Materials Web site at http://som.asu.edu. Admission to the School of Materials graduate programs is highly competitive. The program cannot determine an applicant's chances of admission in advance. All application materials must be submitted and once the application file is complete, it is then forwarded to the graduate admissions committee for evaluation and recommendation.

Recommendations are sent to the Graduate College, where they are subject to final review. The Graduate College will send the applicant a formal letter of acceptance or denial. The application deadline for the fall semester is February 1 ; for spring semester, October 1.

In summary, applicants must submit the following application materials:

- submit the online application (http://graduate.asu.edu/admissions/index.html)
- pay the applicable application fees
- submit official transcripts
- submit a GRE score
- international students must submit a Test of English as a Foreign Language (TOEFL) score
- supplemental application
- resume
- statement of purpose
- three letters of recommendation

Financial aid is available to highly qualified applicants. The most common type of financial aid is teaching and research assistantships. RAs/TAs are accompanied by waivers of tuition and major Medical insurance benefit. Other types of financial aid include Fulton School of Engineering Fellowships and Science Foundation Arizona fellowships.

## Materials Science and Engineering (MSE) ESMATEMSE

## IRA A. FULTON SCHOOL OF ENGINEERING, ONLINE

Contact: http://som.asu.edu | som-grad@asu.edu | ECG 303 | 480/727-9314 | 8706
Official Degree Awarded: Materials Science and Engineering (MSE)
Program Description: The School of Materials offers a Master of Science in Engineering (MSE) degree in Materials Science and Engineering at ASU. This degree does not require a thesis. The degree is intended for students who are working full-time in local industry. Many of the courses are offered online. Three options are available: General or concentration in semiconductor
processing and packaging (SPP) with the processing or the packaging track. Courses for the SPP concentrations are available entirely online.

Program Requirements: A total of 32 semester hours are required for the Master of Science in Engineering Degree (MSE) in Materials Science and Engineering. Students must take 30 semester hours of technical electives, with the following conditions:

1. Either IEE 570 (Advanced Quality Control) or IEE 572 (Design of Experiments) are highly recommended.
2. Up to six semester hours may be at the 400 or higher level.
3. Up to nine semester hours may be outside MSE, by approval.
4. Up to six semester hours of reading and conference may be taken in place of six semester-hour of electives.

Seminar (two semester hours): Students must take two semester hours of seminar (MSE 591), which is one semester-hour of credit per semester.

## Preparatory Courses

Students who do not have a background in materials science and engineering may have to take prerequisite or deficiency courses. Students should contact the graduate advisor to discuss any deficiencies.

## Financial Aid

Financial aid is not available for MSE students.

## Faculty Supervisory Committee

Students select a supervisory committee consisting of three members from the roster of graduate faculty in the School of Materials, which includes both core and affiliate faculty. The majority of members should be full-time faculty in the School of Materials. The committee may include research scientists, academic and industrial professionals and other non-ASU affiliated individuals, subject to approval by the school director and the Graduate College.

## Program of Study (iPOS)

The interactive program of study (iPOS) is an online form that all graduate study must submit. The form lists the course work taken and the course work to be taken to complete the credit and course requirements for the degree. When the program of study is filed, the Graduate College approves the faculty supervisory committee. A student is not eligible to apply for graduation until the iPOS has been approved by the Graduate College.

## Culminating Event

In lieu of a thesis, students will complete a report ( 15 to 20 pages with figures and references) on a topic of their choice, which must be approved by the advisory committee. At the conclusion of the report, the student will make an oral presentation on the topic to his/her committee.

## Graduation

The student is eligible for graduation when all course work is finished, the thesis has been approved and the defense has been passed and the Graduate College requirements for graduation have been met and the thesis is submitted to the ASU Bookstore for binding.

Admission Requirements: Application requirements, procedures and deadlines are outlined in the School of Materials Web site at http://som.asu.edu. Admission to the School of Materials graduate programs is highly competitive. The program cannot determine an applicant's chances of admission in advance. All application materials must be submitted and once the application file is complete, it is then forwarded to the Graduate Admissions Committee for evaluation and recommendation. Recommendations are sent to the Graduate College, where they are subject to final review. The Graduate College will send the applicant a formal letter of acceptance or denial. The application deadline for the fall semester is February 1; spring semester, October 1.

Summary steps for application:

1. submit online application (http://graduate.asu.edu/admissions/index.html)
2. pay the applicable application fees
3. submit official transcripts
4. submit a GRE score
5. international students must submit a Test of English as a Foreign Language (TOEFL) score
6. supplemental application
7. resume
8. statement of purpose
9. three letters of recommendation

## Materials Science and Engineering (PhD) ESENMATPHD

IRA A. FULTON SCHOOL OF ENGINEERING, TEMPE

Contact: http://som.asu.edu | som-grad@asu.edu | ECG 303 | 480/727-9314 | 8706
Official Degree Awarded: PHD Materials Science and Engineering
Program Description: The School of Materials offers a Doctor of Philosophy (PhD) in Materials Science and Engineering at Arizona State University. This graduate program prepares students for professional careers in materials science and engineering and related field in industry, government and educational institutions.

## Program Requirements: 1. Credit Requirements

The PhD degree in Materials Science and Engineering consists of 84 semester hours of graduate work. A total of ten lecture courses ( 30 credits) plus three credits of seminar are required. Students entering the program with a master's degree in materials science may apply up to 30 credits toward the PhD program of study, but must take five lecture courses at ASU. If the MS has not been completed, a maximum of 12 semester hours of graduate work may be applied.

## 2. Required Courses

The core courses are shown below. These courses contain the foundation knowledge in the discipline of materials science that will prepare students for further graduate study in specialized areas, represented elective courses. The four lecture courses should be completed in the first 2 semesters of the program, in preparation for the qualifying examination.

Any core course may be waived by petition to the graduate program committee, with evidence of an equivalent course at another accredited university with a grade of B+ or better. The student must provide proof in the form of transcripts and a syllabus of that course. A petition should be submitted to the Associate Director of the Graduate Program who reviews requests for waivers or substitutions of the core courses. Students are expected to demonstrate a working knowledge of this material in the qualifying exam.

MSE 598 Advanced Thermodynamics (3 credits)
MSE 598 Structure and Mechanical Properties (3 credits)
MSE 598 Kinetics and Phase Transformations in Solids (3 credits)
MSE 598 Physics of Materials or PHY 511 Materials Physics I and PHY 512 Materials Physics II (3 credits)
SEM 591 Graduate Student Seminar (3 credits)
Total Core Credits: 15

## 3. Electives

Graduate elective courses may be selected from any of the courses in the School of Materials (MSE prefix) as well as courses from related disciplines such as chemistry, physics, electrical engineering, etc, subject to approval by the faculty supervisory committee. These courses should comprise a focused program of study in a particular area of materials science, organized in consultation with a faculty advisor. A current list of course offerings may be found on the School of Materials web site at http://som.asu.edu.

## 4. Interactive Program of Study (iPOS)

The interactive program of study is an online document where the student lists the courses he/she has taken and the courses he/she will take to complete the 84 credits required for the degree, which would include research and dissertation credits. The
student should file the Interactive Program of Study (iPOS) after he/she has completed the coursework portion of the degree. The iPOS can be accessed through ASU interactive at http://www.asu.edu/interactive.

## 5. Faculty Supervisory Committee

Students select a supervisory committee consisting of three to five members from the roster of Graduate Faculty in the School of Materials, which includes both core and affiliate faculty. The majority of members should be full time faculty in the School of Materials. The committee may include research scientists, academic and industrial professionals and other non-ASU affiliated individuals, subject to approval by the School Director and the Graduate College.

## 6. Qualifying Examination

All students in the PhD program must pass a qualifying examination. A single repeat attempt is allowed. This exam should be taken at the beginning of the 3rd semester, immediately following completion of the four core courses. The format is a 90 minute oral examination covering the material in the four core courses.

## 7. Comprehensive Examination and Dissertation Prospectus

All students in the PhD program must pass a comprehensive examination, which should be done within two semesters of passing the qualifier exam. This exam consists of a 20-page report on the topic of the expected thesis subject, which is presented orally to the student's advisory committee. A detailed description of policy and procedures is given in the student handbook. This comprises also the dissertation prospectus.

## 8. Dissertation Credits

PhD students must take 12 dissertation credits (and only 12) to complete the PhD program of study. Dissertation credits should be taken once the student begins research on a dissertation topic under the guidance of a faculty mentor.

## 9. The Dissertation

The PhD dissertation is based on original and independent research conducted by the student, under the guidance of the faculty mentor and faculty advisory committee. The dissertation should demonstrate the candidate's mastery of research methods, theory and tools of the discipline. The dissertation should demonstrate the candidate's ability to address a major intellectual problem and to propose meaningful questions and hypothesis. A copy of the dissertation is given to the department and a copy is placed in the ASU library.

Admission Requirements: Specific requirements and procedures for application to the School of Materials graduate programs can be found on the School of Materials Web site at http://som.asu.edu.

In summary, applicants must submit the following application materials:

```
submit the Graduate College online application,
    pay the applicable application fees,
    submit official transcripts,
    submit a GRE score,
    international students must submit a Test of English as a Foreign Language (TOEFL) score,
    supplemental application,
    resume,
    statement of purpose,
    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. RAs/TAs are accompanied by waivers of tuition and major Medical insurance benefit. Other types of financial aid include Fulton School Fellowships and Science Foundation Arizona fellowships.

# Mechanical Engineering (MS) ESMEMS 

IRA A. FULTON SCHOOL OF ENGINEERING, TEMPE
Contact: http://mae.fulton.asu.edu | mae@asu.edu | ECG 346 | 480/965-3291| 6106
Official Degree Awarded: Mechanical Engineering (MS)
Program Description: The faculty in the Department of Mechanical and Aerospace Engineering (MAE) offer a graduate program leading to the Master of Science (MS) degree in Mechanical Engineering. A number of wide and diverse research areas may be pursued. All of the department's graduate programs stress a sound foundation leading to a specialized area of study. Additional information can be found in the MAE Guidelines http://mae.fulton.asu.edu/graduate/graduate-studies.

Program Requirements: All candidates for the MS degree program are required to complete 30 semester hours and a thesis. Additional courses may be assigned by the supervisory committee depending on the background of the candidate.

The MS is the department's research master's degree.
The student is encouraged to select an advisor as soon as possible but in no case later than the middle of the first semester in residence. The name of the student's advisor must be filed with the department office. A change of advisor requires approval of the department chair.

The advisor, 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 with at least two being from MAE. Participation of individuals from institutions external to ASU is encouraged but these shall be nonvoting members. The advisor shall serve as the chair of the MSPC.

As soon as possible, but no later than the end of the student's first semester of residence, the student in consultation with the MSPC, must file a program of study (POS) with the department. The MSPC and the MAE chair must approve changes to the POS.

The POS must be in accordance with Graduate College and MAE requirements. The student is required to write and defend a thesis that describes an original contribution within the chosen discipline. The candidate must complete at least 30 semester hours of courses and thesis work distributed as follows:

1. at least 12 credit hours course work in the candidates major area of interest,
2. At least six credit hours of upper-division mathematics, as defined in the MAE Guidelines at http://mae.fulton.asu.edu/graduate/graduate-studies,
3. At least six credit hours of other graduate level course work outside the candidates major area of interest; these must be restricted to mathematics, engineering and/or science,
4. At least six credit hours of MAE 599 Thesis.

In accordance with MAE academic standards, students are required to maintain a 3.0 cumulative grade point average.
Admission Requirements: Student interested in applying to this program must submit the Graduate College online application. A minimum grade point average of 3.00 (on a 4.00 scale) is required for graduates from accredited U.S. institutions. The Graduate College is responsible for international grade point average interpretation.

All applicants are required to take the Graduate Record Examination (GRE).
Students who do not have English as their primary language are required to achieve a minimum score of 213 on the TOEFL examination.

Three letters of recommendation are required, using the format specified by the Department of Mechanical and Aerospace Engineering.

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.

# Mechanical Engineering (MSE) ESMEMSE 

IRA A. FULTON SCHOOL OF ENGINEERING, TEMPE
Contact: http://mae.fulton.asu.edu | mae@asu.edu | ECG 346|480/965-3291|6106

Official Degree Awarded: Mechanical Engineering (MSE)
Program Description: The faculty in the Department of Mechanical and Aerospace Engineering (MAE) offer a graduate program leading to the Master of Science in Engineering (MSE) degree in Mechanical Engineering. A number of wide and diverse research areas may be pursued. All of the department's graduate programs stress a sound foundation leading to a specialized area of study. Additional information can be found in the MAE Guidelines at http://mae.fulton.asu.edu/graduate/graduate-studies.

Program Requirements: All candidates for the MSE degree program are required to complete 30 semester hours and an applied project. Additional courses may be assigned by the supervisory committee depending on the background of the candidate.

The MSE is the Department's professional degree; it is a nonthesis degree.
The student is encouraged to select an advisor as soon as possible but in no case later than the middle of the first semester in residence. The name of the student's advisor must be filed with the department office. A change of advisor requires approval of the department chair.

The advisor, 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 with at least two being from MAE. Participation of individuals from institutions external to ASU is encouraged but these shall be nonvoting members. The advisor shall serve as the chair of the MSEPC.

As soon as possible, but no later than the end of the student's first semester of residence, the student in consultation with the MSEPC, must file a program of study (POS) with the department. The MSEPC and the MAE chair must approve changes to the POS.

The POS must be in accordance with Graduate College and MAE requirements. The candidate must complete at least 30 semester hours of courses distributed as follows:

1. At least 15 credit hours course work in the candidate's major area of interest
2. At least six credit hours of upper-division mathematics, as defined in the MAE Guidelines http://mae.fulton.asu.edu/graduate/graduate-studies.
3. At least nine credit hours of other graduate level course work outside the candidate's major area of interest; these must be restricted to mathematics, engineering and/or science.

In accordance with MAE academic standards, students are required to maintain a 3.00 cumulative GPA.
Admission Requirements: 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

Deficiencies for admission to the graduate degree programs are specified at the time of admission. The verbal, quantitative, and written components of the Graduate Record Examination (GRE) are not required unless specified by the respective academic unit in which the major is offered. TOEFL scores must be submitted by international applicants before admission is considered. Applicants with TOEFL scores of 550 ( 213 on the computer-based examination) or higher may be regularly admitted without requiring further language study. Applicants with scores below 550 may be regularly admitted but must complete study in ASU's American English and Culture Program (AECP) before enrolling in course work in the academic program.

## Mechanical Engineering (PhD) ESMEPHD

IRA A. FULTON SCHOOL OF ENGINEERING, TEMPE
Contact: http://mae.fulton.asu.edu | mae@asu.edu | ECG 346 | 480/965-3291 | 6106
Official Degree Awarded: Mechanical Engineering (PhD)

Program Description: The graduate programs in Mechanical and Aerospace Engineering (MAE) 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. The doctoral program emphasizes original research and provides students with a strong background for employment by academic institutions government laboratories and industrial research laboratories. Additional information can be found in the MAE Guidelines http://mae.fulton.asu.edu/graduate/graduatestudies.

Program Requirements: The program of study should be submitted as early as possible and must have the approval of the student's program committee (PC), MAE chair, and the dean of the Graduate College. All candidates for the PhD degree program are required to complete 84 semester hours.

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 discretion of the PC and MAE chair, students may apply up to 30 semester hours from a previously awarded master's degree toward their doctoral program of study.

The PhD degree is directed toward original research. The student is required to write and defend a dissertation that describes an original contribution within the chosen discipline. The research results should be suitable for publication in the archival literature. The department currently offers majors in Aerospace Engineering and Mechanical Engineering.

University regulations note the possibility of having two separate supervisory committees, a Program Committee and a Dissertation Committee. In MAE these will normally be one and the same and will be designated as the PC.

The PC shall consist of at least five ASU faculty with the majority being from MAE, but at least one being from outside the department. Furthermore, the PC should have the following character:

1. advisor (PC chair); must be a member of the MAE graduate faculty with an endorsement to chair,
2. two or three additional faculty in the student's general area of research,
3. at least one faculty outside the student's general area of research (e.g., mathematics, physics or other engineering disciplines).

A change in the PC requires approval of the department chair.
The POS must be in accordance with Graduate College and MAE requirements. A minimum of 84 semester hours is required for the PhD degree. Twelve (and only 12) of these hours must be dissertation. Of the 84 semester hours, at least 30 hours (which may include research credit) of the approved PhD program and 12 dissertation hours must be completed after admission to the student's PhD Program. Distribution of the 84 hours follows:

1. at least 18 credit hours course work in the candidates major area of interest,
2. at least six credit hours of upper-division mathematics, as defined in the MAE Guidelines at http://mae.fulton.asu.edu/graduate/graduate-studies,
3. at least nine credit hours of other graduate level course work outside the candidates major area of interest; these must be restricted to mathematics, engineering and/or science,
4. 12 (and only 12) semester hours of MAE 799 dissertation to be completed after admission to the PhD program,
5. additional research hours (MAE 792) may be utilized to meet the total 84 credit hour requirement.

In accordance with MAE academic standards, students are required to maintain a 3.25 cumulative grade point average.
Admission Requirements: Students interested in applying to this program must submit the Graduate College online application.

## Nuclear Power Generation (Grad Certificate) ESNPGGRCT

IRA A. FULTON SCHOOL OF ENGINEERING, TEMPE
Contact: http://ee.fulton.asu.edu/ | askee@asu.edu | GWC 212 | 480/965-3590 | 5706

Official Degree Awarded: Nuclear Power Generation (Certificate) (CERT)
Program Description: The Nuclear Power Generation graduate certificate is a multidisciplinary professional option within the Fulton School of Engineering. New and existing courses from multiple academic units will constitute both the core and elective classes available to the student. The primary mode of instructional delivery will be online using the facilities of the Engineering Office of Global Outreach and Extended Education (GOEE). The courses will be offered on-campus and simultaneously recorded to streaming video for distance-learning via the Internet.

Program Requirements: Required Semester Credit Hours: 18
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 will be required to submit an official ASU graduate online application, official transcripts of all undergraduate and graduate coursework, and a statement of career and educational goals. Regular admission may be granted to applicants who have achieved a grade point average of 3.0 ( 4.0 scale) or better in the last two years of work leading to a bachelor's degree and are competitive in the applicant pool.

## GRADUATE COLLEGE

## Biological Design (PhD) GCBDSPHD

GRADUATE COLLEGE, TEMPE

Contact: http://biologicaldesign.asu.edu/ | biologicaldesign@asu.edu | BD A320CB | 480/727-9298 | 5001

## Official Degree Awarded: Biological Design (PhD)

Program Description: The doctoral program in Biological Design seeks to develop a new type of scientist by training students in core disciplines related to biology 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 research community at ASU and with partner organizations locally and nationally. Students are expected to complete the program in four to five years. Students accepted into the Biological Design PhD program will be supported as Research Assistants (RAs) in the first year of study and generally through the term of their studies.

Program Requirements: The PhD program requires 84 semester hours, an oral examination, a defense of a written disseration and at least 18 hours of formal course work. Because this is a highly-mentored program designed around each student, your advisor will provide guidance on the appropriate curriculum based on your core discipline of interest.

The key distinguishing features of the curriculum are:

- A personalized program of study that allows you to explore the disciplinary areas of greatest interest to you.
- Three ten-week laboratory rotations during your first year of study
- A two-semester core course sequence consisting of two courses that will provide core training in all the relevant biorelated areas.
- Encouragement to choose dissertation research projects that are use-focused, contribute to solving a large-scale challenge, and promise rich interdisciplinary experiences.
- Students accepted into the Biological Design PhD program will be supported as Research Assistants (RAs) in the first year of study and generally through the term of their studies.

If you are accepted to the Biological Design PhD Program:
During the first academic year, in addition to a core course sequence, you will complete three 10-week laboratory rotations. Rotations can be in any laboratory on the ASU campus provided it is centered largely on biological research and is approved by the Biological Design graduate faculty chair. Your advisor will help coordinate these rotations to help you choose the best laboratory and mentor for you, and one which exposes you to diverse approaches to science.

At the end of the first year of course work and rotations (May), you will choose a lab and professor to work in consultation with the Biological Design Program and prospective mentors. One semester of teaching assistant participation will be required to gain experience in teaching. All Biological Design graduate students through the course of the graduate experience will participate in special seminars, meetings and social activities to encourage broad research interactions. You will be eligible for program support to attend scientific meetings.

You may request to work in a laboratory at ASU the summer prior to the start of your graduate studies.
Admission Requirements: Applications for the Biological Design PhD program are taken and processed through the ASU Graduate College. The application deadline for the program is January 1.

Prior to submitting the online application, candidates should prepare the following documents (these documents can be uploaded into the application as .doc, .rtf. or .txt file types):

- Personal Statement: This document should reflect your career and educational goals, and should explain why you are interested in pursuing this program. Candidates should describe their prior and current research experience. Your statement should be one to three pages.
- Resume: Your resume should reflect your prior research and employment experience and list honors, awards, memberships held and any publications.

Additionally, candidates must submit the following information:

- GRE test scores: The institution code for ASU is 4007. Subject test scores are also recommended but not required.
- Letters of Recommendation: Three letters of recommendation relative to your academic career are required for consideration. At least one letter should be an academic reference. Letters that reflect the candidate's research experience and potential are strongly encouraged. The applicant should collect all letters in separate sealed envelopes, but should mail them together in a larger envelope to the ASU Graduate College. When you submit your online application, you will be given a Document Reference Number that ensures proper matching of documents with your application. Please write your Document Reference Number on the upper left side of the envelope and mail to:


## Graduate College

Arizona State University
Interdisciplinary Bldg, B wing, Room 170
PO Box 871003
Tempe, AZ 85287-1003
For additional Graduate College application requirements, including transcripts, fee and international application requirements, please review this link: http://www.asu.edu/graduate/admissions/admissions_checklist.htm.

## Human and Social Dimensions of Science and Technology (PhD) GCHSDSTPHD

GRADUATE COLLEGE, TEMPE
Contact: http://hsd.asu.edu | hsd@asu.edu | LSC 284 | 480/965-1778 | 3301
Official Degree Awarded: Human and Social Dimensions of Science and Technology (PhD)
Program Description: Under the auspices of the Graduate College, a steering committee administers the PhD program in Human and Social Dimensions of Science and Technology (HSD). This program prepares students to teach and conduct research on the
conceptual, historical, social, and policy foundations of science and technology, and their interactions with society, using humanistic and social scientific methods.

The HSD program responds to the 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 well-being can only be found by fully integrating research from across many social science and humanities disciplines. The PhD program in HSD 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.

Program Requirements: The PhD in HSD is a research degree, culminating in a dissertation, which must draw on multiple disciplinary perspectives.

The degree requires completion of 84 semester hours of which 12 hours (and only 12) are for dissertation. Students may apply up to 30 hours from a prior master's degree toward 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 year-long 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 certain dissertation projects.

## Fields

In consultation with the student's supervisory committee, each student develops three distinct fields to provide the in-depth training necessary to formulate and carry out his or her dissertation research. Each student must complete two major and one minor field. Major fields consist of the equivalent of three courses of specialized work (either in existing elective courses or through independent reading or research projects) designed to achieve mastery of a particular intellectual subject. The minor field consists of the equivalent of two courses of specialized work. For each field, the supervisory committee and student will select a field director, who is a member of the student's supervisory committee and who will be responsible for working with the student to determine field content as well as the format for demonstrating mastery of the field, such as a field exam, field paper, or exemplary course paper.

After the completion of course work or other assigned activities for each field, a student will demonstrate mastery of the field. The student's supervisory committee will assess mastery, in a format proposed by the committee and the student and approved to by the steering committee. Common formats for demonstrating mastery of a field include a field exam, a field paper, or an exemplary course paper. The timing of demonstration of mastery of each of the three fields is determined by the student and his or her supervisory committee; the demonstrations need not occur at the same time.

## Supervisory Committee

Each student appoints his or her supervisory committee no later than the end of the second semester of program enrollment. A supervisory committee includes a chair, who is a tenured or tenure-track faculty member of the HSD faculty, and two to four additional members. Fifty percent or more of the supervisory committee members must be HSD faculty. The student's field directors are members of his or her supervisory committee. A student may change the members of his or her supervisory committee with approval of the program steering committee chair.

## Study Plan and Study Plan Review

During the second semester, each student develops, in collaboration with the student's supervisory committee, a study plan. The study plan specifies the second-year research project topic, fields, and electives the student will pursue.

The study plan review is a formal meeting of each student's supervisory committee at which the student presents the study plan for supervisory committee approval. This meeting is typically held during the second semester of enrollment or at the beginning of the third semester. Students may not begin a fourth semester of study without an approved study plan.

## Comprehensive Examination

Each student develops a written dissertation prospectus, including a bibliography, discussion of relevant research skills, and a brief (less than one page) description of each field completed and how mastery was demonstrated. The dissertation prospectus shows t

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.

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 PhD degree and identifies one or more faculty member(s) whose interests and/or work are relevant to the student's proposed research. A writing sample, general GRE scores, and three academic letters of recommendation are also required. Regular admission may be granted to applicants who meet Graduate College admission requirements.

## Neuroscience (PhD) GCBMENPHD

GRADUATE COLLEGE, TEMPE
Contact: andrew.webber@asu.edu | Intsd B288 | 480/965-5906 | 1003
Official Degree Awarded: Neuroscience (PhD)
Program Description: Neuroscience (PhD)

## Statistics (Grad Certificate) GCSTATCE

GRADUATE COLLEGE, TEMPE
Contact: statistics@asu.edu | GWC 551 | 480/965-2671 | 5906
Official Degree Awarded: Statistics (certificate) (CERT)
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 School 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. The certificate requires 15 semester hours of course work selected from approved courses presently offered in graduate programs at ASU. It is administered by the Committee on Statistics, which also administers the Master of Science in Statistics degree through the Graduate College.

Program Requirements: The certificate program requires a minimum of 15 semester hours of course work. To qualify for the certificate, a student must complete courses in applied regression analysis (IEE 578, QBA 525, or STP 530) and analysis of variance/experimental design (IEE 572, QBA 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 MS in Statistics degree. Students must have a GPA of at least 3.00 in the courses which apply to the certificate.

Admission Requirements: To apply in the certificate program, the applicant must have a bachelor's degree, and should have completed the following courses (equivalents at ASU are given in parentheses): one semester of calculus (MAT 270 or 210), and introductory applied statistics (QBA 221 or STP 420). The applicant is also required to have some computer literacy with knowledge of a programming language, a spreadsheet program, or a statistical software program.

## Statistics (MS) GCSTATMS

## GRADUATE COLLEGE, TEMPE

Contact: http://graduate.asu.edu/statistics | statistics@asu.edu | PSA 744 | 4809652671| 1003

## Official Degree Awarded: Statistics (MS)

Program Description: The Committee on Statistics offers a program leading to the degree Master of Science 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 School 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 MS degree 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 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.

Program Requirements: Completion of the degree requires 30 semester hours of approved credit, none of which may be from the prerequisites. The program must include the nine semester hours from three required theory courses: probability (STP 421), mathematical statistics (STP 427), and theory of statistical linear models (STP 526). 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, QBA 525, or STP 530) and applied analysis of variance/design of experiments (IEE 572, QBA 530 or STP 531). The program must also include either three semester hours of applied project (IEE 593, QBA 593, or STP 593) or six semester hours of thesis (IEE 599, QBA 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 semester hours come from elective courses chosen by the student with the approval of supervising faculty. A maximum of six semester 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. One area of emphasis is. Possible areas of specialty include, among others, applied data analysis, Bayesian analysis, biostatistics, categorical data analysis, data mining, design of experiments, industrial statistics and six sigma methodology, linear models, multivariate analysis, sampling and survey research, smoothing methods, statistical computing, statistical process control, and time series analysis.

Admission Requirements: Applicants must satisfy the general requirements for admission to the Graduate College. 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. The submission of Graduate Record Examination test 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.

# JOURNALISM AND MASS COMMUNICATION, WALTER CRONKITE SCHOOL OF 

Master of Mass Communication (MMC) CSMCOMMMC

WALTER CRONKITE SCHOOL OF JOURNALISM AND MASS COMMUNICATION, DTPHX

Contact: http://cronkite.asu.edu/grad/index.php | masscomm@asu.edu | 555 N. Central Ave. Ste. 302 | 602/496-5555|2020
Official Degree Awarded: Mass Communication (MMC)
Program Description: The Master's of Mass Communication (MMC) program offers basic journalism skills instruction, education in journalism values, and instills 21st century 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 Cronkite School's specialized experiences: NewsWatch, New Media Innovation Lab, the Knight Center for Digital Media Entrepreneurship, Cronkite News Service Print, Cronkite News Service Broadcast, projects covering the borderland with Mexico, and a strategic media experience.

Program Requirements: The master's program is a full-time, three-semester long, 36 -semester-hour immersion program. Students with extensive professional experience may be offered the opportunity to pursue the 30 -semester-hour mid-career option.

Admission Requirements: Admission is granted for the fall semester only. The application deadline is February 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.

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 semester hours or 90 quarter hours of undergraduate course work.

The scores on the quantitative and verbal sections of the Graduate Record Exam (GRE) of those admitted average about 1213, with the verbal score being particularly important to the Cronkite School's graduate committee. TOEFL scores must be at least 600 for the paper-based exam, 250 for the computer-based exam, and 100 for the iBT score.

Applicants must submit three letters of recommendation, a personal statement of interest (350-500 words in length) and a resume.

## LAW, SANDRA DAY O'CONNOR COLLEGE OF

## Juris Doctor (JD) LWJDJD

SANDRA DAY O'CONNOR COLLEGE OF LAW, TEMPE
Contact: http://www.law.asu.edu | iim-mls.admisions@asu.edu | 4809656181|7906
Official Degree Awarded: Juris Doctor of Law (JD)
Program Description: The Sandra Day O'Connor College of Law offers programs in traditional law studies that culminate in a Juris Doctor (JD) degree. Within the JD program, there are many areas of concentration, such as Indian law, science and technology, tax, and philosophy. In addition, the college offers several joint degree programs for individuals who wish to earn additional degree distinctions along with the JD.

The Sandra Day O'Connor College of Law offers a fully ABA-accredited Juris Doctor degree program. The program is full-time and classes are offered during the day. The college enrolls about 170 students each fall.

Program Requirements: Students must complete a total of 88 semester hours and write a substantial paper to complete the graduation requirements. First year students are required to take a specific set of classes, including Contracts, Torts, Criminal Law, Civil Procedure, Constitutional Law I, Property, Law and the Regulatory State, and Legal Research and Writing. After the first year, the only required courses are Professional Responsibility and Criminal Procedure or Constitutional Law II. Students may also participate in the various clinics, simulation courses, or externships.

Admission Requirements: The Sandra Day O'Connor College of Law at Arizona State University enrolls only one first-year class per year, and it enters in the fall semester. The program is full-time, day-time only. Each year, far more applications are submitted to the College of Law than the college's facilities and programs can accommodate. Thus, admission is competitive. The College of Law makes its admissions decisions based upon all information contained in the applicant's file.

To be considered for admission to the JD program, an applicant must have taken the Law School Admission Test (LSAT) and have earned, or expect to earn by the time of enrollment in law school a baccalaureate 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 must be submitted through the Law School Data Assembly Service (LSDAS) and will be provided to the College of Law by LSAC with the applicant's LSAT record.

The Sandra Day O'Connor College of Law at Arizona State University will provide full file review to 100 percent of the completed applications to the JD 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 the rigor of the undergraduate course of study, graduate study, demonstrated commitment to public service, work experience, leadership experience, extracurricular or community activities, history of overcoming economic or other disadvantage, personal experiences with discrimination, overcoming disability, geographic diversity, diversity of experience and background, maturity, ability to communicate, foreign language proficiency, honors and awards, service in the Armed Forces, publications, exceptional personal talents and other factors.

## Early Admission

To be considered timely for Early Admission, an applicant must take the LSAT no later then the September/October administration, and submit a completed application for admission postmarked or electronically submitted no later then November 1. Any application postmarked or electronically submitted after November 1, or remaining incomplete as of December 10, even if marked for Early Admission, will be considered along with the Regular Admission applications.

The admissions committee will make every effort to provide a response on all completed Early Admission applications by the end of January. Please note that some applicants will not receive a final decision of admission or denial, but will instead receive notice that they are being held for review with the regular applicant pool.

## Regular Admission

To be considered timely for Regular Admission, an applicant must take the LSAT no later than the February administration, and submit a completed application for admission postmarked or electronically submitted no later than February 1. Any application postmarked or electronically submitted after February 1, or remaining incomplete as of March 10, is untimely and may be at a disadvantage in the review process.

For an application to be considered complete, it must include the following:

- A \$50 application fee (credit card/check/money order).
- A personal statement that does not exceed three double-spaced, typed pages.
- A resume that does not exceed three typed pages.
- Explanations to affirmative answers to any conduct questions.
- Law School Admissions Test (LSAT) score(s) from Law Services.
- A complete Law School Data Assembly Service (LSDAS) report with all transcripts and letters of recommendation. The LSDAS report must be from the current application year.

Applicants who have received an undergraduate or graduate degree from a foreign institution

## Law - Biotechnology and Genomics (LLM) LWGENOMLLM

## SANDRA DAY O’CONNOR COLLEGE OF LAW, TEMPE

Contact: http://www.law.asu.edu | llm-mls.admissionsl@asu.edu | 4809656181 | 7906
Official Degree Awarded: Biotechnology and Genomics (LL.M.)
Program Description: The Master of Laws (LLM) in Biotechnology and Genomics program is offered through the Sandra Day O'Connor College of Law's Center for the Study of Law, Science, and Technology, 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, LLM candidates (those who have received their Juris Doctor or comparable terminal law degree) will examine the legal issues surrounding genetic applications such as genetically modified organisms, forensic evidence, gene testing, gene therapy, cloning, stem cells, and behavioral genetics. The issues relate to privacy, confidentiality, regulation, liability, international trade, evidentiary standards, intellectual property, licensing, and business planning.

LLM students explore and examine the law that enables and constrains the development, control, and application of biotechnology and genomics. Relevant legal fields include health law, particularly public health law, agricultural law and policy, and 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.

Program 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 semester hours of course work to obtain the LLM in Biotechnology and Genomics degree. A candidate may elect to write a graduate thesis for either three or six semester hours, or can instead elect to not 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, Policy and Law. The remaining semester hours will generally be obtained from the list of elective courses. With faculty advisor approval, a candidate may satisfy up to six semester hours with courses offered by the law school or other ASU departments.

Admission Requirements: Criteria for admission include grades in law school and other academic programs, recommendations by professors and/or employers, employment and life experience, and evidence of interest and potential in biotechnology and genomics. The admissions committee recommends and appreciates early applications. We do not anticipate matriculating more than 20 full-time students annually. Applications are currently accepted on a rolling basis, with preference given for fall start dates.

Applicants to the program must submit:

1. proof of a law degree; either a JD from an ABA accredited law school in the United States or a comparable law degree from a foreign law school approved by either the government or the relevant accrediting authority of the nation where the school is located;
2. an essay describing their interest in the program;
3. a writing sample;
4. two letters of recommendation;
5. completed LLM application; and
6. official transcripts of undergraduate and law degree studies.

International Applicants or those who have earned academic credit for law in foreign countries.

## Course Evaluations:

The World Education Services (WES) must independently evaluate all academic documents issued in countries than the United States. Please contact WES at their website (http://www.wes.org/) to obtain an application for an evaluation. You must request a course-by-course evaluation and have an official copy from WES be sent directly to:

Sandra Day O'Connor College of Law
Arizona State University
Office of Admissions and Financial Aid
1100 S. McAllister Ave.
PO Box 877906
Tempe, AZ 85287-7906

## Law - Legal Studies (MLS) LWLGSMLEGS

SANDRA DAY O'CONNOR COLLEGE OF LAW, TEMPE
Contact: http://www.law.asu.edu | llm-mls.admissionsl@asu.edu | 4809656181 | 7906
Official Degree Awarded: Legal Studies (MLS)
Program Description: The Master of Legal Studies (MLS) program offers an interdisciplinary immersion in the law school's curriculum to highly qualified non-lawyers who do not seek a degree that will enable them to practice law, but instead wish to achieve a basic familiarity with legal thought and to explore the relation of law to their ongoing fields of work or scholarship. The program seeks MLS candidates from a variety of backgrounds with a diversity of goals: natural scientists and engineers who want to study the legal regulation of science or the protection of intellectual property; social scientists who seek a foundation in law and legal process in order to design and conduct better informed empirical research on policy issues; humanities scholars who desire a foundational understanding of law and legal culture to enrich their primary historical or philosophical or literary scholarship; journalists who want to report on law-related events in a more informed and illuminating way; entrepreneurs and managers who hope to better advance their companies in industries as diverse as banking, insurance, construction, development, agribusiness, and electronics by better understanding the legal system in which they operate. This program is intended for the professional who wishes to study law, but does not seek to become an attorney. Completed course work from the MLS will not qualify as law school credit.

Program Requirements: The program consists of 30 semester hours of approved study. The degree can be completed in two semesters of full-time study or spread out over two or more years in part-time study. Each student is assigned a faculty advisor to help develop a curriculum that best meets the student's goals. MLS students are required to choose at least two of the following basic first year law courses-Contracts, Constitutional Law, Criminal Law, Property, and Torts. Other courses can be chosen from Legal Process, Legislation, or Jurisprudence in order to include a broad perspectives course in their curriculum. These core courses will provide 10 to 12 of the requisite 30 semester hours. The remainder of the hours are electives. Course selection will be flexible to accommodate the diversity of intellectual interests the program is intended to serve. Students will earn the remainder of their credits through whatever combination of elective law school courses-and in some instances courses offered elsewhere in the University-best complements and advances the student's goals.

Admission Requirements: To begin this graduate-level program, students must have earned an undergraduate degree from an accredited four-year college or university in the United States or a comparable degree from a foreign institution. All applicants must submit official transcripts of their undergraduate and graduate degree studies, a personal statement, a resume, a writing sample, and two letters of recommendation. The admissions committee recommends and appreciates early applications.

Criteria for admission include prior academic experience, recommendations by professors and/or employers, employment and life experience, and evidence of potential for success. Graduate school entrance exams (e.g., LSAT, GRE, GMAT, etc) are not required, but applicants who have taken those exams are invited to report their scores. One goal of the admissions committee is to admit a diverse student body that will contribute to a dynamic and interesting learning environment. Academic background and strength, though important, are not the only criteria evaluated in the application process. For this reason, a personal statement, written by you, limited to 1250 words on double-spaced, typed pages, is a required part of the application. In this statement we seek information about your distinctive qualities, talents, successes, achievements, interests, life experiences, and interest in the program. Your writing sample should be a professional or academic sample, written solely by you, that gives an indication of your writing ability.

1. proof of a four year degree; either
a) an accredited college or university in the United States or
b) a comparable degree from a foreign institution approved by either the government or the relevant accrediting authority of the nation where the school is located;
2. a personal statement;
3. a résumé;
4. a writing sample;
5. two letters of recommendation;
6. a completed MLS application; and
7. official transcripts of undergraduate and graduate degree studies

Mail these items to the following address:

Sandra Day O'Connor College of Law
Arizona State University
Office of Admissions and Financial Aid
PO Box 877906
Tempe, AZ 85287-7906

## International Applicants

Applicants who have earned academic credit in countries other than the United States: The World Education Services (WES) must independently evaluate all academic documents issued in countries than the United States. Please contact WES at their website (http://www.wes.org/ ) to obtain an application for an evaluation. You must request a course-by-course evaluation and order that an official copy from WES be sent directly to:

Graduate Admissions
Sandra Day O'Connor College of Law
Arizona State University
PO Box 877906
Tempe, AZ 85287-7906

Your application for admission to the Sandra Day O'Connor College of Law at Arizona State University will not be complete until this evaluation is received by the Sandra Day O'Connor College of Law.

International applicants must meet the requirements of the Graduate College as well as those of the Sandra Day O'Connor College of Law.

If English is not your native language, you must provide evidence of English proficiency as indicated by acceptable scores. Applicants should have a TOEFL score above 600 (paper) or 250 (computer). Exceptional candidates with relevant experience and background who have scores of at least 590 (paper) or 243 (computer) also will be considered.

## Law - Tribal Policy, Law, and Government (LLM) LWTBLMLAWS

SANDRA DAY O'CONNOR COLLEGE OF LAW, TEMPE
Contact: http://www.law.asu.edu | llm-mls.admissions@asu.edu | 4809656181 | 7906
Official Degree Awarded: Tribal Policy, Law and Government (LL.M.)
Program Description: The LLM 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. Today, the Sandra Day O'Connor College of Law graduates more Indian law specialists than any other law school in the country. The LLM 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 United

States, home to roughly one-third of the native population in the United States 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.

Program Requirements: The program is administered by the Indian Legal Program and consists of two different tracks intended to serve two distinct groups of students. Candidates will choose either the practicum track or the thesis track.

## The LLM Practicum Track

The LLM 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 semester hours of study, including a clinical law experience. 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 state, tribal and federal court practice; tribal code drafting; and research projects for tribal courts and governments. 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.

## The LLM Thesis Track

The LLM Thesis track is oriented toward students who desire to undertake the academic study of tribal law and federal Indian law in preparation for careers as professors and scholars. This track is designed for candidates who have demonstrated analytic and research ability, and who desire to undertake extended study, research, and scholarly writing. This track will require a minimum of 30 semester hours of study, including completion of a thesis of publishable quality.

Students will build a foundation in scholarly research and writing in tribal law and federal Indian law. While matriculating in the program, LLM students will have the opportunity to teach at the law school level. Students will be assigned to an Indian law professor who will mentor them in creating a thesis and submitting publishable articles. Graduates will have the necessary skills for entry-level positions in academia.

Admission Requirements: Criteria for admission include grades in law school and other academic programs, written recommendations by professors and/or employers, relevant professional and practical experience, and evidence of interest and potential in Indian Law.

Students admitted to the LLM program in Tribal Policy, Law, and Government must possess either a Juris Doctor degree from a law school in the United States accredited by the American Bar Association or a comparable terminal law degree from a law school accredited by the government or the highest accrediting authority of the nation inwhich the school is located. The program is oriented, however, toward students who have a basic understanding of American government and have taken the relevant foundational course in federal constitutional law. For this reason,it is assumed that most applicants will have earned their degrees from law schools within the United States.

The LLM program is designed to accommodate seven students per year. Interest in this program appears to be large. Because the committee utilizes a "rolling admissions" process and space is limited, your chances of acceptance are higher the earlier you apply.

Applicants to the program must submit:

1. proof of a law degree; either
a) a JD from an ABA accredited law school in the United States or
b) a comparable law degree from a foreign law school approved by either the government or the relevant accrediting authority of the nation in which the school is located;
2. an essay describing their interest in the program;
3. a writing sample;
4. two letters of recommendation;
5. a completed LLM application; and
6. official transcripts of undergraduate and law degree studies.

## International Applicants:

Applicants who have earned academic credit in countries other than the United States: The World Education Services (WES) must independently evaluate all academic documents issued in countries other than the United States. Please contact WES at their website (http://www.wes.org/) to obtain an application for an evaluation. You must request a course-by-course evaluation and order an official copy from WES be sent directly to:

Graduate Admissions
Sandra Day O'Connor College of Law
Arizona State University
PO Box 877906
Tempe AZ 85287-7906

Your application for admission to the Sandra Day O'Connor College of Law at Arizona State University will not be complete until this evaluation is received by the college.

International applicants must meet the requirements of the Graduate College as well as those of the Sandra Day O'Connor College of Law. If English is not your native language, you must provide evidence of English proficiency as indicated by acceptable scores. Applicants should have a TOEFL score above 600 (paper) or 250 (computer). Exceptional candidates with relevant experience and background who have scores of at least 590 (paper) or 243 (computer) also will be considered.

## Law, Science, and Technology Certificate LWLAWSTCE <br> SANDRA DAY O'CONNOR COLLEGE OF LAW, TEMPE

Official Degree Awarded: Law, Science, and Technology (certificate) (CERT)
Program Description: The certificate program provides coherence and structure to student academic development; there are specializations in intellectual property, healthcare law, environmental law, genomics and biotechnology law, and law and psychology. Externships in the local legal community provide students with hands-on experience under the guidance of skilled practitioners. The center's Technology Ventures Clinic provides a unique applied clinical experience where students evaluate inventions generated by ASU researchers, devise marketing strategies, and file patent documentation. Subjects include scientific evidence, intellectual property and cyber law, behavioral biology, healthcare and bioethics, information and communication technologies, statistics and mathematical methods, biotechnology, environmental and natural resource law and policy, and risk management.

Program Requirements: For specific program requirements, see (http://www.law.asu.edu/?id=220) Law, Science, and Technology Certifcate Program.

Admission Requirements: The certificate program is limited to students who are enrolled in the Sandra Day O'Connor College of Law. Admissions information is available at Admissions (http://www.law.asu.edu/?id=330).

## LIBERAL ARTS AND SCIENCES, COLLEGE OF

## African Studies (Grad Certificate) LAAFRICACE

COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE
Contact: http://www.asu.edu/clas/aframstu/ | aframstu@asu.edu | WILSN 140|480/965-4399|0903

Program Description: The graduate certificate in African and African Diaspora Studies is an interdisciplinary program with four areas of emphasis: African studies, African diaspora studies, women and gender in African and African diaspora studies, and comparative 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.

Program Requirements: The certificate program requires 18 hours of course work:

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AFR 500 RM: Theory and Methods (3)
Emphasis courses* (9)
Capstone project (3)
Elective (3)
Total }1
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* Students choose one of the following emphases: African studies, African diaspora studies (includes African American studies), women and gender in African and African diaspora studies, or comparative studies.

Admission Requirements: Applicants must submit the Graduate College online application. Admission to the graduate certificate program in African and African Diaspora Studies 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 as nondegree graduate students.

To be considered for admission, students should submit the following documents to the African and African American Studies program office (WILSN 140):

1. a completed application form (available in WILSN 140),
2. a personal statement describing interest in the certificate, academic objectives, and career goals,
3. a résumé or curriculum vitae,
4. an official transcript showing the completion of a bachelor's degree in any academic field, and
5. two letters of recommendation.

After reviewing the application materials, the coordinator of the certificate program contacts the student to set up an interview.

## Anthropology (Museum Studies) (MA) LAMUSEUMMA

COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE
Contact: http://shesc.asu.edu/graduate_studies | anthgrad@asu.edu | ANTH 233 | 4809656215 | 2402
Official Degree Awarded: Anthropology (Museum Studies) (MA)
Program Description: The School of Human Evolution and Social Change offers an MA degree 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 research, collections management, exhibition work, educational programming and administration.

Program Requirements: A minimum of 30 semester hours of graduate work approved by a student's supervisory committee and the Graduate College is required. More than 30 semester hours are required in certain programs. The program offers a thesis and non-thesis option.

Admission Requirements: 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 statement of their interests and professional goals and three letters of recommendation. Applicants who received their BA during the past ten years must also submit scores on the Graduate Record Examination. 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.

## Anthropology (PhD) LAANTHRPHD

COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE
Contact: http://shesc.asu.edu/graduate_studies | shescgrad@asu.edu | ANTH 233|4809656215 | 2402

## Official Degree Awarded: Anthropology (PhD)

Program Description: The School of Human Evolution and Social Change is an excellent choice for students wanting to pursue a PhD in the traditional fields of anthropology (socio-cultural anthropology, linguistics, physical anthropology or archaeology). It is also an ideal environment for students who want to combine these approaches and other disciplines to explore specific issues or research questions. Our flexible graduate curricula are designed to encourage students to design innovative programs of study to pursue their interests, while receiving broad training in key areas. The anthropology faculty actively engage with faculty in other disciplines, including environmental economics, formal modeling, urban planning, science and technology studies, and sociology.

The school offers many exciting hands-on learning opportunities through laboratories and field-based research that focus on finding ancient human fossils; unearthing buried cities, villages, and hunter-gatherer camps; understanding the development of language; appreciating the cultures of such diverse areas as Southeast Asia, Latin America, and the Mediterranean Basin; disease and medicine; human-environmental interactions; and many other topics that explore humans of the past and present. Students without a master's degree apply to Phase I of the program, where they will receive a master's degree in passing. During this phase, students develop a Research Skills Portfolio and present one of their papers in a school-wide research symposium. A formal evaluation is then completed to determine the student's readiness to enter Phase II of the program. Students with an MA in anthropology or related field begin in Phase II of the PhD program where they receive training to become expert scholars able to contribute not only to their chosen field, but to finding solutions to humankind's greatest challenges.

Program Requirements: This degree program requires 84 credit hours, a dissertation, and a written comprehensive examination. The doctoral program is divided into three phases. The first consists of 30 semester hours of course work and readings, culminating in a research portfolio, which normally consists of two research papers. The faculty may require additional hours of course work or other preparation for entering students who are unfamiliar with the concepts of general anthropology at a level equivalent to that of the ASU undergraduate anthropology core. Mastery of the phase I course material is demonstrated by successful completion of a sequence of core courses. Admission to phase II of the doctoral program is granted to students on the basis of performance in phase I, the quality of the MA research portfolio, prior course work, faculty recommendations, and other relevant information. The second phase consists of 30 semester hours of course work, readings in anthropology and related fields, and directed research designed to prepare the student for the dissertation project. Proficiency in one foreign language may be required by the supervisory committee. The second phase is completed when the following have been met:

1. passing a written comprehensive examination, and
2. passing the oral defense of the dissertation proposal.

The successful student is then advanced to candidacy.
The final phase consists of 24 semester hours of research and dissertation.
Admission Requirements: 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 statement of their interests and professional goals and three letters
of recommendation. Applicants who received their BA during the past ten years must also submit scores on the Graduate Record Examination. 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.

## Applied Mathematics (PhD) LAAPMPHD

COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE
Contact: http://math.la.asu.edu | grad@math.la.asu.edu | PSA 216 | 480/965-3951 | 1804
Official Degree Awarded: Applied Mathematics (PhD)
Program Description: The PhD in Applied Mathematics and its asociated graduate faculty is the focal point for Applied Mathematics at ASU. Outstanding interdisciplinary research programs with strong external funding link faculty and students from the Department of Mathematics and Statistics with faculty and students in Engineering and the Natural Sciences. The curriculum builds a strong foundation in Applied Mathematics and allows the flexibility of
interdisciplinary learning and research. Current research areas include High Performance Computing, Ecology, Imaging, Supply Chain Dynamics and Neuroscience. Graduates are poised for successful careers in research universities, government laboratories, and industry.

## Applied Mathematics for the Life and Social Sciences (PhD) LAAMLPHD

COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE
Contact: shescgrad@asu.edu | SHESC 210PC | 480/965-6215 | 2402
Official Degree Awarded: Applied Mathematics for the Life and Social Sciences (PhD)
Program Description: The Applied Mathematics for the Life and Social Sciences (AMLSS) 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 cross-disciplinary 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 such an applied doctoral program from students 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.

Applied Mathematics for the Life and Social Sciences (AMLSS) is a challenging field because it requires balancing various ways of thinking (computational, mathematical, statistical, sociological and scientific) and combining them through the production of coherent applications to life and social sciences. Students with strong but possibly highly heterogeneous scientific and cultural backgrounds will find a natural home in this field.

The specific skills that successful students should master in an ideal world would result in a large set whose implementation would be daunting. It is unlikely that all these skills could be taught within a reasonable time frame to a single student at the university separately. Hence, the focus of this degree is on finding ways for students to learn a way of thinking, that is, an appropriate philosophy of learning that will potentially help them (life-long project) become first-rate scientists. The curriculum includes dynamic and statistical approaches as critical and unifying components.

In AMLSS the subject of the studies are people and subsequently relevant solutions of each research question which has a natural time scale pertaining to the particular question and level of social applicability. The fundamental challenge associated with the development of AMLSS curricula comes from the fact that it must provide a bridge connecting the stream of research that is being carried out at particular temporal and spatial scales across scales and levels of social organization. The program builds upon foundations already established in mathematical epidemiology, population dynamics, ecology, genomics, bioinformatics, mathematical analysis, nonlinear dynamic, computational sciences and the social science fields by offering courses that enhances
interdisciplinary exchanges and collaboration among the faculty and students interested in addressing questions of social relevance.

In short, AMLSS is a new and exciting frontier at the intersection of the environmental, health, life, social, mathematical, physical and computational sciences. It deals with challenges that are inherent to complex adaptive systems, particularly, those that involve human interactions. The graduate experience stresses exposure to interdisciplinary learning; interweaving of theory, applications, and analytical approaches, and cross-disciplinary and international collaboration.

Program Requirements: The program requires a total of 84 semester hours. Up to 30 semester hours can be counted from a previously awarded master's degree. After a master's degree, the students must complete a minimum of 30 semester hours, 12 hours of research, plus 12 hours of dissertation research for a total of 54 hours. The core competences shall consist of math biology, stochastic modeling, deterministic modeling or computational methods, statistics and probability, and core math skills.

## All students are required to complete:

AML 610 Topics in Applied Mathematics for the Life and Social Sciences (3).
AML 611 Research Design and Proposal Writing (3) or approved equivalent.
AML 612 Applied Mathematics for the Life and Social Sciences Modeling Seminar (3) or approved equivalent. AML 613 Probability and Stochastic Modeling for the Life and Social Sciences (3) or approved equivalent. A course in Theory of Statistics or advanced Biostatistics (3).
Applied Mathematical Analysis or Mathematical Methods (3), this includes topics in advanced calculus, complex variables, advanced linear algebra and ODE's and PDE's.

Remaining electives are selected from an approved list. Students must also demonstrate competency in a computer programming or modeling language. This can be done either by course work or practical applications or both. Due to the interdisciplinary nature of the program, students are encouraged to propose to the Executive Committee additional courses from any ASU unit as possible electives.

The degree policies and procedures are designed to promote degree completion in three years for those entering with a master's degree, and no more than five years for those entering directly from the bachelor's degree. These timelines are to be considered goals contingent on the individual circumstances and educational aspirations of the student. There are three different timeline tracks: post-bachelors full-time, post-master's full time, and post-master's half-time. Students are required to follow the timelines as closely as possible. The half-time track is only available to those who have a master's in an area that provides basic background in a relevant subject area (e.g., in applied mathematics, biology, sociology), and students must have the approval of both their major professor and the executive committee to be on the half-time track.

- Within the first year, and ideally in the first semester, the student selects a temporary major professor who is an affiliate of the applied mathematics for the life and social sciences program. The major professor is affirmed no later than the end of the 3rd semester.
- When a student selects a supervisory committee, there must be three or more members, and the committee must be approved by the executive committee and the ASU Graduate College.
- There are three tracks a student can concentrate in

1. Life sciences-focus on understanding the tools for representing the structure and operation of complex biological and ecological processes.
2. Social sciences-focus on understanding the tools for representing the structure and operation of complex social systems and processes.
3. 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.

The choice should be reflected in the choice of classes and the research topic chosen. Appropriate balance is by oversight and subject to approval by the graduate committee. A minimum competency in biology and social sciences is expected. To demonstrate this at least four of the electives will consist of two graduate courses in the areas of life sciences-evolutionary biology, molecular biology, genetics, physiology, etc., and two in the social-sociology, geography, demography, anthropology,
etc., (for post-master's students these credits can be fulfilled with courses taken prior to entry into the program, subject to approval).

- In the first semester, the student prepares a program of study that addresses all the course requirements, to be approved by their temporary major professor. This program of study is revised if necessary, and then approved by the full formal supervisory committee by the time the student completes 27 hours in their program or no later than the end of the second year whichever comes first.
- Based on their track timeline, the student prepares for the doctoral comprehensive exam and a written doctoral prospectus that must be defended in an oral exam. At the completion of all requirements, including any computer language requirements, the student is advanced to candidacy.
- Students write a research-based dissertation, which must be approved by their committee. The dissertation must be presented in an oral public defense. Because of the program's emphasis on use-inspired research, the dissertation should include a perspective or component that addresses the relevance of the research to society.
- Students must maintain a 3.20 average GPA in their courses and complete degree requirements per the program's satisfactory progress policy.
- No more than six hours of 400-level courses may be counted toward the degree.

Admission Requirements: Entry level competencies: Prior to admission, students should have completed, at a 300 or 400 level a minimum of

1. 15 hours of mathematics and/or statistics,
2. a total of 9 hours of life sciences and social sciences coursework at the senior or college graduate level, and
3. no less than three hours each of life sciences and social sciences coursework. 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.

Students must meet the admissions criteria of the Graduate College.

Admission decisions will be competitive, based on evidence of GRE scores, undergraduate and graduate GPA, letters of recommendation, prior relevant experience and statement of purpose.

## Applicants submit:

- An official ASU graduate application.
- Official GRE scores.
- Transcripts of all undergraduate and graduate coursework.
- A statement of purpose outlining career and educational goals,
- Three letters of academic recommendation.

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. Students with master's degrees or coursework in appropriate fields will usually be favored over those with only bachelor's level qualifications. Given the interdisciplinary goals of the program, a diverse pool of students is desirable. Thus, prior training in any one particular field (e.g., applied math or statistics) will not be considered a necessarily better preparation, and selection of applicants will also seek to maintain some diversity based on prior disciplinary training and experiences. However, given the quantitative nature of the degree, fluency in calculus and statistics as well as competency in a computer programming or modeling language will be required.

## Asian Languages/Civilizations: Chinese (MA) LACHINAMA

COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE
Contact: http://www.asu.edu/clas/silc/chi/MA_chinese.html | silc@asu.edu | LL 440|4809656281|0202

Program Description: The Asian languages faculty in the School of International Letters and Cultures offers a graduate program leading to a master of arts degree 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.

Program Requirements: The program of study for the MA degree includes a minimum of 30 semester hours of graduate-level work, as approved by the candidate's supervisory committee and a thesis. 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 of advanced-level work in another language or in closely related courses may be included in the program. Students who are primarily interested in teaching at the secondary or community college levels may select a program of study with a concentration in language pedagogy. Students seeking an MA degree in Asian Languages and Civilization should consult with the respective director of graduate studies. 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 Chinese language environment within four years of completing the program.

Admission Requirements: Students interested in applying to the program must submit a Graduate College online application. Candidates for the MA degree 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.

# Asian Languages/Civilizations: Japanese (MA) LAJAPANMA 

COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE
Contact: http://www.asu.edu/clas/silc/jpn/MA_Japanese | silc@asu.edu | LL 440 | 4809656281 | 0202
Official Degree Awarded: Asian Languages and Civilizations (Japanese) (MA)
Program Description: The Asian languages faculty in the School of International Letters and Cultures offers a graduate program leading to a master of arts degree 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.

Program Requirements: The program of study for the MA degree includes a minimum of 30 semester 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 of advanced-level work in another language or in closely related courses may be included in the program.

Students who are primarily interested in teaching at the secondary or community college levels may select a program of study with an area of study in language pedegogy. Students seeking an MA degree in Asian Languages and Civilization should consult with the respective director of graduate studies. 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 completing the program.

Admission Requirements: Students interested in applying to this program must submit an online Graduate College application. Candidates for the MA degree 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.

## Asian Studies (Grad Certificate) LAASIANCE

COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE
Contact: http://www.asu.edu/asian | car@asu.edu | COOR, 6th Floor | 480/965-7184 | 1702

Official Degree Awarded: Asian Studies (certificate) (CERT)
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) and Southeast Asia (Indonesia, Laos, Thailand and Vietnam).

Program Requirements: The certificate requires the completion of 18 semester hours distributed among a language requirement, core course requirements, electives and a thesis or capstone project on a topic related to their 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 and have been admitted as nondegree students.

## Astrophysics (MS) LAASTPHMS

COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE
Contact: http://sese.asu.edu | seseinfo@asu.edu | PSF 686 | 480/965-5081 | 1404
Official Degree Awarded: Astrophysics (MS)
Program Description: The program provides fundamental graduate training in astrophysics to prepare candidates for careers in astrophysics, such as scientific staff positions at government laboratories, teaching at the community college level, technical positions in industry, or further graduate study.

Program Requirements: This degree program requires 30 credit hours and a thesis. Twenty semester 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. MS programs of study also include a minimum of six semester hours of research (AST 592) and thesis credit (at least three of which must be AST 599). ASU Graduate College policies and procedures must also be met for admission to the program as well as 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: Students applying for admission to the MS degree program in Astrophysics must submit scores on the Graduate Record Examination (GRE) Aptitude Test (verbal, quantitative and analytical) and the GRE Aptitude Test. Applicants must also submit official transcripts, three letters of recommendation and a statement of purpose. The deadline for applications for the fall term is January 5. Students must apply using the Graduate College online application.

## Astrophysics (PhD) LAASTPHPHD

COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE
Contact: http://sese.asu.edu | sese@asu.edu | PS-F 686 | 4809655081 | 1404
Official Degree Awarded: Astrophysics (PhD)
Program Description: The PhD degree program in Astrophysics is designed to develop creative scholarship and prepare students for professional careers in astrophysics, astronomy or related fields.

Program Requirements: This degree program requires 84 credit hours, a dissertation, a written comprehensive examination, and an oral comprehensive examination. 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's-level work in a related field can be accepted towards the fulfillment of the PhD requirements. The program of study for the PhD wiill 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, quantum mechanics, statistical physics, electrodynamics, and/or other core subjects in addition to those covered in the six-course core AST sequence. Each program of study must include 24 semester hours of a combination of research and dissertation. ASU, Graduate College policies and procedures must also be met for fulfilling the requirements of the degree.

Foreign Language Requirements: None.
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 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 a Graduate College online application. Students applying to the PhD degree program in Astrophysics must also submit scores on the GRE Aptitude Test (verbal, quantitative and analytical) and the GRE Physics Aptitude Test. Additionally, applicants must submit official transcripts, three letters of recommendation and a statement of purpose. The application deadline for fall semester is January 5 .

## Atmospheric Science (Grad Certificate) LAATMOSCE

## COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE

Contact: http://geography.asu.edu/atmocert/ | abrazel@asu.edu | COOR 5586 | 480/965-7533 | 0104
Official Degree Awarded: Atmospheric Science (certificate) (CERT)
Program Description: "The interdisciplinary certificate program in Atmospheric Science is administered by an Executive Committee composed of faculty from the Ira A. Fulton School 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. A minimum of 16 semester hours consisting of three core courses and two electives, plus a capstone seminar (one semester hour), are required to complete the certificate. Students must also 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. A full description of the program is available on the Web at geography.asu.edu/atmocert.

## Audiology (AuD) LAAUDAUDD

COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE
Contact: http://shs.asu.edu | shsgrad@asu.edu | Coor 2211|4809652374|0102
Official Degree Awarded: Audiology (AudD)
Program Description: The Doctor of Audiology (AuD) degree 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.

Program Requirements: The AuD 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 AuD program requires a minimum of 101 semester hours, of which 66 are required academic credits provided through the Department of Speech and Hearing Science, and 35 are required clinical credits. Graduation Requirements: Eligibility for graduation is based upon the following: successful completion of 66 semester hours of required academic course work, successful completion of 35 semester hours of clinical experiences, and achieving a passing score on the ASHA Praxis national certification examination in audiology.

Admission Requirements: An applicant to the AuD program must hold a baccalaureate degree in Speech and Hearing Science or another discipline. All applicants must also have a cumulative GPA of 3.00 or higher and a GRE score of 1000 or higher (total of verbal and quantitative tests). Applicants are to submit official transcripts, GRE scores, three letters of recommendation, and a statement of intent containing evidence of proficiency in written communication. All application materials must be submitted to the Graduate Admissions office by January 15; enrollment begins in the fall semester only.

## Biochemistry (MS) LABIOCHMS

## COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE

Contact: http://chemistry.asu.edu/graduate | chmgrad@asu.edu | PS D102 | 4809654664 | 1604
Official Degree Awarded: Biochemistry (MS)
Program Description: The faculty in the Department of Chemistry and Biochemistry offer a program leading to the MS degree 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. Drug design and protein chemistry, nanobiotechnology, biogeochemistry, medicinal chemistry and RNA-protein interactions are a few of the many topics currently being researched. See the Department of Chemistry and Biochemistry Web site
(http://chemistry.asu.edu/graduate/facultyResearch_grad.asp) for information on faculty research and the state-of-the art facilities available for conducting high quality investigations. The MS in Biochemistry prepares students for professional careers in industry, government and educational institutions.

Program Requirements: A minimum of 30 semester hours, including course work, seminars, research, and thesis, are required. Courses are selected by the student in consultation with his/her supervisory committee based on the research area. The MS degree in Biochemistry is awarded when the student has obtained a cumulative GPA of 3.00 in course work, demonstrated quality performance in the laboratory and completion of his/her research project, completed a successful theses oral defense, and has met all deadline dates and requirements set by the Graduate College.

Admission Requirements: All students applying for admission to the program must submit scores for the Graduate Record Examination.

## Biochemistry (Medicinal Chemistry) (MS) LABCHMCMS

## COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE

Contact: http://chemistry.asu.edu/graduate/ | chmgradl@asu.edu | PS D 102 | 480/965-4664|1604
Official Degree Awarded: Biochemistry (Medicinal Biochemistry) (MS)
Program Description: The faculty in the Department of Chemistry and Biochemistry offer a program leading to the MS degree in Biochemistry with a concentration in medicinal chemistry. This program is intended for students who plan to continue their educational training in pharmacy, Medical school or a related field and want to expand their background knowledge in biochemistry before beginning their professional education. Students completing the program will be awarded a

MS in Biochemistry degree with a oncentration in medicinal chemistry.
Program Requirements: A minimum of 30 semester hours, including course work, seminars, research, and an applied project consisting of a written research paper, and a capstone course are required. Courses are selected by the student in consultation with his/her supervisory committee based on the research area. The MS degree in Biochemistry is awarded when the student has obtained a cumulative GPA of 3.00 in course work, demonstrated quality performance in the laboratory and completion of his/her research project, completed and presented an approved research paper at an oral defense to the student's Supervisory Committee, and has met all deadline dates and requirements set by the Graduate College.

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 Web site. Applicants must also submit original scores for the Graduate Record Examination. The subject test is not required. Application to the Department of Chemistry and Biochemistry includes the completion of electronic Supplemental Application providing information on test scores, a personal statement and contact information for three letters of recommendation.

## Biochemistry (PhD) LABIOCHPHD

COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE

Contact: http://chemistry.asu.edu/graduate/ | chmgrad@asu.edu | PS D102 | 4809654664 | 1604

## Official Degree Awarded: Biochemistry (PhD)

Program Description: The faculty in the Department of Chemistry and Biochemistry offer a program leading to the PhD degree 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. Drug design and protein chemistry, nanobiotechnology, biogeochemistry, medicinal chemistry and RNA-protein interactions are a few of the many topics currently being researched. See the Department of Chemistry and Biochemistry Web site
(http://chemistry.asu.edu/graduate/facultyResearch_grad.asp) for information on faculty research and the state-of-the art facilities available for conducting high quality investigations. The PhD in Biochemistry prepares students for professional careers in industry, government and educational institutions.

The faculty also participate in the interdisciplinary program leading to the PhD degree with a major in Molecular and Cellular Biology (see Molecular and Cellular Biology)

Program Requirements: A minimum of 84 semester hours, including course work, seminars, research, and dissertation are required. 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. The PhD degree in Biochemistry is awarded when the student has obtained a cumulative GPA of 3.00 in course work, demonstrated quality performance in the laboratory and completion of his/her research project, evidence of a publishable contribution of original research, completed a successful dissertation oral defense, and has met all deadline dates and requirements set by the Graduate College.

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 Web site (http://graduate.asu.edu/admissions/index.html). Applicants must also submit original scores for the Graduate Record Examination. 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, a personal statement and contact information for three letters of recommendation. Information on the Supplemental Application can be found at: http://chemistry.asu.edu/graduate/applicantInfo.asp.

Information on the PhD degree in Biochemistry program can be found on the Department of Chemistry and Biochemistry Web site at: http://chemistry.asu.edu/graduate/.

## Biology (Biology and Society) (MS) LABIOSMS

COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE
Contact: http://sols.asu.edu/grad/bio_soc.php | sols.grad.asu.edu | Life Sciences C, Rm 226 | 480/965-2349 | 4601
Official Degree Awarded: Biology (Biology and Society) (MS)
Program Description: Within the Biology degree programs, students may choose a formal concentration in the areas where Biology intersects with Society. This includes especially BPL: Bioethics, Policy, and Law, which 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; and HPS: History and Philosophy of Science, which 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 biology, history and philosophy of science, religious studies, history, philosophy, political science, justice studies, nursing, law, health administration of policy, anthropology and other disciplines to develop skills for analyzing and addressing the problems where biology intersects with society. 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 suggestions for those wishing to focus on these areas.

## Biology (Biology and Society) (PhD) LABIOSPHD

COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE

Contact: http://sols.asu.edu/grad/bio_soc.php | sols.grad.asu.edu | Life Sciences C, Rm 226|480/965-1768|4601

Official Degree Awarded: Biology (Biology and Society) (PhD)
Program Description: Within the biology degree programs, students may choose a formal concentration in the areas where biology intersects with society. This includes Bioethics, Policy and Law (BPL) which 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; and History and Philosophy of Science (HPS) which trains students in the conceptual foundations of science, including the epistemological and methodological assumptions that shape science and its progress. The program is richly interdisciplinary, drawing from biology, history and philosophy of science, religious studies, history, philosophy, political science, justice studies, nursing, law, health administration of policy, anthropology and other disciplines to develop skills for analyzing and addressing the problems where biology intersects with society. 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 multi-disciplinary education. The two tracks offer suggestions for those wishing to focus on these areas.

## Program Requirements:

Required Semester Credit Hours: 84

Required Examinations: Oral and written comprehensive examinations
Required Culminating Experience: Dissertation

Admission Requirements: The Biology and Society concentration, within the biology doctoral program admits one cohort annually for programs of study that begin in the fall semester. The deadline for applications is December 15 for students wishing to begin a program of study the following August. There is no guarantee that applications received after December 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 (http://sols.asu.edu/grad/apply_tips.php) tips on applying for graduate study in the School of Life Sciences for additional information.

Initiate an online ASU Graduate Admissions Application (http://graduate.asu.edu).

1. Select "Sciences (Life, Natural, Physical and Chemical)" as your degree program category.
2. Select "Tempe" as your degree program campus.
3. Select "Biology Ph.D. Degree" as your degree program.
4. 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.
5. Download and print three copies of the School of Life Sciences Recommendation Form.
(http://sols.asu.edu/grad/pdf/recommend_form.pdf)
A. Complete and sign the top portion of each form.
B. Give one form to each of the three persons who will be writing your letters of recommendation.
C. 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
6. Prepare and upload the School of Life Sciences Academic Record Form (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 (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 TOEFL or 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 ( $\mathrm{F}-1$ or $\mathrm{J}-1$ ) will need to submit a Financial Guarantee Form
(http://graduate.asu.edu/f1j1applicants.html).

## Biology (MNS) LALIFE2MNS

## COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE

Contact: http://sols.asu.edu/grad/igels/ | sols.grad@asu.edu | LSC 226 | 4809651768 | 4601
Official Degree Awarded: Natural Science (Biology) (MNS)
Program Description: The School of Life Sciences participates in the program leading to the MNS degree when one of the concentrations is Biology, Microbiology or Plant Biology. This interdisciplinary degree is designed to meet the needs of professionals seeking a graduate-level degree.

Program Requirements: This degree program requires 30 semester hours, a written comprehensive examination and/or and oral comprehensive examination. A thesis option is available. Students are expected to emphasize course work in two or more areas of concentration. The program must be interdisciplinary. 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 academic unit in which the graduate advisor serves as a faculty member. The composition of the supervisory committee must reflect the interdisciplinary nature of the program. A program of study is recommended by the supervisory committee after conferring with the student. The minimum number of semester 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. A thesis is optional. A final written or oral examination, or both, is required. Each examination is administered by the supervisory committee.

Admission Requirements: Applicants must submit a Graduate College online application.
Admission criteria are as follows: a 3.0 minimum GPA during the student's last two years or last 60 semester hours; minimum GRE scores in verbal (50th percentile), quantitative (70th percentile) and writing (5); and TOEFL scores of 250 computer, 600 paper or 100 internet. A GRE subject score of 60th percentile for BS holders or 80th percentile for MS holders is recommended but not required.

## Biology (MS) LABIOMS

## COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE

Contact: http://sols.asu.edu/grad/igels/ | sols.grad@asu.edu | LS C226 | 4809651768 | 4601
Official Degree Awarded: Biology (MS)
Program Description: This program is designed to prepare students for careers in teaching and research in educational, Medical, industrial, and governmental institutions.

Program Requirements: The program of each student is prepared in consultation with the supervisory committee, consisting of a major professor and two additional faculty members. A minimum of 30 semester hours is required. The program must include six hours of thesis and one hour of seminar. The remainder of the program of study usually consists of (1) a mixture of course work, readings and conference, and seminars in the student's primary field and related fields and (2) research credits. Courses and research credits can be distributed in any combination appropriate to the student's individual educational goals. A typical program of study consists of six semester hours of thesis, one semester hour of seminar, nine to 15 hours of course work and additional seminars, and eight to 14 semester hours of research credit. A final oral examination covering the thesis and related subject matter is administered by the supervisory committee.

Admission Requirements: Applicants must submit a Graduate College online application. Admission criteria are as follows: Applicants should have completed the requirements for an undergraduate major in biology or related discipline; a 3.00 minimum GPA during the student's last two years or last 60 semester hours; minimum GRE scores in verbal (50th percentile), quantitative (70th percentile), and writing (5); and TOEFL scores of 250 computer, 600 paper, or 100 Internet.

## Biology (PhD) LABIOPHD

COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE
Contact: http://sols.asu.edu | sols.grad@asu.edu | LS C226 | 4809651768 | 4601

Official Degree Awarded: Biology (PhD)
Program Description: The PhD degree program in Biology allows the student to acquire high research competency in one or more specialized areas while receiving a broad, solid grounding in biological sciences.

Program Requirements: The program 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. Eighty-four semester hours are required. Twelve hours of dissertation are required and the remaining hours are comprised of course work showing breadth in biology subdisciplines, seminars, and research. An oral comprehensive exam is required in order to advance to candidacy, and a formal defense of the final written dissertation is required prior to graduation.

Admission Requirements: Applicants must submit a Graduate College online application. Admission criteria are as follows: Applicants should have completed the requirements for an undergraduate major in the biology, or related discipline, with an adequate background in related courses in chemistry, mathematical and physical sciences; a 3.00 minimum GPA during the student's last two years or last 60 semester hours; minimum GRE scores in verbal (50th percentile), quantitative (70th percentile), and writing (5); and TOEFL scores of 250 computer, 600 paper, or 100 internet. A GRE subject exam, with a score of 60th percentile for BS holders or 80th percentile for MS holders, is strongly recommended.

## Chemistry (MNS) LACHEMMNS

COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE
Contact: http://chemistry.asu.edu/graduate/applicantInfo.asp | chmgrad@asu.edu | PS D 103 | 4809654664 | 1604
Official Degree Awarded: Natural Science (Chemistry) (MNS)
Program Description: The Master of Natural Science degree in Chemistry offers the opportunity for interdisciplinary graduate training in the natural sciences (biological sciences, mathematics and physical sciences) and cognate (related) areas. The program emphasizes professional training rather than research and is designed as an individualized professional graduate program based on the background and goals of the student.

Program Requirements: A minimum of 30 semester hours, including course work, seminars, research, and an applied project are required. The student must complete four graduate-level courses, two within the Department of Chemistry and two from a related discipline which supports the students' academic goals. The MNS degree in Chemistry is awarded when the student has obtained a cumulative GPA of 3.00 in course work, and completes a preapproved project agreed on by the student and his/her supervisory committee members. The culminating experience may include a short literature review paper or report of a project presented in both a written form and an oral presentation before the student's supervisory committee. The student must meet all deadline dates and requirements set by the Graduate College.

Admission Requirements: APPLICATIONS ARE NOT BEING ACCEPTED AT THIS TIME.

## Chemistry (MS) LACHEMMS

COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE
Contact: http://chemistry.asu.edu/graduate | chmgrad@asu.edu | PS D102 | 4809654664 | 1604

Official Degree Awarded: Chemistry (MS)

Program Description: The faculty in the Department of Chemistry and Biochemistry offer a program leading to the MS degree in Chemistry. Areas of study include analytical chemistry, biochemistry, geochemistry, inorganic chemistry, organic chemistry, physical chemistry, chemical education, and solid-state chemistry. Environmental chemistry, photosynthesis and photo chemistry, organic and inorganic synthesis, dynamics of liquids and glasses, genome analysis, theoretical chemistry and nanomaterials and functional semiconductors are a few of the many topics currently being researched. See the Department of Chemistry and Biochemistry Web site (http://chemistry.asu.edu/graduate/facultyResearch_grad.asp) for information on faculty research and the state-of-the art facilities available for conducting high quality investigations. The MS in Chemistry prepares students for professional careers in industry, government and educational institutions.

Program Requirements: A minimum of 30 semester hours, including course work, seminars, research, and dissertation, are required. Courses are selected by the student in consultation with his/her supervisory committee based upon research area. The MS degree in Chemistry is awarded when the student has obtained a cumulative GPA of 3.00 in course work, demonstrated quality performance in the laboratory and completion of his/her research project, completed a successful thesis oral defense, and has met all deadline dates and requirements set by the Graduate College.

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 Web site (http://graduate.asu.edu/admissions/index.html). Applicants must also submit original scores for the Graduate Record Examination. 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, a personal statement and contact information for three letters of recommendation. Information on the Supplemental Application can be found at: http://chemistry.asu.edu/graduate/applicantInfo.asp.

Information on the MS degree in Biochemistry program can be found on the Department of Chemistry and Biochemistry Web site at: http://chemistry.asu.edu/graduate/.

## Chemistry (PhD) LACHEMPHD

COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE
Contact: http://chemistry.asu.edu/graduate | chmgrad@asu.edu | PS D102 | 4809654664 | 1604

## Official Degree Awarded: Chemistry (PhD)

Program Description: The faculty in the Department of Chemistry and Biochemistry offer a program leading to the PhD degree in Chemistry. Areas of study include analytical chemistry, biochemistry, geochemistry, inorganic chemistry, organic chemistry, physical chemistry, chemical education, and solid-state chemistry. Environmental chemistry, photosynthesis, photo chemistry, organic and inorganic synthesis, dynamics of liquids and glasses, genome analysis, theoretical chemistry and nanomaterials and functional semiconductors are a few of the many topics currently being researched. See the Department of Chemistry and Biochemistry Web site (http://chemistry.asu.edu/graduate/facultyResearch_grad.asp) for information on faculty research and the state-of-the art facilities available for conducting high quality investigations. The PhD in Chemistry prepares students for professional careers in industry, government and educational institutions.

Program Requirements: A minimum of 84 semester hours, including course work, seminars, research, and dissertation, are required. 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. The PhD degree in Chemistry is awarded when the student has obtained a cumulative GPA of 3.00 in course work, demonstrated quality performance in the laboratory and completion of his/her research project, evidence of a publishable contribution of original research, completed a successful dissertation oral defense, and has met all deadline dates and requirements set by the Graduate College.

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 Web site. Applicants must also submit original scores for the Graduate Record Examination. 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, a personal statement and contact information for three letters of recommendation. Information on the Supplemental Application can be found at:
http://chemistry.asu.edu/graduate/applicantInfo.asp.

Information on the PhD degree in Chemistry program can be found on the Department of Chemistry and Biochemistry website at: http://chemistry.asu.edu/graduate/ (click ' Program Overview).

## Communication (MA) LACOMMOMA

COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE
Contact: http://www.asu.edu/clas/communication/ | communication@asu.edu | STA 412 | 4809655095 | 1205
Official Degree Awarded: Communication (MA)
Program Description: Faculty in the Hugh Downs School of Human Communication offer a program leading to the MA degree in Communication. Current areas of study within the major are intercultural communication, interpersonal communication, performance studies, organizational communication, and rhetorical studies.

Program Requirements: The program consists of a minimum of 30 semester hours of graduate course work, which includes six semester hours of thesis credit. All students must successfully complete the following:

1. COM 501 Research Methods in Communication with a minimum grade of " B " (3.00);
2. COM 504 Theories and Models in Communication with a minimum grade of " B " (3.00);
3. 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);
4. at least three content seminars (COM courses numbered 691);
5. a written comprehensive examination on theory and methodology, and an area of study (an oral examination may be required); and
6. a thesis, which is an account of original research, and an oral examination in defense of the thesis.

Admission Requirements: Admission is competitive, based upon evidence of the applicant's scholarly and research abilities. All applicants must submit the following:
2. a Graduate College application, completed either online or on paper, along with official undergraduate and graduate transcripts;
3. a statement of professional goals (approximately 500 words);
4. Graduate Record Examination scores (verbal, quantitative, and analytical writing) taken within the past five years, plus other relevant test data provided by the applicant;
5. three letters of recommendation prepared within the preceding 12 months;
6. a writing sample; and
7. all applicants whose native language is not English must submit TOEFL scores; minimum scores are 600 on the paper and pencil version of this test or 250 on the computer version of this test.

A completed application for admission and official transcripts of all undergraduate and graduate work must be submitted to the Graduate Admissions Office. See Admission to the Graduate College, for Graduate College general requirements. All application materials must be received by February 1. Late applications cannot be considered.

## Communication (PhD) LACOMMOPHD

COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE
Contact: http://www.asu.edu/clas/communication | communication@asu.edu | STA 412 | 4809655095 | 1205
Official Degree Awarded: Communication (PhD)
Program Description: The committee of faculty offers an interdisciplinary graduate program leading to the PhD degree in Communication. Concentrations are available in communicative development, intercultural communication, 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.

Program Requirements: This degree program requires 96 credit hours, a dissertation, a written comprehensive examination, and an oral comprehensive examination. If the student has completed an appropriate master's degree, the PhD requires a minimum of 66 hours beyond the master's degree. Course work for a typical program of study is distributed as follows: required core courses (nine semester hours), area of concentration (33 semester hours), dissertation (COM 799) and research (COM 792) ( 24 semester hours) for a total of 66 hours (minimum). Up to 12 semester hours of research (COM 792) may be taken before admission to candidacy. Three 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 semester hours of COM 792 R: Prospectus/Dissertation Practicum and three semester hours of COM 792 R: Seminar Assistant. In addition, students must take two of the three advanced methods courses, which consist of COM 607 Contemporary Rhetorical Methods, COM 608 Multivariate Statistical Analysis of Data in Communication, and 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, 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 MA degree requirements in Communication except that no thesis is required. These requirements include a general overview of research in communication (COM 501), an overview of theories and models of communication (COM 504), a statistics course (COM 508), and electives from communication or other disciplines to total 24 hours of course work. The methods, theory, and statistics courses must be completed before beginning the required theory and methodology sequence for the PhD (i.e., they are prerequisites for the required courses).

Admission Requirements: Applicants must submit a Graduate College online application.

## Communication Disorders (MS) LACOMDISMS

COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE
Contact: http://shs.asu.edu/ | shsgrad@asu.edu | Coor 2211 | 4809652374 | 0102
Official Degree Awarded: Communication Disorders (MS)
Program Description: The faculty in the Department of Speech and Hearing Science offer a program leading to the MS degree 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.

Program Requirements: This degree program requires 39 semester hours of graduate course work, exclusive of credit for practicum, as approved by the supervisory committee.

Clinical Requirements: A student in the MS program must complete at least 375 clock hours of supervised clinical practicum experience, plus 25 observation hours. A minimum of 325 clock hours must be obtained at the graduate level.

Thesis Option: Students wishing to pursue the thesis option must complete 39 semester hours of course work, six hours of which must be thesis credit, excluding practicum and internship hours. The thesis must meet requirements established by the Graduate College.

Nonthesis Option: Students choosing the nonthesis option must complete 39 semester hours of course work, excluding practicum and internship hours.

Final Examinations: For the MS degree (thesis option), two final examinations are required: (1) the ASHA Praxis national certification examination in speech-language pathology, and (2) an oral defense of the thesis. For a candidate for the MS degree (nonthesis option), only the ASHA Praxis national certification examination in speech-language pathology is required.

Students should expect to spend two years completing the academic, practicum, and research requirements for either degree option.

Admission Requirements: Applicants must submit a Graduate College online application. Students applying for admission to this program should have their undergraduate transcripts, Graduate Record Examination scores, a statement of professional and academic goals not to exceed 200 words, and three letters of recommendation mailed to the Graduate Admissions Office. All materials must be received by January 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.

## Computational Biosciences (PSM) LACOMBIPSM

COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE
Contact: http://math.asu.edu/~cbs/ | cbs@math.asu.edu | PSA 216 | 480/965-9792 | 1804
Official Degree Awarded: Computational Biosciences (PSM)
Program Description: Participating faculty from the colleges, departments, and schools of Biomedical Informatics, Chemistry and Biochemistry, Computer Science and Engineering, Electrical Engineering, Industrial Engineering, Life Sciences, Mathematics and Statistics, Physics, and Quantitative Business Analysis offer a program leading to the Professional Science Master's (PSM) degree in Computational Biosciences.

The disciplines of the life sciences are rapidly requiring more mathematical and computational analyses than have typically been employed. While some mathematical approaches have been applied to biological questions for many years, the advance in computational capability has increased the pace of bioscience research to unprecedented levels of speed, precision, and detail, and thus dramatically transformed the kinds of problems tackled. The PSM degree serves to produce students capable of meeting the demands of today's bioinformatics/biomedical industries.

Program Requirements: This degree program requires 42 credit hours and an applied project. The master's program requires a total of 30 semester hours of course work and an additional six hours for internship or further advanced study and six semester hours of graduate-level study on professional issues in biotechnology for a total of 42 semester hours of study. The core program is followed by electives designed around the specific interest of the student.

Core Program

- CBS 520 Modeling and Computational Biology (4)
- CBS 521 Applications and Complex Problem Solving in Computational Biology (4)
- CBS 530 Introduction to Structural and Molecular Biology (4)
- CBS 584 Internship (6)
- CBS 598 ST: Experimental Design (3)
- CBS 598 ST: Multivariate Statistical Analysis (3)

Professional Portion

- CBS 598 ST: Business Issues and Ethics I (3)
- CBS 598 ST: Business Issues and Ethics II (3)

Admission Requirements: Applicants must submit a Graduate College online application. In addition to the minimum requirements for admission established by the Graduate College, the interdisciplinary nature of this program makes individual aptitudes and experiences important with regard to a student's competitive status.

# Computational Biosciences - Mathematics Department (PhD) LACOMPBPHD 

COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE
Contact: http://math.asu.edu | grad@math.la.asu.edu | PSA 216|480/965-3951| 1804
Official Degree Awarded: Mathematics (Computational Biosciences) (PhD)
Program Description: The PhD in Computational Biosciences is designed such that graduates of the program will be able to transition immediately into the computational biosciences workforce with strong quantitative, computational and life science skills. The concentration in computational biosciences augments the mathematics PhD with a truly interdisciplinary program. It broadens the opportunities for students to take on a completely interdisciplinary doctoral training, while also maintaining a disciplinary focus to their studies. There is increasing emphasis nationally and locally on developments in the quantitative biological sciences. Crucial to future developments in life sciences is a well-trained workforce competent at the interface of the disciplines of life sciences and mathematics, with the skills for translation of biological phenomena into models for rigorous mathematical study. Graduates of this program have a strong interdisciplinary training and will become future leaders of the field. They take courses from mathematics, computer science, and life sciences, and their thesis is on an area which crosses these disciplines. All students are co-advised by faculty from mathematics and the school of life sciences.

Program Requirements: This degree program requires 84 semester hours, a dissertation, a written comprehensive examination and an oral comprehensive examination. A standard doctoral degree program at ASU comprises 84 hours of study, of which 12 hours (and only 12) are for the dissertation, and of which 30 hours may be applied from an appropriate master's degree.

Students must satisfy core components of the computational biosciences concentration. See website for detailed information.
Admission Requirements: Applicants must submit the Graduate College online application. Students are required to have satisfied courses in mathematics, statistics, biology, chemistry and computer science prior to admission to the program. Students are encouraged to plan early for admission to the program in order to allow completion of any deficiencies. Courses are available at ASU, some during the two summer sessions. Students with a limited number of deficiencies may be conditionally admitted to the program, if it is likely that the deficiencies can be completed prior to admission or concurrently with core courses of the program in at most one semester. If a student has completed courses equivalent to the following listed courses at ASU, they have satisfied conditions for regular admission to the program at ASU. Please note that there are prerequisites required for each of these courses.

Program Prerequisites
BIO 340 General Genetics
BIO 353 Cell Biology
CHM 231 Elementary Organic Chemistry
BCH 361 Principles of Biochemistry
MAT 275 Modern Differential Equations
STP 420 Introductory Applied Statistics
CSE 205 Concepts of Computer Science and Data Structures

## Creative Writing (MFA) LACWRITMFA

COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE
Contact: http://www.asu.edu/english/creativewriting | karla.elling@asu.edu | LL C315 | 480/965-3528 | 0302
Official Degree Awarded: Creative Writing (MFA)
Program Description: Faculty of the Creative Writing Committee offer an interdisciplinary Master of Fine Arts degree in Creative Writing. The program is offered jointly by the Department of English in the College of Liberal Arts and Sciences and the School of Theatre and Film in the Katherine K. Herberger College of the Arts.

One of the unique features of this interdisciplinary program is that, because it utilizes faculty research, creative activity, and teaching interests of two academic units, a student may tailor a course of study to fit individual needs, talents, and goals. The Department of English administers the program and reviews the applications for admission. In the English Department, the studio/academic program requires poets and prose writers to divide work equally between writing workshops and literature
courses. This flexible curriculum allows candidates time to study with several gifted writers and scholars in a stimulating atmosphere, time to get quality advice on writing, and time to explore and develop their talents. In the School of Theatre and Film, the studio/academic program emphasizes the collaborative process of playwriting. Working with actors, directors and playwrights in workshop settings include informal readings, staged readings, and workshop production of student plays.

Program Requirements: The MFA in Creative Writing degree program requires 48 credit hours, a practicum, and a written comprehensive examination. In poetry and fiction, the program of study requires a minimum of 48 semester hours of graduate credit approved by the student's supervisory committee, the director of the Creative Writing Committee, and the dean of the Graduate College. Of these, 24 semester hours must be creative writing courses and must include nine semester hours of ENG 580 , and nine semester hours of any combination of ENG 562, 563, 594, 598, 662, 663, and 664. The course 594 Conference and Workshop may be taken twice to varied offerings. The literature component of 24 semester hours must include ENG 591, 665, and two ENG courses in literature selected by the student's supervisory committee or the director of the creative writing committee such as ENG 667. In playwriting, the program of study requires a minimum of 48 semester hours of graduate credit approved by the student's supervisory committee, the director of the Creative Writing Committee, and the dean of the Graduate College. The program of study must include the following: THP 519 (three semester hours), 560 ( 15 semester hours), 561 (three semester hours), 598, and 693 (six semester hours). The literature component must include THE 500, 504, 520, and 562.

Admission Requirements: In addition to meeting the general requirements of the Graduate College, applicants should have an undergraduate major in English or Theatre, with a GPA of 3.00 or higher. Applicants who do not have an undergraduate major in English or Theatre may be admitted on the basis of excellent creative and academic work. Deficiencies in undergraduate preparation may be removed while pursuing the MFA degree. Applicants must also submit the following:

1. three letters of recommendation;
2. a professional résumé; and
3. a statement of career goals, including the designation of an area of specialization (options include creative nonfiction, fiction, playwriting, and poetry) and a manuscript sample of one of the following: 30 pages of drama; 20 pages of poetry; 30 pages of prose fiction or creative nonfiction; or 40 total pages of work in two of these literary forms.

## English (MA) LAENGLMA

COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE
Contact: http://www.asu.edu/clas/english/gradstudies/enggrad.htm | enggrad@asu.edu | LL 543B | 4809653194 | 0302
Official Degree Awarded: English (MA)
Program Description: This degree is designed to provide further cultural and professional advancement for students of English.

Program Requirements: A student may pursue a concentration in comparative literature, English linguistics, literature and language, or rhetoric and composition. All concentrations have a foreign language requirement.

For the concentration in comparative literature, a candidate must complete 36 semester hours of graduate courses, with a minimum of 12 hours being taken in the School of International Letters and Cultures. Included in the hours must be ENG 500 Research Methods; ENG 503 Comparative Literature, Theory, and Practice; and ENG 599 Thesis. A written comprehensive examination is required.

For the concentration in English linguistics, a candidate must complete a minimum of 30 semester hours of graduate-level courses. Two tracks are available. The general linguistics track must include LIN 500, 511, 514, and 515 and one advanced linguistics course. 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. Both tracks require six hours of LIN 599 Thesis. Electives are chosen in consultation with the advisor.

For the concentration in literature and language, a candidate must complete a minimum of 30 semester hours. The hours must include ENG 500 Research Methods; a course in literary theory; ENG 599 Thesis; and a nine-hour distribution requirement. Two courses selected must be graduate seminars at the 600 level. Electives are chosen in consultation with the advisor.

For the concentration in rhetoric and composition, a candidate must complete a minimum of 30 hours of graduate courses. These hours must include ENG 500 Research Methods, a course in rhetoric theory, a course in composition theory, a six-hour thesis, and 15 elective course hours that must include six semester hours of graduate seminars at the 600 level. Electives are chosen in consultation with the advisor.

Admission Requirements: Applicants must submit a Graduate College online application. Applicants for the MA program in English 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 nondegree students while they take courses in areas of deficiency, as identified by the advisor. Applicants must also submit Graduate Record Examination (GRE) general test scores, three letters of recommendation, a personal statement of aims and purposes, and an academic writing sample.

Applicants for the MA program in English 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, and 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 and a personal statement of aims and purposes. Applicants for the rhetoric and composition concentration must also submit Graduate Record Examination (GRE) general test scores and an academic writing sample. Applicants for the linguistics concentration must show completion of one upper-division course in a linguistics-related field.

Applicants for the MA program in English with a concentration in comparative literature must prove fluency in a foreign language to a level sufficient for graduate study. Applicants must also submit three letters of recommendation and a statement of aims and purposes.

## English Literature (PhD) LAENLITPHD

## COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE

Contact: http://www.asu.edu/clas/english/gradstudies/enggrad.htm | enggrad@asu.edu | LL 542B | 4809653194 | 0302

## Official Degree Awarded: English (Literature) (PhD)

Program Description: The PhD program at ASU 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 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.

Program Requirements: The PhD program is a total of 84 hours, a dissertation, written and oral comprehensive examinations, and a foreign language exam. In general, a student with an appropriate master's degree must complete a minimum of 54 semester hours of approved graduate work, which includes 12 hours of dissertation. Research hours may be used towards course work in consultation with the advisor. A student without an appropriate master's degree must complete 84 hours of work at ASU. At the advisor's discretion, students may include up to 12 hours of appropriate, graduate-level course work undertaken at another university, and not previously counted towards any other degree. Specifically required are six semester 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: Literature to 1500, Literature 1500-1660, Literature 1660-1900, Literature since 1900, Genre, Gender Studies, Ethnic Studies, Postcolonial/Anglophone literatures, Cultural Studies, and History/Structure of the English Language. Students must take at least five graduate seminars at the 600 level en route to the PhD degree, at least three of which must be taken in the PhD program. Up to 12 semester 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 PhD degree in English must submit three letters of recommendation, a statement of purpose, and an academic writing sample. GRE general scores are required for both concentrations. The GRE advanced literature section is optional for the literature concentration.

Deadline for admission applications and requests for financial aid, including teaching assistantships, is February 1. Incomplete files are not considered.

Materials should be sent to:
Graduate Coordinator
Department of English
Arizona State University
PO Box 870302
Tempe AZ 85287-0302

## Environmental Life Sciences (PhD) LAELSPHD

COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE
Contact: http://els.asu.edu/ | Susanne.neuer@asu.edu | LSE 421|480/727-7254| 4501

## Official Degree Awarded: Environmental Life Sciences (PhD)

Program Description: Environmental Life Sciences (ELS) is a novel graduate degree program that will provide Ph.D.'level training in several complementary fields focused on interactions between organisms (plant, animal or microbe) and their environment. ELS will provide trans-disciplinary training that includes aspects of biology, geosciences, chemistry/biochemistry, environmental engineering, sustainability, social sciences, and mathematics. Graduate students will be trained in core classes, seminars, reading groups and 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. degree program that produces students with a broad appreciation of environment-organism questions in the context of natural and anthropogenic environmental change.

Program Requirements: As specified in each student's Plan of Study, the total number of credit hours should consist of 7 credit hours of core courses, a minimum of 9 hours of electives and 12 hours of dissertation credit (ELS799). 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 beyond masters or 84 total).

Admission Requirements: 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.

Minimum of a 3.00 cumulative GPA (scale is $4.0=\mathrm{A}$ ) in the last 60 hours of a student's first bachelor's degree program.
All applicants must submit a GRE results.

## Environmental Social Science (PhD) LAESSPHD

COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE
Contact: http://shesc.asu.edu/graduate_studies | shesegrad@asu.edu | ANTH 233 | 480/965-6215 | 2402
Official Degree Awarded: Environmental Social Science (PhD)
Program Description: The PhD in Environmental Social Science (ESS) is one of the few doctoral programs in the U.S. that focuses on the social dynamics of environmental issues using critical social science perspectives. The ASU program is organized around theoretically-based conceptual domains (political ecology, culture and the environment, environmental justice, science and technology studies, environmental hazards and vulnerability, and human environment impacts). 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 human and physical geography, cultural and Medical anthropology, archaeology, community resources, demography, geographic information systems, environmental history, planning, public affairs, sociology, and science and technology studies. The ESS program will train students to move into teaching and research positions, or to assume leadership roles in nongovernmental organizations (NGOs), government, or
industry. 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.

Program Requirements: All students entering the program complete a suite of classes totaling 30 hours. These include 18 hours of core classes in Conceptual Domains and Topical Foci. Additional hours come from one course each in Research Design and Technical Expertise, and six hours of electives. Students may select from a substantial range of courses to satisfy noncore requirements. Students entering with an MA will be granted up to 30 credit hours toward the 84 hour total required for the Ph.D. Students without an MA must earn an additional 30 hours of graduate credit, selecting courses from a number of appropriate programs on campus. All students must earn 12 (and only 12) dissertation hours and may earn up to 12 research hours for a total of 24 hours to achieve the 84 hour total.

Admission Requirements: Applicants are required to have a bachelor's degree from a regionally accredited institution with a grade point average of 3.20 ( 4.00 scale) or higher in the last two years of course work. A master's degree in any relevant field is advantageous for environmental social science (ESS) students, or students can earn an MA-in-passing as part of the ESS graduate program. In addition to general requirements for admission to the Graduate College, the Environmental Social Science PhD program requires students to provide a statement of their interests and goals as a professional, three letters of recommendations, a sample of their written work, and GRE scores. 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 required to take additional courses as noted at the time of admission if they lack an adequate background in the social sciences.

## Family and Human Development (MS) LAFAMHDMS

COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE
Contact: http://www.asu.edu/ssfd | SSFD@asu.edu | SS144 | 480/965-6978 | 3701
Official Degree Awarded: Family and Human Development (MS)
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.

Program Requirements: Courses are selected by the student along guidelines of the specific areas, after consultation with the supervisory committee. The program of study should be completed and approved by the supervisory committee by the end of the second semester of full-time graduate study upon completion of 12 semester hours. A program of study may include more than 33 semester hours, and the exact number will be determined by program requirements and the student's supervisory committee. Acceptance of the proposed program of study must be verified by signature of the student and committee members. After approval within the program or college, the program 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: FAS 500, FAS 531, CDE 531, CDE 534, and PSY 530 (or equivalent with the approval of the Graduate Committee).

## Child Development

The required courses are CDE 533 and six semester hours of CDE elective selected (with approval of the student's advisor). Six semester hours of thesis work are also required.

## Family Relationships

The required courses are FAS 539 and six semester hours of FAS electives (selected with approval of the student's advisor). Six semester hours of thesis work are also required.

Admission Requirements: Admission to the MS degree program in Family and Human Development is determined by the following criteria:

1. official transcripts of all undergraduate and graduate course work;
2. verbal, quantitative, and analytical Graduate Record Examination scores;
3. statement of goals relevant to the Master of Science program;
4. three letters of recommendation; and
5. an application for admission to the Graduate College.

A Test of English as a Foreign Language score of at least 600 is required of all applicants whose native language is not English.

Applications, which are due January 15, should be sent to
Graduate Secretary
Family and Human Development
PO Box 873701
Arizona State University
Tempe AZ 85287-3701

## Family and Human Development (PhD) LAFAMSCPHD

COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE
Contact: http://www.asu.edu/ssfd | ssfd@asu.edu | SS 144 | 480/965-6978 | 3701
Official Degree Awarded: Family and Human Development (PhD)
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.

Program Requirements: Each student must prepare and submit a program of study in conjunction with the chair and members of his or her supervisory committee during the first year in the program. The program of study consists of a minimum of 87 semester hours for students entering after the bachelor's degree and 57 semester hours for students entering after the master's degree. Of the 87 semester hours for a postbaccalaureate program, six are thesis credits and 24 are dissertation and research credit. Postbaccalaureate students complete a master's-in-passing before advancing to their doctoral studies. Correspondingly, the 57 semester hours of the post-master's program include 24 semester hours of dissertation and research credit. The additional hours in both the postbaccalaureate and post-master's tracks involve

1. family and human development courses,
2. statistics and research methods, and
3. a collateral area of study relating to family and human development.

Admission Requirements: Admission to the PhD in Family and Human Development is determined by the following criteria:

1. official transcripts of all undergraduate and graduate course work;
2. verbal, quantitative, and analytical Graduate Record Examination scores;
3. a statement of goals relevant to the PhD program;
4. three letters of recommendation; and
5. an application for admission to the Graduate College.

A Test of English as a Foreign Language score of at least 600 is required of all applicants whose native language is not English.

Graduate Secretary
Family and Human Development
PO Box 873701
Arizona State University
Tempe AZ 85287-3701

## French Comparative Literature (MA) LAFRECLMA

## COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE

Contact: http://www.asu.edu/clas/silc/fre/grads/ | silc@asu.edu | LL 440 | 4809656281|0202
Official Degree Awarded: French (Comparative Literature) (MA)
Program Description: The faculty in the School of International Letters and Cultures offer a graduate program leading to the MA degree in French with a concentration in comparative literature.

Program Requirements: A total of 30 semester hours of graduate work is required. 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); and 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: Period courses, genre courses and Francophone studies 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 program of study. Grades below a " C " 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 teacher 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: general concepts of comparative literature and problems of comparative literature.

Admission Requirements: Applicants must submit a Graduate College online application. Prerequisites for admission into the literature program include French 321 Introduction to French Literature: Medieval through the Eighteenth Century; French 322 Introduction to French Literature: Nineteenth and Twentieth Centuries; in addition to two 400 -level French classes of which at least one must be a literature course.

## French Linguistics (MA) LAFRELINMA

COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE
Contact: http://www.asu.edu/clas/silc/fre/grads | silc@asu.edu | LL 440 | 4809656281 | 0202
Official Degree Awarded: French (Linguistics) (MA)
Program Description: The faculty in the School of International Letters and Cultures offer a graduate program leading to the MA degree in French.

Program Requirements: The program of study for the MA degree includes a minimum of 30 semester hours of graduate-level work, as approved by the candidate's supervisory committee. It has a thesis and an applied project option. 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: Candidates for the MA degree 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.

## French Literature (MA) LAFRELITMA

## COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE

Contact: http://www.asu.edu/clas/silc/fre/grads | silc@asu.edu | LL 440 | 4809656281|0202
Official Degree Awarded: French (Literature) (MA)
Program Description: The faculty in the School of International Letters and Cultures offer a graduate program leading to the MA degree in French.

Program Requirements: The program of study for the MA degree includes a minimum of 30 semester hours of graduate-level work, as approved by the candidate's supervisory committee. It has a thesis and an applied project option. 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: Candidates for the MA degree 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.

## Gender Studies (PhD) LAGSTPHD

COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE
Contact: http://www.asu.edu/clas/womens_studies | womens.studies@asu.edu | West Hall 205 | 4809652358 | 4902
Official Degree Awarded: Gender Studies (PhD)
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 the their place int eh world as academic faculty, as researchers inside and outside of academia, and as policy-makers.

The PhD in Gender Studies is designed around three areas of expertise:

- Justice, Social Change and Sustainability: Courses in this area explore the gender dimension of the social structure and the social division of labor, the processes of social change, institutions and organizations, community development and sustainability and analyze how policies and laws can improve or hinder the quality of life for everyone. We have faculty expertise in gender and globalization, immigration, work, social policy, domestic violence, child welfare, gender and development in Latin America, and gender and the environment.
- Health, Science and Technology. Courses in this area explore the impact of gender on health care, health occupations and the scientific enterprise. We have faculty expertise in gender and global health disparities, bioethics, women's roles
as healers and care-givers, HIV/AIDS prevention, addiction, technology, and the participation of women in math and science in the developing world.
- Visual and Narrative Culture. Courses in this area include the study of historical characterization of gender, literary narratives about gender and the cultural representations of gender and race in film, media, advertising, and art. We have faculty expertise in history, gender, race and cultural representations, performance, literature, and art.

Admission Requirements: The Gender Studies program requires 84 semester hours, a dissertation, a written comprehensive examination, an oral comprehensive examination and a foreign language examination.

## Geographic Education (MAS) LAGEOEDMAS

COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE
Contact: http://geography.asu.edu/masge | ronald.dorn@asu.edu | COOR 5302 | 4809657533 | 5302

## Official Degree Awarded: Geographic Education (MAS)

Program Description: The Master of Advanced Study (MAS) degree 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 $\mathrm{K}-12$ 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.

Program Requirements: The MAS degree program in Geographic Education consists of 30 semester hours taken completely online, with two one-day sessions required at the Tempe Campus (orientation session and presentation of an applied project). Students complete 24 semester hours in geography, a three semester-hour course in educational research (COE 501 Introduction to Research and Evaluation in Education) and a three semester-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. A sample program of study for a full-time student is located at geography.asu.edu/masge/. Students are required to have access to a computer with an internet connection and the capability to view video and animated files with sound (e.g. Flash, shockwave, mpeg, avi, etc.), access to e-mail and access to a word processing program (e.g. Microsoft Word).

Admission Requirements: 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.

## Geographic Information Systems (Grad Certificate) LAGEOGISCE

## COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE

Contact: http://geography.asu.edu/ | luc.anselin@asu.edu | School of Geographical Sciences, COOR 5302 | 480/965-7533 | 5302
Official Degree Awarded: Geographic Information Science (certificate) (CERT)
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.

Program Requirements: A minimum of 16 semester hours consisting of three required and two elective courses (three semester hours each) plus a capstone seminar (one semester hour) is required to complete the GIS certificate.

Admission Requirements: 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 furnish proof of an advanced degree
by a formal transcript and enroll as nondegree graduate students through the Graduate College. Prospective students must complete prerequisites listed for the level one required course, or pass a proficiency test.

## Geographic Information Systems (MAS) LAGISMAS

COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE
Contact: http://geography.asu.edu | Robert.Balling@asu.edu | COOR 5302|4809659759|5302
Official Degree Awarded: Geographic Information Systems (MAS)
Program Description: The Master of Advanced Study (MAS) degree 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 the theoretical aspects of GIS, the technical side of the discipline, and the applications domain. 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 MAS degree is achievable in a one-year time period.

Program Requirements: This degree program requires 30 semester hours and an applied project. Enrolling students must complete three sequential semesters of coursework totaling 30 graduate semester hours. 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 semester-hour courses. During the final semester, offered through the 8 -week summer sessions, students must complete three semester hours of GIS internship and a three semester-hour Capstone course.

Admission Requirements: In addition to ASU 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 MAS-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.

## Geographical Sciences (Urbanism) (PhD) LAGCUUPHD

COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE
Contact: http://geography.asu.edu | etalen@asu.edu | COOR 5302 | 4809657533 | 5302
Official Degree Awarded: PHD Geographical Sciences (Urbanism)

Program Requirements: The School of Geographical Sciences requires PhD students to pass written and oral comprehensive examinations. These are taken at the completion of all course work. After students have passed the comprehensive examinations and satisfied the other requirements, they are eligible to apply for candidacy. A dissertation based on original work demonstrating creativity in research and scholarly proficiency in the subject area is required. A final oral examination in defense of the dissertation is also required. A minimum of 30 semester hours of course work at ASU beyond the master's degree is required, plus a minimum of 12 semester hours of credit in research and dissertation. For the Concentration in Urbanism, 15 credit hours will be selected from an approved list of applicable courses related to urbanism

Admission Requirements: Admission to the PhD program requires a completed master's degree in Geography or equivalent degree. At a minimum, this preparation should include competence in cartography and quantitative methods and basic course work in human and physical geography. Students who have not already acquired these basic skills or taken these basic courses must do so during the first year of their graduate program. These courses are considered deficiencies, and will not count towards the degree.

## Geography (MA) LAGEOGMA

COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE
Contact: http://geography.asu.edu | sgeos@asu.edu | COOR 5302 | 4809659759|5302

## Official Degree Awarded: Geography (MA)

Program Description: The Master of Arts in Geography degree 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 semester hours beyond the bachelor's degree is required. At least 24 semester hours must be in geography.

Program Requirements: 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 semester hours including 24 semester hours of combined coursework and research hours at ASU and a 6 semester-hour thesis. The master's program includes two required courses (GCU 529 Geographic Thought and GCU 585 Advanced Research Methods) and additional coursework 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 MA program must be accompanied by the applicant's scores on the Graduate Record Examination (verbal and quantitative) and 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.

## Geography (PhD) LAGEOGPHD

## COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE

Contact: http://geography.asu.edu | sgeos@asu.edu | COOR 5302 | 480/965-9759 | 5302
Official Degree Awarded: Geography (PhD)
Program Description: The PhD 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.

Program Requirements: This degree program requires 84 semester hours, a dissertation, a written comprehensive examination and an oral comprehensive examination.

PhD students entering with a bachelor's degree must complete 84 semester hours. These hours include 72 sememster hours of coursework 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 semester 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.

PhD Students entering with a master's degree must complete 54 semester hours. These include 42 semester hours of combined coursework and research hours at ASU and 12 dissertation hours. The PhD program includes two required courses (GCU 529 Geographic Thought, GCU 585 Advanced Research Methods), two seminars (GCU/GPH 591) and additional coursework 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 PhD 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 coursework that will enable them to pursue graduate studies in their area of specialization.

Applications for the PhD program must be accompanied by the applicant's scores on the Graduate Record Examination (verbal and quantitative) and three letters of recommendations from professors. All applications are reviewed by the Graduate Recruiting and Admissions Committee and the Director of Geographical Sciences.

## Geological Sciences (MNS) LANATSCIMN

## COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE

Contact: http://sese.asu.edu/ | seseinfo@asu.edu | PSF 686 | 4809655081 | 1404
Official Degree Awarded: Natural Science (Geological Sciences) (MNS)
Program Description: The School of Earth and Space Exploration participates in the program leading to the Master of Natural Science (MNS) degree when the concentration is Geological Sciences. This interdisciplinary degree is designed to meet the needs of professionals seeking a graduate level degree. The Master of Natural Science degree offers the opportunity for interdisciplinary graduate training in the natural sciences (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. The major is Natural Science. Students are expected to emphasize course work in two or more areas of concentration. The program must be interdisciplinary.

Program Requirements: The MNS in Geological Sciences requires 30 semester hours and an applied project. 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 academic unit in which the graduate advisor serves as a faculty member. The supervisory committee is formed soon after the student has been admitted to the degree program. The graduate advisor and student suggest names of persons to serve on the supervisory committee. The composition of the supervisory committee must reflect the interdisciplinary nature of the program.

A program of study is recommended by the supervisory committee after conferring with the student. The minimum number of semester 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.

A thesis is optional. A final written or oral examination, or both, is required. Each examination is administered by the supervisory committee.

Admission Requirements: See Admission to the Graduate College. A prerequisite for admission is the availability of resources in SESE and having a faculty member in SESE serve as a graduate advisor. The submission of scores on the GRE (verbal, quantitative and analytical) is required of all applicants.

## Geological Sciences (MS) LAGEOSCMS

COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE
Contact: http://sese.asu.edu | sese@asu.edu | PSF 686 | 4809655081 | 1404
Official Degree Awarded: Geological Sciences (MS)
Program Description: The MS degree program in Geological Sciences 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 certain careers in geology or for further graduate study.

Program Requirements: The MS degree consists of a minimum of 30 semester hours of work beyond the bachelor's degree; 20 or more semester 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 MS candidate must include on the program of study one hour of GLG 500 RM: Geology Colloquium and six hours of GLG 592 Research and GLG 599 Thesis, at least three of which must be GLG 599 Thesis. A maximum of six hours of thesis may appear on a program of study. One-half of the semester hours applicable toward the degree must be in geological sciences courses; the remainder may include work either in geological sciences or 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.
Students applying for admission to the Geological Sciences MS degee program must submit Graduate Record Exam (GRE) Aptitude Test scores (verbal, quantitative and analytical) in addition to official transcripts, three letters of recommendations and a statement of purpose. The deadline for applications for the fall term is January 5.

## Geological Sciences (PhD) LAGEOSCPHD

COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE
Contact: http://sese.asu.edu | seseinfo@asu.edu | PSF 686 | 4809655081 | 1404
Official Degree Awarded: Geological Sciences (PhD)
Program Description: The PhD degree program in Geological Sciences is administered by the School of Earth and Space Exploration. The PhD degree consists of a minimum of 84 semester hours of course work beyond the bachelor's level. The program is designed to develop creative scholarship and to prepare the student for a professional degree in the geological sciences including geology, geophysics, geochemistry, planetary geology and related fields.

Program Requirements: This degree program requires 84 semester hours, a dissertation, a written comprehensive examination and an oral exam. The program of study for the PhD is selected with the recommendation of the student's supervisory committee. Each program of study must include 24 semester hours of research and dissertation. ASU Graduate College policies and procedures must also be met for admission into the program and for fulfilling the degree requirements.

## Foreign Language Requirements. None.

Comprehensive Examination. PhD 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 a Graduate College online application. Students applying for admission to the PhD program in Geological Sciences must also submit scores on the Graduate Record Examination (GRE) aptitude test (verbal, quantitative and analytical) in addition to transcripts, three letters of recommendation and a statement of purpose. The deadline for applications for fall semester is January 5.

Students may be admitted to the program with a bachelor's or master's degree in a related field. Up to 30 semester hours of master's-level course work in a related field can be accepted toward fulfillment of the PhD requirements.

## German (MA) LAGERMMA

COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE
Contact: http://www.asu.edu/clas/silc/ger/graduate | silc@asu.edu | LL 440 | 4809656281 | 0202

Official Degree Awarded: German (MA)
Program Description: The faculty in the School of International Letters and Cultures offer a graduate program leading to the MA degree in German.

Program Requirements: The program of study for the MA degree includes a minimum of 30 semester 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.

Comprehensive Examination: All candidates are required to pass a comprehensive written or oral examination designed to evaluate the candidate's knowledge in the area of specialization. In lieu of a traditional thesis for an MA in German, a student may opt for a nonthesis project. Candidates for the MA in German will be provided with a current Graduate Student Handbook.

Admission Requirements: Students interested in applying for this program must submit a Graduate College online application. Candidates for the MA degree 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.

## History (MA) LAHISTMA

COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE
Contact: http://www.asu.edu/clas/history/ | graduate.history@asu.edu | Coor 4th Floor | 4809653226 | 4302
Official Degree Awarded: History (MA)
Program Description: The faculty in the Department of History offer a graduate program leading to the MA degree in History. Candidates are offered an opportunity to develop knowledge of a specific historical field, to study comparative history and to learn research techniques.

Program Requirements: This degree program requires 30 semester hours, a thesis or applied project, and a foreign language examination. Upon matriculation, the student, in consultation with the graduate director, selects a faculty advisor in the student's area of concentration. The faculty advisor directs the student toward completion of required course work. The 30 semester hours must conform to the following guidelines:

1. At least 24 semester hours of course work in history is required. With the approval of the supervisory committee, candidates may add to the 24 semester hours, six semester hours of closely related course work in another academic unit (this does not apply to students in the public history concentration).
2. Eighteen of the 24 semester hours must be in 500 -level history courses. If 400 -level courses are included in the program of study, documented proof must be provided that they were taken for graduate credit. Contact the graduate program coordinator for details.
3. At least three of the 24 semester hours must be in HST 591 Seminar (normally in the major field of study).
4. At least six semester hours of HST 599 Thesis are required of students writing and MA thesis. The thesis equivalent substitutes six semester hours of HST 592 in place of six semester hours of HST 599 and incorporates an additional three semester hours of HST 591 into the program.

Admission Requirements: Applications for the MA program in History must be accompanied by

1. a letter of application;
2. copies of unofficial transcripts;
3. a departmental data form;
4. a graduate assistantship application (optional);
5. the applicant's scores on the Graduate Record Examination (GRE);
6. three letters of recommendation from faculty members or others who are qualified to judge the applicant's potential for advanced study in history;
7. a résumé;
8. a writing sample;
9. a statement of ambitions and career goals; and
10. TOEFL scores and TSE scores for students applying from outside the U.S. whose native language is not English must be submitted to the Graduate College. TWE scores are also requested. On the TOEFL, students are required to score

600 or higher on the regular examination (or an equivalent score on the computerized version). Unofficial scores should be sent directly to the History Department.

## History (PhD) LAHISTPHD

COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE
Contact: http://www.asu.edu/clas/history/ | graduate.history@asu.edu | Coor 4th Floor | 4809653226 | 4302
Official Degree Awarded: PHD History

Program Description: The PhD degree 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 at leading academic institutions, in historical societies and agencies, in the public sector and in business.

Major emphasis is placed upon developing a disciplined mind, expertise in a chosen subject area and competence in historical research methodology. The program is composed of small classes that bring students into a close working relationship with faculty and other graduate students.

Program Requirements: This degree program requires 84 semester hours, a dissertation, a written comprehensive examination and an oral comprehensive examination.

For students admitted to the doctoral program with a master's degree, the requirements for the PhD are an additional 54 semester hours of credit in residence, of which 24 semester hours are dissertation research and writing. All 54 semester hours have to be taken after admission to the program. A minimum of 84 semester hours of graduate course work is required for the doctorate.

For students admitted to the doctoral program directly from a baccalaureate program, the requirements for the PhD are 84 semester hours of course work, of which 24 semester hours are dissertation research and writing. A minimum of 54 semester hours must be taken while the student is in residence after admission to the doctoral program.

Upon matriculation, the student, in consultation with the graduate director, selects a faculty advisor in the area of concentration. Together the faculty advisor and student select a PhD committee consisting of at least three faculty members. In consultation with the student, the committee draws up the program of study and helps direct the student to the completion of required coursework.

The program of study must conform to the following guidelines (consult the graduate handbook):

1. at least 36 hours must be at the 500 -level or above;
2. if 400-level courses are taken as part of the program of study, the student must have documented proof that they were taken for graduate credit, contact the graduate program coordinator for details;
3. a course is required on research, theory, and methodology: HST 500 (three semester hours);
4. at least nine semester hours must be in research seminars (HST 591);
5. 24 semester hours of dissertation research and writing are required; and
6. at least three out of four of the core HST 598 courses offered by faculty in the North American and European history fields are required (for only those students majoring in these two fields).

Admission Requirements: Applicants must submit the Graduate College online application.

Applications for the PhD degree in History must be accompanied by

1. a letter of application;
2. copies of unofficial transcripts;
3. a departmental data form;
4. a graduate assistantship application (optional);
5. the applicant's scores on the Graduate Record Examination (GRE);
6. three letters of recommendation from faculty members or others who are qualified to judge the applicant's potential for doctoral study;
7. a résumé;
8. a writing sample;
9. a statement of ambitions and career goals; and
10. TOEFL scores and TSE scores for students applying from outside the U.S. whose native language is not English must be submitted to the Graduate College. TWE scores are also requested. On the TOEFL, students are required to score 600 or higher on the regular examination (or an equivalent score on the computerized version). Unofficial scores should be sent directly to the History Department. Policy exceptions can be obtained from www.asu.edu/graduate/international.

## Immigration Studies (CE) LAIMMSTUCE

COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE
Contact: http://shesc.asu.edu/grad_degrees | takeyuki.tsuda@asu.edu | Matthews Center 203K | 480/965-7887
Official Degree Awarded: Immigration Studies (Certificate) (CERT)
Program Description: Immigration Studies (CE)

## Infant - Family Practice (MAS) LACDEMAS

COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE
Contact: http://www.asu.edu/clas/ssfd | ssfd@asu.edu | Social Science 144 | 480/965-6978 | 3701
Official Degree Awarded: Infant Family Practice (MAS)
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, infant mental health, early intervention, family support and child care and early childhood administration. 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, see http://www.itmhca.org/.

Program Requirements: The Master's of Advanced Studies in Infant-Family Practice requires the successful completion of a minimum of 30 semester hours and a portfolio, including required course work and an internship in a community placement approved by the MAS-IFP 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:

1. admission to the ASU Graduate College,
2. three letters of recommendation from individuals familiar with the applicant's academic background,
3. official transcripts of the student's academic record, and
4. a personal statement.

In addition, selected candidates will be contacted for an interview.

## Justice Studies (MS) LAJUSSTMS

COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE
Contact: http://www.asu.edu/clas/justice/ | graduate.justice@asu.edu | Wilson Hall room 228| 4809656008 | 0403
Official Degree Awarded: Justice Studies (MS)
Program Description: The MS degree in Justice Studies is designed to prepare students for professional positions in justicerelated organizations, for teaching in community colleges and for further study and research in the justice field.

## Areas of Study

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

Program Requirements: The MS degree has two options: a thesis or an applied project.

## Thesis option

The thesis option requires the completion of 36 semester hours, six of which are JUS 599 Thesis. To satisfy the thesis requirement for the MS 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 semester hours, six of which 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 of study has three major categories: foundation courses, elective courses, and 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 RM: 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: In addition to the general admission requirements of the Graduate College, applicants must submit the following materials by December 14 for fall admissions:

1. Graduate Record Examination (GRE) scores or LSAT score taken within the last five years; and
2. transcripts.

Send these materials to

Graduate College
Arizona State University
PO Box 871003
Tempe AZ 85287-1003

Applicants must submit these items directly to the School of Justice and Social Inquiry by the same deadline:

1. personal statement ( 800 to 1000 words) outlining areas of interest, educational and career goals;
2. three letters of recommendation (academic, if possible); and
3. a writing sample.

Send these materials to

School of Justice and Social Inquiry Graduate Programs
Arizona State University
PO Box 870403
Tempe AZ 85287-0403

## Justice Studies (PhD) LAJUSSTPHD

## COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE

Contact: http://www.asu.edu/clas/justice/ | graduate.justice@asu.edu | WILSN 2nd floor | 4809656008 | 0403
Official Degree Awarded: Justice Studies (PhD)
Program Description: The Doctoral program in Justice Studies is an interdisciplinary degree program offered through the auspices of the School of Justice and Social Inquiry (SJSI). The program integrates philosophical, legal, and ethical approaches with social science and humanities perspectives to study five areas of interest: (1) citizenship, migration, and human rights; (2) globalization, sustainability, and economic justice; (3) law, policy, and social change; (4) media, technology, and culture; and (5) social identities and communities. SJSI is recognized as a leader in the interdisciplinary study of justice and a pioneer in the establishment of a full-fledged program in the field.

Program Requirements: This degree program requires 84 semester hours, a dissertation, and a written comprehensive examination. The doctoral program requires that students complete three foundation courses as a part of their course work for the PhD 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 JD degree are required to complete 54 semester hours. Of the 54 hours, 12 hours are earned as dissertation research; nine hours as PhD core courses; 15 as elective course work; and 18 are comprised of any combination of additional elective courses, reading or conference hours, or research hours.

Students entering the doctoral program without a master's or JD degree are required to complete 84 semester hours. Of the 84 hours, 12 hours are earned as dissertation research credit; 12 as 500 -level foundation courses; nine as required PhD courses; 24 hours as elective credit; and 27 semester hours are comprised of any combination of additional elective courses, reading and conference hours, or research hours.

Admission Requirements: In addition to the general admission requirements of the Graduate College, applicants must submit the following materials by December 14 for fall admissions:

1. Graduate Record Examination (GRE) scores or LSAT score taken within the last five years; and
2. transcripts.

## Send these materials to:

Graduate College
Arizona State University
PO Box 871003
Tempe AZ 85287-1003

Applicants must submit these items directly to the School of Justice and Social Inquiry by the same deadline:

1. personal statement ( 800 to 1000 words) outlining areas of interest, educational and career goals;
2. three letters of recommendation (academic, if possible); and
3. a writing sample.

## Send these materials to:

School of Justice and Social Inquiry Graduate Programs
Arizona State University
PO Box 870403
Tempe AZ 85287-0403

## Kinesiology (PhD) LAKINEPHD

COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE
Contact: http://www.asu.edu/clas/kines/ | kineswebmaster@asu.edu | PEBW 218|4809653875 | 0701
Official Degree Awarded: Kinesiology (PhD)
Program Description: The PhD degree in Kinesiology is an individualized, interdisciplinary program that integrates graduate courses from a variety of academic units to provide a sound foundation for research leading to a dissertation. Topics for these dissertations come from one of five research areas: biomechanics, motor behavior, physiology of exercise, exercise/health psychology, and human physiology.

Program Requirements: The program of study consists of a minimum of 84 semester hours of graduate credit for applicants holding a baccalaureate degree ( 54 hours of graduate work beyond the master's degree). Of the 84 semester hours, at least 30 hours (which may include research credit) of the approved PhD program, and 24 research and dissertation hours must be completed after admission to a PhD program at ASU. An individual program of study is selected in consultation with the student's supervisory committee. The program of study reflects the interdisciplinary nature of the degree program.

Admission Requirements: In addition to meeting Graduate College requirements, students must submit a letter designating a potential area of interest, the name of a potential mentor or mentors (from the list of faculty), and a statement of career goals to the Department of Kinesiology director, in care of the graduate studies committee. Graduate Record Examination (GRE) scores (verbal, quantitative, and the writing score), a professional résumé, and three letters of recommendation must also be submitted. All applicants whose native language is not English must submit a Test of English as a Foreign Language score. Admission decisions are based on the compatibility of the applicant's career goals with the purpose of the degree program, previous academic training and performance, GRE scores, recommendations, and match of research interests with those of available mentors.

To be considered for research or teaching assistantships, all application materials should be received before December 1 . Application materials are due before August 1 for admission in the spring.

## Liberal Studies (MLSt) LAMLSMLS

COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE
Contact: http://clas.asu.edu/liberaltudies/mls.htm | paulmorris@asu.edu | SS 214|4807270819|5002

Official Degree Awarded: Liberal Studies (MLSt)
Program Description: The Master of Liberal Studies 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.

Program Requirements: This program requires 30 credit hours 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:

18 hours of elective, no more than nine in the same department.

## Three emphasis areas are available

Science, nature and creative nonfiction writing
Gender, religion and culture
Borders: migration, health and cultural identity
Admission Requirements: Applicants must submit the Graduate College online application.

## Liberal Studies - Film and Media Studies (MLSt) LAFMSMLS

COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE
Contact: http://clas.asu.edu/liberalstudies/mls.htm | paulmorris@asu.edu | SS 214|480/727-0819|6505
Official Degree Awarded: Liberal Studies (Film and Media Studies) (MLSt)
Program Description: The Master of Liberal Studies - Film and Media Studies offers students interested in a multidisciplinary approach to 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 film and media. The program connects students to the entire College of Liberal Arts and Sciences and integrates the disciplines.

Program Requirements: This degree program requires 30 semester hours 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:

Admission Requirements: Applicants must submit a Graduate College online application.

# Linguistics (Grad Certificate) LALINGUICE 

COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE
Contact: enggrad@asu.edu | Languages and Literatures 542B | 480/965-3194 | 0302
Official Degree Awarded: Linguistics (certificate) (CERT)
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, critical thinking, problem solving and communication skills. 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.

Program Requirements: This certificate program requires 18 semester hours of coursework. The required nine semester-hour core of the certificate consists of courses in phonology, syntax and discourse analysis/pragmatics. The other three courses (nine semester hours) may be chosen from fields such as second language acquisition, applied linguistics, sociolinguistics, computer science, education, language and culture.

Pre-requisite: 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 coursework must be completed with an average grade of "B" or higher.
Admission Requirements: Applicants must submit the Graduate College online application. Students interested in earning the Graduate Certificate in Linguistics must make a formal application to the Supervisory Committee of the Graduate Certificate in Linguistics. To do so, students must complete the declaration of interest form, provide necessary documentation and meet with the certificate faculty advisor. Questions about the application process and other logistical matters concerning the certificate should be directed to Sheila Luna (480) 965-3194, sheila.luna@asu.edu. Students must submit a copy of official transcripts from an undergraduate degree institution attesting to the completion of the 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 while being nondegree graduate students. Students who apply to the graduate certificate in Linguistics and are admitted to ASU as nondegree graduate students, will be denied admission to the certificate program if they do not hold a bachelor's degree (or equivalent) from a regionally accredited institution or equivalent. Graduate students who have already been admitted to an ASU degree program will have already had their undergraduate credentials verified and no additional verification will be required.

## Marriage and Family Therapy (MAS) LAMFTMAS

COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE
Contact: http://www.asu.edu/clas/ssfd | ssfd@asu.edu | SS 144|480/965-6978 | 3701
Official Degree Awarded: Marriage and Family Therapy (MAS)
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, http://www.bbhe.state.az.us/. The degree requirements are specified by the board and the program a designed to train practitioners who wish to practice marriage and family therapy.

Program Requirements: The Master's of Advanced Studies in Marriage and Family Therapy program requires the successful completion of a minimum of 39 semester hours, and applied project, including required course work and completion of 300 client contact hours in a community internship placement approved by the MAS-MFT 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.

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 Graduate College online application.
Admission to the program is determined by the following criteria:

1. admission to the ASU Graduate College,
2. three letters of recommendation from individuals familiar with the applicant's academic background,
3. official transcripts of the student's academic record, and
4. a personal statement.

In addition, selected candidates will be contacted for an interview.

## Mathematics (MA) LAMATHMA

## COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE

Contact: http://math.la.asu.edu/ | grad@math.la.asu.edu | PSA 216|4809653951 | 1804
Official Degree Awarded: Mathematics (MA)
Program Description: This degree is designed for students who wish to extend their knowledge and prepare for careers using mathematics. Students pursuing the MA degree in Mathematics may choose one of the following general areas: mathematics, applied mathematics, statistics and probability, and mathematics education. Further information may be obtained from the department website.

Program Requirements: This degree program requires 30 semester hours of math or math related graduate coursework. A student may choose to write a thesis, in which case six of the 30 semester hours must consist of thesis (599). Twelve of the remaining 24 semester hours must be at the 500 level. The student must also complete a qualifying examination (see department web page for exam information) and a final oral examination in defense of the thesis. Students who do not choose the thesis option must take 18 semester hours at the 500 level. They must also pass two qualifying examinations.

Admission Requirements: Applicants must submit the Graduate College online application. Minimum background for consideration of admission to a graduate program in mathematics includes a bachelor's degree in mathematics or a closely related area with a 3.00 Grade Point Average, and course work in linear algebra (MAT 342) and advanced calculus (MAT 371). Familiarity with computer languages is highly desirable for areas in applied mathematics.

## Mathematics (MNS) LAMATHMNS

COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE
Contact: http://math.la.asu.edu/ | grad@math.la.asu.edu | PSA 216|4809653951 | 1804

Official Degree Awarded: Natural Science (Mathematics) (MNS)
Program Description: The Master's of Natural Science (MNS) degree offered by the Department of Mathematics and Statistics is for students interested in an interdisciplinary program with a major emphasis in mathematics and a minor emphasis in a related subject such as biology, engineering, education or economics.

Program Requirements: This degree program requires 36 semester hours and a written comprehensive examination. Twelve of those semester hours must consist of coordinated graduate study outside the Department of Mathematics and Statistics. At least 18 semester hours must be at the 500 level, which includes at least six semester hours of the courses completed outside the department. Students must either pass one qualifying examination or receive a minimum GPA of 3.25 in four courses of two qualifying sequences. See the department website for examination information.

Admission Requirements: Applicants must submit the Graduate College online application. Minimum background for consideration of admission to a graduate program in mathematics includes a bachelor's degree in mathematics or a closely related area with a 3.00 Grade Point Average, and course work in linear algebra (MAT 342) and advanced calculus (MAT 371). Familiarity with computer languages is highly desirable for areas in applied mathematics.

## Mathematics (PhD) LAMATHPHD

COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE
Contact: http://math.la.asu.edu/ | grad@math.la.asu.edu | PSA 216 | 4809653951 | 1804
Official Degree Awarded: Mathematics (PhD)
Program Description: The PhD 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.

Program Requirements: PhD students must complete 84 semester hours of coursework which must include 12 semester hours of dissertation (799). Students must pass two qualifier examinations, a written comprehensive examination, and an oral 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 Graduate College online application. Minimum background for consideration of admission to a graduate program in mathematics includes a bachelor's degree in mathematics or a closely related area with a 3.00 Grade Point Average, and course work in linear algebra (MAT 342) and advanced calculus (MAT 371). Familiarity with computer languages is highly desirable for areas in applied mathematics.

## Mathematics Education (PhD) (Mathematics and Statistics Dept - Grades 9-20) LAMTEPHD

COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE
Contact: http://math.la.asu.edu | grad@math.la.asu.edu | PSA 216|480/965-3951 | 1804
Official Degree Awarded: Mathematics Education (PhD)
Program Description: The PhD in Mathematics Education through the Mathematics and Statistics Department emphasizes mathematics education at the secondary and collegiate levels.

## Medieval Studies (Grad Certificate) LAMEDSTCE

COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE
Contact: http://www.asu.edu/clas/acmrs | acmrs@asu.edu | Lattie Coor Hall - 4th Flr Rms 4432, Tempe | 480/965-5900|4402
Official Degree Awarded: Medieval Studies (certificate) (CERT)
Program Description: The certificate program prepares students for advanced study or for academic positions by augmenting their skills and knowledge, thereby making them more equipped to handle the demands of their fields.

Since Medieval and Renaissance studies are by nature interdisciplinary, students in the certificate program receive interdisciplinary training. Besides the course work and examinations required in their major field, students take six to nine semester hours outside their discipline and receive training in a Medieval vernacular language or a modern European language.

The core of the program has two components: (1) Latin, the international language for both the Middle Ages and Renaissance, and (2) paleography, the study of the physical medium through which Latin and other languages were transmitted.

For more information, contact the Arizona Center for Medieval and Renaissance Studies.

Program Requirements: One semester (3 to 4 credit hours) of Medieval Latin for M.A. students, two semesters (6 to 8 credit hours) for Ph.D. students, with proficiency attested either by achieving a grade of 'B' or better in the Medieval Latin course (or courses) 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)

Two semesters or 6 credit hours (M.A.), 3 semesters or 9 credit hours (Ph.D.) of a Medieval vernacular language (e.g., Old English, Old Norse, Old French).

One semester (3 credit hours) of paleography.
Two semesters (6 credit hours) of course work outside the major discipline (M.A.), three semesters or 9 credit hours for Ph.D.
A thesis or dissertation in the area of Medieval Studies (3 to 6 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: Graduate students admitted to a degree program in any field may earn one of two MA- or PhD-level certificates: the Certificate in Medieval Studies or the Certificate in Renaissance Studies.

## Microbiology (MS) LAMICROMS

COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE
Contact: http://sols.asu.edu/grad/igels/ | sols.grad@asu.edu | LSC 226 | 4809651768 | 4601
Official Degree Awarded: Microbiology (MS)
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, industry or government agencies.

Program Requirements: A minimum of 30 semester 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 semester hours of course work, a fundamental understanding of the following subdisciplines: bacterial genetics, immunology, molecular biology, physiology and metabolism and 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 semester hours of formal course work. A thesis is required along with a final oral examination covering the thesis and related to subject matter.

Admission Requirements: Applicants must submit the Graduate College online application. Admission criteria are as follows: Applicants should have 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; a 3.0 minimum GPA during the student's last two years or last 60 semester hours; minimum GRE scores in verbal (50th percentile), quantitative (70th percentile) and writing (5); and TOEFL scores of 250 computer, 600 paper or 100 internet.

## Microbiology (PhD) LAMICROPHD

COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE
Contact: http://sols.asu.edu/grad/igels/ | sols.grad@asu.edu | LSC 226 | 4809651768|4601

Official Degree Awarded: Microbiology (PhD)
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, industry or government agencies.

Program Requirements: The program of study is planned 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 semester hours are required. Twelve hours of dissertation are required and the remainder hours are comprised of coursework showing breadth in microbiology and related disciplines, seminars and research. 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.

Admission Requirements: Applicants must submit the Graduate College online application.
Admission criteria are as follows: Applicants should have completed the requirements for an undergraduate major in microbiology, the plant sciences, biology or related discipline, with an adequate background in related courses in chemistry, mathematical and physical sciences; a 3.0 minimum GPA during the student's last two years or last 60 semester hours; minimum GRE scores in verbal (50th percentile), quantitative (70th percentile) and writing (5); and TOEFL scores of 250 computer, 600 paper or 100 internet. A GRE subject exam is strongly recommended.

## Molecular/Cellular Biology (MS) LACELLMS

COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE
Contact: http://sols.asu.edu | sols.grad@asu.edu | LSC 226|4809651768 | 4601
Official Degree Awarded: Molecular and Cellular Biology (MS)
Program Description: The MS in Molecular and Cellular Biology 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. 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 viral, bacterial, plant or animal.

Program Requirements: Thirty semester hours are required. A minimum of 10 designated semester hours of MCB 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: Admission criteria are as follows: a 3.0 minimum GPA during the student's last two years or last 60 semester hours; minimum GRE scores in verbal (50th percentile), quantitative (70th percentile), and writing (5); and TOEFL scores of 267 computer, 600 paper, or 100 internet.

## Molecular/Cellular Biology (PhD) LACELLPHD

COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE
Contact: http://sols.asu.edu | sols.grad@asu.edu | LSC 226 | 4809651768 | 4601
Official Degree Awarded: Molecular and Cellular Biology (PhD)
Program Description: The PhD in Molecular and Cellular Biology 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 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 viral, bacterial, plant or animal.

Program Requirements: The program of study is planned 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 semester hours are required. Twelve semester hours of dissertation are required and the remaining hours are comprised of core coursework, seminars and research. An oral and written comprehensive examination are required in order to advance to candidacy, and a formal defense of the final written dissertation is required prior to graduation.

Admission Requirements: Admission criteria are as follows: a 3.0 minimum GPA during the student's last two years or last 60 semester hours; minimum GRE scores in verbal (50th percentile), quantitative (70th percentile), and writing (5); and TOEFL scores of 267 computer, 600 paper, or 100 internet. A GRE subject exam is strongly recommended.

## Museum Studies (Grad Certificate) LAMUSEUMCE

COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE
Contact: http://shesc.asu.edu/graduate_studies | anthgrad@asu.edu | Anthropology Bldg, Cady\&Tyler Malls, Tempe Campus | 480/965-6215| 2402

Official Degree Awarded: Museum Studies (certificate) (CERT)
Program Description: The certificate may be taken independently or in conjunction with the MA degree in Anthropology with a concentration in museum anthropology.

Program Requirements: 12 semester hours of required course work and a six-semester-hour internship at an approved museum.
Admission Requirements: Nondegree or graduate students who are accepted into the certificate program. The certificate may be taken independently or in conjunction with the MA degree in Anthropology with a concentration in museum anthropology. 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 statement of their interests and professional goals and three letters of recommendation. Applicants who received their BA during the past ten years must also submit scores on the Graduate Record Examination. 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.

## Nanoscience (PSM) LANANPSM

COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE
Contact: http://physics.asu.edu | physics.grad@asu.edu | PSF 470 | 480/965-3561 | 1504
Official Degree Awarded: Nanoscience (PSM)
Program Description: The Professional Science Masters (PSM) 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 physics, chemistry and biochemistry, materials science, and electrical engineering. Commercial innovation is a particular target goal of the degree, including applications in optics, semiconductor electronics and optoelectronics, sensors, nano-medicine, and healthcare. The PSM in Nanoscience program is suitable for working professionals as well as for students who have obtained traditional BS or MS degrees in related fields.

Program Requirements: To be awarded the PSM degree in Nanoscience, students must complete 30 semester hours of course work 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 courses are currently offered within the Department of Physics. 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, initial Summer Session)
NAN 593 Applied Project (three credits each, Spring and final Summer Session)
NAN 598 Nanoscience and Society (two credits, final Summer Session)
NAN 598 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.
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 PSM in Nanoscience degree 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: 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. This program also seeks to attract students already employed in related areas, and who wish to become knowledgeable and skilled in nanoscience. GRE scores are not required for application, but will be taken into consideration if submitted. A 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 Web site.

## Philosophy (History and Philosophy of Science) MA LAHPSMA

COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE
Contact: http://sols.asu.edu/grad | Sols@asu.edu | LSC 284 | 480/965-8927 | 4601
Official Degree Awarded: Philosophy (History and Philosophy of Science) (MA)
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 on just philosophy or just history, but those that bring the two together are regarded as among the strongest in each area. The objective here is to provide a program for students who come to HPS from the humanities and who seek a career based in philosophical analysis of the sciences. We have the research strength competitive with any program internationally.

Program Requirements: Students will complete 30 hours of graduate coursework for the MS which include:
History of Science (3 Hours)
Philosophy of Science (3 Hours)
Topics in the History of Science (3 Hours)
Topics in the Philosophy of Science (3 Hours)
Research Methods in HPS (3 Hours)
Prospectus Writing (3 Hours)
Research and Thesis (12 Hours)

## Philosophy (History and Philosophy of Science) PHD LAHPSPHD

Contact: http://sols.asu.edu/grad | sols@asu.edu | LSC 284|480/965-8927|4601
Official Degree Awarded: Philisophy (History and Philosophy of Science) (PhD)
Program Description: This Concentration combines solid training in the core areas of philosophy with an emphasis on interdisciplinary studies of the sciences, their history, epistemology, conceptual structure, and their 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 on just philosophy or just history, but those that bring the two together are regarded as among the strongest in each area. The objective here is to provide a program for students who come to HPS from the humanities and who seek a career based in philosophical analysis of the sciences. We have the research strength competitive with any program internationally.

Program Requirements: Students will complete 84 hours of graduate coursework for the PhD which include:

History of Science (3 Hours)
Philosophy of Science (3 Hours)
Topics in the History of Science (3 Hours)
Topics in Philosophy of Science (3 Hours)
Research Methods in HPS (3 Hours)
Prospectus Writing (3 Hours)

Additional courses required for the degree include:

A Course in History of Philosophy (3 Hours)
A Course in Value Theory (3 Hours)
Advanced Logic or Approved Equivalent (3 Hours)
Approved Philosophy Or Other Relevant Courses (9 Hours)
HPS 600 Lab (3 Hours, One Credit Each)
Research or Elective Courses Approved By Dissertation Chair (33 Hours)

## Philosophy (MA) LAPHILMA

COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE
Contact: http://www.asu.edu/clas/philosophy/ | philosophy@asu.edu | COOR 3309|4809653394|4102
Official Degree Awarded: Philosophy (MA)
Program Description: The MA degree program in Philosophy is designed to prepare students either to teach philosophy at the community college level, to enter doctoral programs in philosophy at other institutions, or to be employed in any areas that require critical and analytical thinking (such as medicine, law, government or publishing).

Program Requirements: There are two tracks of study for the MA degree in Philosophy:

## THESIS OPTION:

A. Distribution Requirement

1. Each student shall be required to take at least 24 semester hours of approved graduate-level courses, not including PHI 599 Thesis.
2. An additional six hours of PHI 599 Thesis is required (see Thesis Requirements below.)
3. Each student is required to take an approved graduate-level course of three semester 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.
4. A thesis is required. This written work must demonstrate the ability to carry out independent research in philosophy.
5. A final oral examination in defense of the thesis is required.
6. Each semester's program of study must be approved by the Director of Graduate Studies.
B. Thesis Requirement
7. Each student must complete 6 semester hours of PHI 599 Thesis; no more than 6 semester hours of PHI 599 may count toward the 30 credit hour requirement.
8. 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 of the thesis committee shall be designated the Director of the Thesis and shall chair the thesis committee. At least three members of the thesis committee, including the Director, shall be members of the Philosophy Department.
9. After the thesis committee is formed, the student shall, within a reasonable time, present a thesis prospectus to that committee for approval.
10. Once the thesis committee has certified that the student's thesis is sufficiently complete to warrant an oral defense, the student shall present an oral defense of the thesis. The defense cannot take place less than two weeks after the Director of Graduate Studies has made public announcements of the time and place of the defense. The committee's certification is not to be construed as warrant that the committee will not require changes in the thesis after the oral defense.
C. Academic Standards
11. A graduate student is considered to be performing satisfactorily when:
a. She/He maintains a "B" average or better in her/his graduate course work and obtains at least a "B" in the courses specified in Part A above.
b. Her/His research is progressing satisfactorily.
c. Her/His performance of duties incident to any appointment she/he may hold is satisfactory (e.g., teaching assistantship).
The Director of Graduate Studies of the Department maintains academic standards by surveying periodically the records of all graduate students. An individual whose performance according to the above standards is not entirely satisfactory is so notified in writing. Recommendations of the Director of Graduate Studies are communicated to the Chair of the Department, who may direct, on the basis of performance, one of the following:
. Immediate termination of enrollment.
a. Probationary continuation of enrollment.
b. Continuation of the graduate program.

The student is welcome to appeal in writing to the Chair of the Department if she/he feels there are extenuating circumstances which should be considered or if she/he feels the faculty action is unfair or unusually severe.

## NON-THESIS OPTION

A. Distribution Requirements

1. Each student shall be required to take at least 27 semester hours of approved graduate-level courses, not including PHI 592 Research.
2. An additional three hours of PHI 592 Research is required to prepare the portfolio.
3. Each student is required to take an approved graduate-level course of three semester 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.
4. 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.
5. A final oral examination in defense of the portfolio is required.
6. Each semester's program of study must be approved by the Director of Graduate Studies.

## B. Portfolio Requirements

1. 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.
C. Academic Standards
2. A graduate student is considered to be performing satisfactorily when:
a. She/He maintains a " $B$ " average or better in her/his graduate course work and obtains at least a "B" in the courses specified in Part A above.
b. Her/His research is progressing satisfactorily.
c. Her/His performance of duties incident to any appointment she/he may hold is satisfactory (e.g., teaching assistantship).
The Director of Graduate Studies of the Department maintains academic standards by surveying periodically the records of all graduate students. An individual whose performance according to the above standards is not entirely satisfactory is so notified in writing. Recommendations of the Director of Graduate Studies are communicated to the Chair of the Department, who may direct, on the basis of performance, one of the following:
. Immediate termination of enrollment.
a. Probationary continuation of enrollment.
b. Continuation of the graduate program.

The student is welcome to appeal in writing to the Chair of the Department if she/he feels there are extenuating circumstances which should be considered or if she/he feels the faculty action is unfair or unusually severe.

Admission Requirements: Applicants must submit the Graduate College online application. All applications for admission to the MA degree program in Philosophy must be accompanied by complete transcripts, the applicant's score in the GRE aptitude exam, three letters of recommendation from persons qualified to judge the applicant's potential for graduate work in philosophy, a sample of philosophical writing, a statement of purpose and a TA application.

The graduate application, transcripts, GRE, and TOEFL scores should be sent to

Admissions Office
Graduate College
Arizona State University
PO Box 871003
Tempe AZ 85287-1003

The letters of recommendation, philosophical writing sample, statement of purpose and TA application should be mailed to

Director of Graduate Studies
Department of Philosophy
Arizona State University
PO Box 874102
Tempe AZ 85287-4102

## Philosophy (PhD) LAPHILPHD

## COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE

Contact: http://www.asu.edu/clas/philosophy/ | philosophy@asu.edu | COOR 3309|4809653394|4102

## Official Degree Awarded: Philosophy (PhD)

Program Description: The PhD degree program in Philosophy is designed to prepare students for careers as philosophers and teachers of philosophy, and in areas that may benefit from advanced training in philosophy, such as law, civil service and publishing.

Program Requirements: This degree program requires 84 semester hours, a dissertation, a written comprehensive examination and an oral comprehensive examination. The student's program 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 will be required to pass with a grade of B or better:

1. Two graduate courses in history of philosophy.
2. Two graduate courses in value theory.
3. Four graduate courses in metaphysics and epistemology (including areas such as philosophy of language, philosophy of science and philosophy of mind).
4. One advanced course in symbolic logic ( 400 or 500 level). Students may satisfy the logic requirement by examination.

## Foreign Language Requirement

None

## Comprehensive Examination

Students will be examined in their area of specialization and competence. The written and oral examinations are based on a bibliography compiled by the student and approved by the student's advisory committee. Normally these examinations are taken after the student has completed at least 60 hours of graduate course work.

## 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:

1. thesis statement
2. discussion of relevant literature
3. discussion of the approach to the project
4. bibliography

## 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 hours of Research or Dissertation credit after admission to candidacy.

## Final examination

An oral examination in defense of the dissertation is required.

Admission Requirements: PhD 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.

## Physics (MNS) LAPHYSMNS

COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE

Contact: http://physics.asu.edu | physics.grad@asu.edu | PSF 470 | 4809653561| 1504
Official Degree Awarded: Natural Science (Physics) (MNS)
Program Description: The Master of Natural Science (MNS) degree curriculum provides interdisciplinary graduate training in physics, physical science, or physics education. The degree is especially suited for individuals 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. The major is Natural Science and students are expected to emphasize course work in two or more areas of concentration. The program must be interdisciplinary.

Program Requirements: A minimum of 30 semester hours is required for the degree. 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 graduate advisor and the student suggest names of persons to serve on the supervisory committee. The supervisory committee recommends the program of study, after conferring with the student. 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. A thesis is optional. A final written or oral examination, or both, is required. Each examination is administered by the supervisory committee.

Teachers may enroll in these courses in order to earn credit towards re-certification, or to pursue a Master of Natural Science degree (MNS). 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 MNS for high school physics teachers is available on the department's Web site at http://phy.asu.edu.

Admission Requirements: 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. A 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 Web site. To obtain application forms, access the department's Web site at http://phy.asu.edu.

## Physics (MS) LAPHYSIMS

COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE
Contact: http://physics.asu.edu/ | physics.grad@asu.edu | PSF 470 | 4809653561|1504

## Official Degree Awarded: Physics (MS)

Program Description: The MS in Physics degree 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.

Program Requirements: This program requires 30 semester hours and a thesis. The MS in Physics can emphasize either physics alone or physics in combination with one of the following fields: astronomy and astrophysics, interdisciplinary physics (e.g., with chemistry), technical physics or physics teaching.

A supervisory committee is formed for each student, usually during the first year of study. In each case an appropriate program of study is selected with the approval of the supervisory committee. A research project resulting in a thesis is required of all students enrolled in the program. Every student must complete six, and only six, semester hours of PHY 599. A student may complete as many semester hours of PHY 592 as they wish, however, no more than nine semester hours of PHY 592 can be counted toward the 30 semester hours required for the MS in Physics degree.

The final examination for the program is an oral examination on the subject of the student's thesis and on graduate course work taken.

Admission Requirements: To be admitted to the MS in Physics program without deficiencies, appplicants should have adequate undergraduate preparation equivalent to an undergraduate major of 30 semester hours in physics and 20 semester hours in mathematics. Courses in analytic mechanics, electromagnetism, and modern physics, including quantum mechanics, are particularly important.

Students applying for admission must submit test scores for the verbal, quantitative, and analytical sections of the Graduate Record Examination (GRE). Submission of test scores for the Physics GRE subject exam is recommended although not mandatory. A 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.

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 MS degree, and need and availability of such support. Students on probation are offered financial support only under exceptional circumstances.

## Physics (PhD) LAPHYSIPHD

COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE
Contact: http://physics.asu.edu/ | physics.grad@asu.edu | PSF 470 | 4809653561|1504
Official Degree Awarded: Physics (PhD)
Program Description: The PhD in Physics degree offered by the Department of Physics is intended for highly capable students having the interest and ability to pursue a career in independent research. The degree marks the transition from student of physics to independent physicist. PhD in Physics graduate students are the heart and soul of research activities in any physics department. The ASU graduate program in physics has over 100 PhD students working with members of the physics graduate faculty, which extends beyond the departmental faculty to include PhD faculty members from related disciplines, which currently include chemistry and biochemistry, biology, electrical engineering and materials science.

Program Requirements: This degree program requires 84 semester hours, a dissertation, a written comprehensive examination and an oral comprehensive examination.

PhD physicists enter careers ranging from academic faculty to industrial research to administration and management. To accommodate this broad spectrum of opportunities, the Department of Physics offers PhD programs in both physics and applied physics and encompassing a wide range of options as stated below. The goal is to provide, through course work and independent study, an advanced competence in fundamental, applied and interdisciplinary branches of physics, as well as a demonstrated ability to conduct independent research.

Each PhD student's progress is overseen by a supervisory committee, largely chosen by the student under oversight of the Graduate Program Committee. The supervisory committee approves the student's program of study. A total of 18 hours of core Physics courses are required of all Physics students and should ideally be completed within the first year of graduate study.

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Core Courses (3 semester hours each)
PHY 521 Classical and Continuum Mechanics
PHY }531\mathrm{ Electrodynamics
PHY 541 Statistical Physics
PHY 576 Quantum Theory
PHY 500 Research Rotation I
PHY 500 Research Rotation II
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Research rotations offer a novel means for incoming PhD graduate students to experience research in two separate sub-areas of physics prior to choosing a thesis topic. The two PHY 500 research rotations must be taken with different faculty advisors and on significantly different topics. Students select their top choices for research rotations from a catalog of available projects. Assignments are then made by the Graduate Program Committee, which attempts to optimize student choices. Students may
approach any member of the physics graduate faculty about potential projects, although this does not guarantee assignment to that specific project. As an integral part of each research rotation, students produce a formal written report to document their activities during the project and their resulting analysis and conclusions.

Specific areas of emphasis within the PhD program often require additional coursework as determined by the student's advisor and supervisory committee in consultation with the student. Current areas of emphasis within the Department of Physics are biological physics, electron diffraction and imaging, nanoscale and materials physics, and particle physics and astrophysics.

The PhD written and oral comprehensive examinations are taken at the beginning of the student's second year. Students choose one written report from their two research rotations and expand it (generally over the summer while conducting summer research) into a professional-level report of about 20 pages. The student orally defends this report to a three person committee that is not related to the student's eventual thesis committee. The primary intent of the oral exam is to probe the student's grasp of broad fundamental physics, emphasizing topics covered in the core PhD courses. In addition, the committee may explore the student's understanding of specific topics contained in the written report.

Students enrolled in the PhD program may obtain an 'MS degree in passing' by satisfactorily filing and completing an MS program of study, maintaining a GPA of at least 3.00 in a set of designated core courses within a total of at least 30 semester hours, and passing the PhD written and oral comprehensive examinations. The courses may include those designated for the chosen emphasis of the student's doctoral program. Specific graduate courses may be waived by petition to the Graduate Program Committee upon presenting evidence of equivalent courses previously taken at another institution and provided the prior courses were not required for a previous degree.

Admission Requirements: Applicants to the Department of Physics PhD 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 semester hours in physics and 20 semester 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. Submission of test scores for the Physics GRE subject exam is highly recommended although not mandatory. A 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 Web site. 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 PhD comprehensive examinations, and the need and availability of such support. Students on probation are offered support only under exceptional circumstances. The period for which a PhD candidate may receive financial support through the Department of Physics does not normally exceed six years.

## Plant Biology (MNS) LALIFESMNS

## COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE

Contact: http://sols.asu.edu | sols.grad@asu.edu | LSC 226 | 4809651768 | 4601
Official Degree Awarded: Natural Science (Plant Biology) (MNS)
Program Description: The School of Life Sciences participates in the program leading to the MNS degree when one of the concentrations is Biology, Microbiology or Plant Biology. This interdisciplinary degree is designed to meet the needs of professionals seeking a graduate-level degree.

Program Requirements: This degree program requires 30 semester hours, a written comprehensive exam and an oral comprehensive exam. A thesis option is available. Students are expected to emphasize course work in two or more areas of concentration. The program must be interdisciplinary. 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 academic unit in which the graduate advisor serves as a faculty member. The composition of the supervisory committee must reflect the interdisciplinary nature of the program. A program of study is recommended by the supervisory committee after conferring with the student. The minimum number of semester 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. A thesis is optional. 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. Admission criteria are as follows: a 3.0 minimum GPA during the student's last two years or last 60 semester hours; minimum GRE scores in verbal (50th percentile), quantitative (70th percentile) and writing (5); and TOEFL scores of 250 computer, 600 paper or 100 internet.

## Plant Biology (MS) LAPLBIOMS

COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE
Contact: http://sols.asu.edu | sols.grad@asu.edu | LSC 226 | 4809651768 | 4601
Official Degree Awarded: Plant Biology (MS)
Program Description: The program is designed to prepare students for careers in teaching and research in educational, Medical, industrial and governmental institutions.

Program Requirements: This degree program requires 30 semester hours and a thesis. The program must include at least three semester hours of research, three semester hours of thesis, and one hour of participatory seminar (PLB 591). 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 requirements for an undergraduate major in the plant sciences, biology or related discipline; a 3.0 minimum GPA during the student's last two years or last 60 semester hours; minimum GRE scores in verbal (50th percentile), quantitative (70th percentile) and writing (5); and TOEFL scores of 250 computer, 600 paper or 100 internet.

## Plant Biology (PhD) LAPLBIOPHD

COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE
Contact: http://sols.asu.edu/grad/ | sols.grad@asu.edu | LS C226 | 4809651768|4601
Official Degree Awarded: Plant Biology (PhD)
Program Description: The PhD in Plant Biology program is designed to prepare students for careers in teaching and research in educational, Medical, industrial, and governmental institutions.

Program Requirements: The PhD in Plant Biology program requires 84 credit hours, a disseration and written and oral comprehensive examinations. The program must include a maximum of 12 hours 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:

1. the requirements for an undergraduate major in the plant sciences, biology, or related discipline, with an adequate background in related courses in chemistry, mathematical and physical sciences,
2. a 3.0 minimum GPA during the student's last two years or last 60 semester hours,
3. minimum GRE scores in verbal (50th percentile), quantitative (70th percentile), and writing (5), and
4. TOEFL scores of 250 computer, 600 paper, or 100 internet,
5. a GRE subject exam is strongly recommended.

## Political Science (MA) LAPOLSCMA

COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE

Contact: http://www.asu.edu/clas/polisci/ | polsci@asu.edu | COOR HALL 6700 | 4809656551 | 3902

## Official Degree Awarded: Political Science (MA)

Program Description: The MA 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 PhD. Students may apply directly to the doctoral program or master's program.

Program Requirements: A minimum of 31 semester hours is required for the Master of Arts degree in political science. This program includes both a thesis and non-thesis option. All candidates must take POS 503 and the core course in the student's major and minor fields. Each student must take a pass/fail one semester hour workshop course each semester. In the spring of the first year, the student is required to take POS 598 ST: Teaching and Writing Workshop. Additional hours must be taken in graduate-level courses and seminars. Each student is expected to take seminars each semester in his/her major field, minor field, and an elective until course work is completed. If the thesis option is followed, the program must include a combination of at least six semester hours of research (POS 592) and thesis (POS 599) credit. A maximum of six semester hours in approved courses taken outside the department and six hours of reading and conference (POS 590) courses may count toward the 30 hour requirement.

Admission Requirements: Applicants must submit the Graduate College online application.
The following items should be submitted to the Department of Political Science by February 1 in order to ensure recommendations for admission to the MA program beginning the following fall:

1. scores from the verbal, quantitative, and analytical sections of the Graduate Record Examination (GRE),
2. three letters of recommendation from persons who can evaluate the applicant's academic performance and potential,
3. a career overview statement which describes the applicant's educational objectives, and
4. a writing sample that best represents the applicant's thinking and writing skills.

Departmental application materials should be mailed to:

## Graduate Coordinator

Department of Political Science
PO Box 873902
Tempe AZ 85287-3902

Applicants for financial aid should submit these items and complete the application form for graduate assistantships by February 1.

Undergraduate course work in political science is not a prerequisite for admission. However, MA 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.

## Political Science (PhD) LAPOLSCPHD

COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE
Contact: http://www.asu.edu/clas/polisci/ | polsci@asu.edu | COOR HALL 6700 | 4809656551 | 3902
Official Degree Awarded: Political Science (PhD)
Program Description: The Department of Political Science offers a PhD in Political Science.
Program Requirements: This degree program requires 84 credit hours, a dissertation, and written and oral comprehensive examinations. A minimum of 60 semester hours of graduate courses beyond the baccalaureate degree and approved by the
student's supervisory committee shall constitute the formal course preparation, followed by a minimum of 24 semester hours of research and dissertation work. The supervisory committee has three members, including the committee chair from the student's major field, and two members from a minor field. As part of the 60 semester hours, the student must take POS 503 and 603. Each student must take a pass/fail one-semester-hour workshop course each semester. In the spring of the first year, the student is required to take POS 598 ST: Teaching and Writing Workshop. A maximum of 12 semester hours of approved course work outside the department and 12 semester hours of approved reading and conference courses (POS 590 and 790) may count toward the 60 semester hours.

Admission Requirements: Applicants must submit the Graduate College online application.
In addition to meeting Graduate College requirements, an applicant for the PhD program must take the verbal, quantitative, and analytical sections of the GRE; supply a career overview statement that describes the applicant's educational objectives; submit three letters of recommendation from persons who can evaluate the applicant's undergraduate and graduate work; and provide a sample of writing. These items should be submitted before February 1 to:

## Graduate Coordinator

Department of Political Science
PO Box 873902
Tempe AZ 85287-3902
Applicants for financial aid should also complete and submit the application form for graduate assistantships by February 1.

PhD 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 sufficient time to acquire such a background.

## Psychology (PhD) LAPSYCHPHD

COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE

Contact: http://www.asu.edu/clas/psych/ | psygrad@asu.edu | PSY 296 | 4809657606 | 1104
Official Degree Awarded: Psychology (PhD)
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:

1. behavioral neuroscience;
2. clinical;
3. cognition, action, and perception;
4. developmental;
5. quantitative; and
6. 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., cognition, action, and perception studies and arts, law and psychology, media, and engineering). 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 from basic research in the neurobiological processes that underlie behavior and health (e.g., drug abuse, stress, heart disease), cognitive processes involving human memory and perception, personality and issues of stigma and prejudice, and developmental aspects of emotion and cognition to more applied research that address prevention of child mental health problems, individual resilience, cultural influences on psychological processes, and 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.

Program Requirements: A minimum of 84 semester hours which includes 24 semester hours of research and dissertation beyond the bachelor's degree are required.

In addition to a core curriculum, students take courses related to their area of interest as determined in consultation with their supervisory committees. Requirements vary across training areas.

Admission Requirements: Completed applications, including all letters and supporting documents, must be received by December 15 for applicants to the clinical program, and by January 5 for all other applicants (behavioral neuroscience, cognitive, developmental, quantitative, social psychology).

All applicants are required to submit scores on the Graduate Record Examination (an advanced test in psychology is also required for clinical psychology), as well as transcripts, three letters of reference, and a statement of purpose. International students must include their TOEFL scores.

All materials, except for letters of recommendation, should be submitted to the Graduate College. The letters of recommendation, as well as copies of the statement of purpose, transcripts, and GRE scores (unofficial copies are acceptable) should be sent directly to

Coordinator of Graduate Admissions
Psychology Department
PO Box 871104
Arizona State University
Tempe AZ 85287-1104

## Psychology - Cogn, Act, and Perc (Arts, Media, and Engineering) (PhD) LAPSYCPHD

COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE
Contact: http://www.asu.edu/clas/psych/ | M.M@asu.edu | PSY 296 | 480/965-7606 | 1104
Official Degree Awarded: Psychology (Cognition, Action and Perception in Arts, Media and Engineering) (PhD)
Program Description: Psychology Cognition, Action, Perception and Arts, Media, Engineering (CAP-AME) (PhD)

## Quantitative Research Methods (PhD) LAPSYQUPHD

COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE

Contact: http://www.asu.edu/clas/psych/ | psygrad@asu.edu | PSY 296 | 4809657606 | 1104
Official Degree Awarded: Psychology (Quantitative Research Methods) (PhD)
Program Description: The Quantitative Concentration of the PhD 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 to evaluating the utility of new and existing methods for use in psychological research.

Program Requirements: The program total is 84 semester credits. The quantitative curriculum is structured into a series of progressively more advanced courses. New quantitative/methodological courses may be implemented under an omnibus number
(Psychology 591) at the interest of the faculty. The current requirements are as follows: Seven required courses (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; and PSY 591: Quantitative Seminar); three 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); 12 credits of PSY 792 (post-master's research); and 12 credits of PSY 799 (dissertation).

Admission Requirements: Students are admitted directly to the PhD program, with the expectation that the student will progress through a Master's Degree to the PhD. GRE scores are required, as well as three letters of recommendation, preferrably at least two from individuals within the academic community; a brief statement of purpose ( 900 words or less); an applicant response form; official transcripts of all previous undergraduate and graduate study; application form; and application fee.

## Religious Studies (MA) LARELIGMA

COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE
Contact: http://www.asu.edu/clas/religious_studies/ | Religious.Studies@asu.edu | ECA 377| 4809657145 | 3104
Official Degree Awarded: Religious Studies (MA)
Program Description: The Department of Religious Studies offers an MA in Religious Studies.
Program Requirements: This degree program requires 30 semester hours, a thesis, an applied project, and a foreign language examination.

## Thesis Option

This option is recommended for students intending to seek admission to a doctoral program upon completion of the MA degree or planning to teach in the discipline at community colleges. For the thesis option, the student must satisfy the following requirements:

1. reading knowledge of French, German, or another language relevant to the proposed thesis topic is required,
2. 24 hours of course work, including six hours in methods and theory (REL 501, 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,
3. a thesis that earns six semester hours of 599 thesis credit, and
4. an oral defense of the thesis.

## Portfolio Option

This option is recommended for students intending to augment their primary area of expertise and professional training in fields such as journalism, law, teaching K12, counseling, social work and the ministry. For the portfolio option, the student must satisfy the following requirements:

1. reading knowledge of a foreign language relevant to the proposed area of concentration,
2. 30 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,
3. a portfolio consisting of three publishable papers: one on theory and method, one on the students minor area of study, and one on the major area of study, and
4. an oral defense of the portfolio.

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:

1. test scores from the Graduate Record Exam,
2. 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 or may not count toward the fulfillment of degree requirements) at the beginning of their program of study,
3. three academic letters of reference to be sent to the graduate coordinator of the department,
4. 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.

Complete applications are due by January 1.

## Religious Studies (PhD) LARELIGPHD

COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE
Contact: http://www.asu.edu/clas/religious_studies/ | gradrs@asu.edu | ECA 377 | 4809657145 | 3104
Official Degree Awarded: Religious Studies (PhD)
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 PhDprogram has two main goals: (1) to train graduate students for careers as scholars and teachers in the academic study of religion and (2) 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.

## Program Requirements:

## Course Work

The program of study must contain a minimum of 84 semester hours of course work, including 24 hours of dissertation research and writing, approved by the students supervisory committee, department chair, and the dean of the Graduate College. The breakdown is as follows:

30 semester hours completed for masters degree (Phase I)
30 semester hours of additional course work (Phase II)
24 semester hours of dissertation research and writing (Phase III)

Graduate course work taken at other accredited institutions may be included in the program of study. Ordinarily a masters degree program successfully completed at another accredited institution may be included in a program of study as the equivalent of 30 semester hours.

## Phase I

The first phase consists of 30 semester hours of graduate course work and readings, which must include:

1. three semester hours of research (REL 592) and six semester hours of thesis (REL 599) credit for the thesis or three semester hours of research (590) for a research paper,
2. six hours of method and theory (REL 501 and 502), and
3. up to six semester hours in approved courses taken outside the department (no more may count toward the 30 hour requirement).

Mastery of the Phase I course material is demonstrated by successful completion and oral defense of the thesis or the research paper.
Students who apply to the program with an MA may be admitted directly into Phase II of the doctoral program, although deficiencies may be identified. Students entering the program with an MA degree may receive credit for some or all of the 30 semester hours in the first phase of the PhD program.

## Phase II

Phase II consists of completing 30 semester hours of course work per the requirements listed below, passing the foreign language examination, passing the comprehensive examinations, and successfully defending the dissertation prospectus. A student in the second phase of the PhD program in Religious Studies must take a total of 30 semester hours of graduate courses. Twelve of these hours may be taken outside the department. Please note the following requirements and components of course work for Phase II:

1. three hours of teaching world religions,
2. six hours of core courses in the students specialty area,
3. six to nine hours of seminars taken with the advice and consent of the students advisor, and
4. three hours of the religious studies workshop.

Admission Requirements: In addition to the general requirements for admission to the Graduate College, applicants must also submit:

1. GRE scores,
2. international applicants from non-native English speaking countries must submit a TOEFL score,
3. a statement of purpose of approximately 1,000 words,
4. three letters of recommendation from faculty members or others who are qualified to judge the applicants potential for doctoral study, and
5. a writing sample.

Applicants should send the statement of purpose, letters of recommendation, and writing sample directly to the Department of Religious Studies. Completed applications are due by January 15.

The applicant must have completed the equivalent of 15 semester hours of undergraduate work in the study of religions, including advanced courses in both Western and Asian or other non-Western religions.

## Renaissance Studies (Grad Certificate) LARENAISCE

COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE
Contact: http://www.asu.edu/clas/acmrs | acmrs@asu.edu | Lattie Coor Hall - 4th Flr Rms 4432, Tempe | 480/965-5900 | 4402
Official Degree Awarded: Renaissance Studies (certificate) (CERT)
Program Description: The certificate program prepares students for advanced study or for academic positions by augmenting their skills and knowledge, thereby making them more equipped to handle the demands of their fields.

Since Medieval and Renaissance studies are by nature interdisciplinary, students in the certificate program receive interdisciplinary training. Besides the course work and examinations required in their major field, students take six to nine semester hours outside their discipline and receive training in a Medieval vernacular language or a modern European language.

The core of the program has two components: (1) Latin, the international language for both the Middle Ages and Renaissance, and (2) paleography, the study of the physical medium through which Latin and other languages were transmitted.

For more information, contact the Arizona Center for Medieval and Renaissance Studies.
Program Requirements: One semester (3 to 4 credit hours) of Medieval/Renaissance Latin for M.A. students, two semesters (6 to 8 credit hours) for Ph.D. students, with proficiency attested either by achieving a grade of ' B ' or better in the Medieval Latin course (or courses) or by satisfactory performance on the Medieval/Renaissance Latin examination 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).

Two semesters or 6 credit hours (M.A.), three semesters or 9 credit hours (Ph.D.) of a modern language at the upper division level.

One semester (3 credit hours) of paleography.
Two semesters ( 6 credit hours) of course work outside the major discipline (M.A.), or three semesters ( 9 credit hours) for Ph.D.
A thesis or dissertation in the area of Renaissance Studies (3 to 6 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: Graduate students admitted to a degree program in any field may earn one of two MA- or PhD-level certificates: the Certificate in Medieval Studies or the Certificate in Renaissance Studies.

# Rhetoric/Composition/Linguistics (PhD) LAENRHTPHD 

COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE
Contact: http://www.asu.edu/clas/english/gradstudies/enggrad.htm | enggrad@asu.edu | LL 543B | 4809653194 | 0302
Official Degree Awarded: English (Rhetoric, Composition and Linguistics) (PhD)
Program Description: The PhD 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.

Program Requirements: The PhD program requires 84 credit hours, a dissertation, a written comprehensive examination, an oral comprehensive exam, and a foreign language exam. In general, a student with an appropriate maste's degree must complete a minimum of 54 semester hours of approved graduate work, which includes 12 hours of dissertation. Research hours may be used towards coursework in consultation with the advisor. A student without an appropriate master's degree usually must complete 84 hours of work at ASU. At the adviso'’s discretion, students may include up to 12 hours of appropriate, graduate-level course work undertaken at another university, and not previously counted towards any other degree. Specifically required are ENG 500 Research Methods, a 12-semester-hour foundational distribution (one course in rhetoric, one course in composition studies, and two courses in linguistics), and a 12 -semester-hour advanced studies distribution requirement that consists of courses at the 600level required by the distribution from one area of study (rhetoric, composition, or linguistics), or a combination of areas in which the student would like to concentrate. Up to 12 semester hours of course work taken outside the department may be counted toward the degree. Students should consult with an advisor when choosing these courses.

Admission Requirements: Applicants must submit a Graduate College online application. Applicants for the PhD degree in English must also submit three letters of recommendation, a statement of purpose, an academic writing sample, a vita, and GRE general scores. Deadline for admission applications and requests for financial aid, including teaching assistantships, is February 1. Incomplete files are not considered.

Materials should be sent to:

Graduate Coordinator
Department of English
Arizona State University
PO Box 870302
Tempe AZ 85287-0302

Scholarly Publishing (Grad Certificate) LASCHPUBCE<br>COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE<br>Contact: http://www.asu.edu/clas/history/areas/scholarly_publishing.html | kent.calder@asu.edu | Coor Hall Building 4th Floor, Tempe Campus | 480/965-7726 | 4302<br>Official Degree Awarded: Scholarly Publishing (certificate) (CERT)

Program Description: The Scholarly Publishing Certificate Program offers graduate students in any discipline the opportunity to receive training in publishing studies. The program prepares students to enter scholarly publishing fields, university presses, higher education publishing, reference publishing,or to engage successfully in publishing activities they will encounter as academic professionals, such as journal publishing and documentary editing.

Program Requirements: Course work includes a required core, required courses in editing or design, and electives from a variety of disciplines. The certificate requires 28 hours of course work, including six internship hours. 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. Applicants are strongly urged to submit Graduate Record Examination aptitude scores; a writing sample is required. The application deadline is February 1. For more information, contact the director, Scholarly Publishing Program, COOR 4500, 480/965-7726.

## Social Science and Health (PhD) LASSHPHD

COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE
Contact: http://shesc.asu.edu/graduate_studies | shesc@asu.edu | Anthropology | 480/965-6213 | 2402
Official Degree Awarded: Social Science and Health (PhD)
Program Description: The PhD in Social Science and 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 non-academic health settings, such as governmental agencies, NGOs, and the commercial sector. Some particular thematic foci of the program are: culture and health, social justice and vulnerable populations, health in the Americas, nutritional anthropology, urban and environmental health, indigenous and minority health, biocultural approaches to human coping, mathematical epidemiology and computer based complexity modeling, and social networks. 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 improve substantively 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 US cities to hunter-gatherer communities. Students generally enter the program with an MA in a relevant field.

Program Requirements: The PhD program consists of 84 hours of coursework post BA, or 54 ( 30 coursework, 24 research and dissertation) hours post MA and a dissertation. Students are admitted to candidacy on the basis of a written and oral examination. Students entering the PhD 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's advisory committee in consideration of the research and career goals of the student. The plan should ensure that graduates are strong in both social science theory and appropriate health research methods, and considerable experience in community-level research and its application. Generally, students are expected to complete a core class in social and bio-cultural theories of health, a course in ethics relevant to health social science, a research design/ proposal writing course, at least two advanced statistics courses, training in epidemiology, and gain experience in a range of additional methods such as nutrition, survey, archival analysis, demography, social network analysis, GIS, modeling, or text analysis. Students should also gain community-based internship/ practicum experience prior to advancement to candidacy. The appropriate form and duration will be determined by the student's advisory committee as appropriate to the proposed dissertation project and/or career plans of the candidate. In most cases, demonstration of language competency is expected; the form and level of competency required will be determined by the student's advisory committee as appropriate to the proposed dissertation project and career plans of the candidate. Also recommended is formal training in instruction, such as the short courses provided by the Center for Learning and Teaching Excellence.

Admission Requirements: 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 statement of their interests and professional goals, list those faculty with whom they are interested in working, and three letters of recommendation. Applicants who received their BA within the last

10 years must also submit scores on the Graduate Record Examination. Suitable backgrounds for admission include an MA in the social sciences (such as anthropology or sociology), public health, human biology or related fields. Students entering directly from the BA should already have completed at least 15 hours of social science and six hours of human biology, or equivalent, at the senior level, and have some background in statistics and/or epidemiology.

## Sociology (MA) LASOCMA

COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE
Contact: http://www.asu.edu/clas/ssfd | ssfd@asu.edu | Social Science 144 | 4809656875 | 3701
Official Degree Awarded: Sociology (MA)
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 PhD.

Program Requirements: A MA in Sociology program requires the successful completion of a minimum of 32 semester hours, including an 11-hour core curriculum, three hours of theory (SOC 585), six hours of research methods and statistics (SOC 500 and 505), and one hour of sociology as a profession (SOC 503), with the balance to be drawn from substantive courses and six hours earned through a thesis (SOC 599).

Admission Requirements: Admission to the program is determined by the following criteria:

1. Graduate Record Examination (GRE) scores (verbal, quantitative, and writing),
2. three letters of appraisal from persons familiar with the applicant's academic background,
3. valid transcripts of the student's academic record,
4. a writing sample, and
5. a statement of purpose provided by the applicant.

The application deadline is January 15.

## Sociology (PhD) LASOCPHD

COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE
Contact: http://www.asu.edu/ssfd | ssfd@asu.edu | Social Science 144 | 480/965-6978 | 3701
Official Degree Awarded: Sociology (PhD)
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, demography and health issues.

Program Requirements: This degree program requires 84 semester hours, a dissertation and written and oral comprehensive examinations. Thirty semster hours from a previously awarded master's degree can be applied to the 84 semester-hour requirement. The PhD requires 54 semester hours beyond the master's degree. Three semester hours of each, theory, methods, and statistics are required, and 24 semester hours are earned through dissertation and research. The remaining 21 semester hours are in substantive courses reflecting the student's specialization. First-year PhD students are required to take Sociology as a Profession (503). A minimum of 30 semester hours of the approved PhD program, exclusive of dissertation and research hours, must be completed after admission to the PhD program at ASU.

Admission Requirements: Applicants must submit the Graduate College online application. Admission to the program is determined by the following criteria: GRE scores (verbal, quantitative, and writing), three letters of appraisal from persons familiar with the applicant's academic background, valid transcripts of the applicant's academic record, a writing sample and a statement of purpose provided by each applicant. Applicants should have an MA or its equivalent in Sociology or a related field. The option is available for a few outstanding undergraduates to apply directly to the PhD program. These students must obtain an MA in passing. The application deadline is January 15.

## Spanish (MA) LASPANMA

COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE
Contact: http://www.asu.edu/clas/silc/spa/gradpage | silc@asu.edu | LL 440|4809656281|0202

Official Degree Awarded: Spanish (MA)
Program Requirements: The program of study for the MA degree includes a minimum of 30 semester hours of graduate-level work and a thesis, as approved by the candidate's supervisory committee. Students seeking an MA degree in Spanish should consult with the respective director of graduate studies.

Comprehensive Examination: All candidates are required to pass a comprehensive written or oral 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.

Admission Requirements: Students interested in applying to this program must submit a Graduate College online application. Candidates for the MA degree 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.

## Spanish (PhD) LASPANPHD

COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE
Contact: http://www.asu.edu/clas/silc/spa/gradpage | silc@asu.edu | LL 440 | 4809656281 | 0202
Official Degree Awarded: Spanish (PhD)
Program Description: The PhD degree is offered with a major in Spanish.
Program Requirements: The PhD in Spanish consists of 84 semester hours of graduate-level work, including 12 (and only 12) semester hours of dissertation (SPA 799). Thirty hours of credit for the MA in Spanish will count toward the 84 credit hours. 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. 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. 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. A final oral examination is required. This examination covers the subject matter of the dissertation and appropriate field.

Admission Requirements: All candidates for the PhD degree in Spanish must fulfill the general requirements of the Graduate College concerning admission and residence. Candidates for the doctorate in Spanish will be required to demonstrate a nearnative 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 MA thesis. The Spanish graduate program requires a 3.75 overall grade point average $(4.00=A)$. Admission to the Spanish doctoral program requires the candidate to present an MA 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 MA or PhD program submit scores on the Graduate Record Examination (GRE); this is especially advisable for the applicants for Spanish Graduate Fellowship Award.

## Speech and Hearing Science (PhD) LAHEARPHD

COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE
Contact: http://shs.asu.edu | shsgrad@asu.edu | Coor 2211| 4809652374|0102
Official Degree Awarded: Speech and Hearing Science (PhD)

Program Description: The PhD program 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. 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 PhD program, a programmatic research experience prepares the student for basic or applied research leading to the dissertation.

Program Requirements: This degree program requires 84 semester hours, a dissertation, and written and oral comprehensive examinations.

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:

1. application for admission to the Graduate College and official transcripts of undergraduate and graduate study,
2. Graduate Record Examination (GRE) scores, including the writing score, taken within the last three years,
3. professional résumé or curriculum vitae,
4. a statement describing academic and professional goals, specifying the focus of study desired in the PhD program, and listing the faculty member(s) with whom research interests most closely align,
5. three letters of recommendation, preferably from individuals who are qualified to comment on potential for success in a rigorous PhD program, and
6. one copy of any publications, research manuscripts, and other relevant samples of writing.

All applicants whose native language is not English must submit a score from the Test of English as a Foreign Language and the Test of Spoken English. The department expects scores to meet or exceed those required by the Graduate College.

The application form and official copies of transcripts should be submitted to the Graduate College.

## Statistics (PhD) LASTPPHD

## COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE

Contact: http://math.la.asu.edu | grad@math.la.asu.edu | PSA 216|480/965-3951 | 1804
Official Degree Awarded: Statistics (PhD)
Program Description: Statistics has been described as the science of learning from data. Statisticians are involved with collecting data, analyzing it, interpreting it, and helping to make decisions based on it. 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 analyses of data arising in many areas.

The Statistics Ph.D. program faculty consists of the Committee on Statistics which also offers a program leading to the degree Master of Science 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 School 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.

Program Requirements: PhD students must complete 84 semester hours of coursework which must include 15 semester hours of core coursework (STP 421, STP 427, STP 526, STP 530 or IEE 578, STP 531 or IEE 572), 45 semesters hours of elective statistics or related area courses approved by the student's supervisory committee, 12 semester hours of research (792) and 12 semester hours of dissertation (799). Students must pass one written qualifier examination, a written comprehensive examination, an oral comprehensive examination and a dissertation prospectus exam. Each student must write a dissertation and defend it orally before a five member dissertation committee. See the Department website for examination information.

Admission Requirements: Applicants must satisfy the general requirements for admission to the Graduate College. Applicants must submit the Graduate College online application. Minimum background for consideration of admission includes a bachelor's degree in statistics, mathematics or a closely related area with a minimum 3.00 Grade Point Average. 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. The submission of Graduate Record Examination (GRE) test scores is strongly encouraged, but not required.

## Teaching English to Speakers of Other Languages (MTESOL) LAENGMTESL

## COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE

Contact: http://www.asu.edu/clas/english/linguistics/index.html | enggrad@asu.edu | LL 542B | 4809653194 | 0302
Official Degree Awarded: Teaching English as a Second Language (MTE Speake)
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) degree. This specialized degree program provides students with the knowledge and the skills necessary to teach English as a second language.

Program Requirements: The program requires a minimum of 30 hours of approved graduate course work and must include LIN 500 Research Methods, LIN 510 Linguistics, LIN 520 Second-Language Acquisition Theories, LIN 521 Methods of Teaching English to Speakers of Other Languages, and a three-hour applied project (LIN 593) overseen by the supervisory committee. An internship is recommended if a student has no teaching experience.

Foreign Language Requirements: A foreign language is required, to be completed during the program. International students whose native language is not English may fulfill the foreign language requirement by (1) providing evidence that English is not the medium of instruction at their native-language universities and (2) satisfactory completion of the TSE.

Applied Project: A three-hour applied project (LIN 593) that is overseen by the director, chosen from the English department linguistics/TESOL faculty, is required. Two additional faculty members serve with the director to form a committee for the final oral examination on the project.

Final Examination: An oral examination on the applied project is required.
Admission Requirements: Applicants for the MTESOL degree 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, and speech and hearing science. Students should consult with an advisor to determine whether their preparation is deficient in any area. Applicants must submit three letters of recommendation and a statement of purpose. The deadline is February 1. All applicants must meet the general requirements for admission to the Graduate College. International students must submit a TOEFL score of at least 600, or 250 computer-based.

## Women and Gender Studies (Grad Certificate) LAWSTGRCT

COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE
Contact: http://www.asu.edu/clas/womens_studies/students/index.html\#PhD | serena.turley@asu.edu | West Hall 205 | 480/9652358|4902

## Official Degree Awarded: Gender Studies (certificate) (CERT)

Program Description: One of the largest, most vibrant Women and Gender Studies programs in the country, we offer a comprehensive program of study that empowers students to make a difference in the world. Through the study of history, culture, literature, politics, film, science, and economics, students learn to challenge conventional wisdom about gender. Knowledge leads to action, producing a new generation of leaders.

Program Requirements: This graduate certificate program requires 15 semester hours of course work.

# MANAGEMENT AND AGRIBUSINESS, MORRISON SCHOOL OF 

## Agribusiness (Polytechnic Campus) (MS) AGAGRIBMS

MORRISON SCHOOL OF MANAGEMENT OND AGRIBUSINESS, POLY

Contact: http://www.poly.asu.edu/msma | morrisonschool@asu.edu | 7171 E Sonoran Arroyo Mall Peralta Hall Room 330X |
480/727-1312 | 0180

Official Degree Awarded: Agribusiness (MS)

Program Description: The Morrison School of Management and Agribusiness (MSMA), at the Polytechnic campus, offers the MS degree in Agribusiness. In general, 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 aslo apply to the concentrations in (1) agribusiness management and marketing and (2) food quality assurance.

Program Requirements: All MS candidates must complete a minimum of 36 hours of approved graduate-level course work, excluding courses taken to address deficiencies. Of these 36 hours, 21 must be taken to satisfy core requirements. Thesis students fulfill the remaining 15 semester 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 MS in Agribusiness

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Semester I
AGB 528 Advanced Agribusiness Marketing (3)
AGB 560 Advanced Agribusiness Management Systems (3)
AGB }561\mathrm{ Agribusiness Research Methods (3)
Total }
Semester II
AGB 511 Advanced Agribusiness Management (3)
AGB 532 Advanced Agribusiness Finance (3)
AGB 570 Managerial Economics for Agribusiness (3)
Total }
Semester III
Nonthesis Option
AGB 589 Agribusiness Capstone (3)
500-level AGB emphasis electives (6)
Total }
Thesis Option
AGB 589 Agribusiness Capstone (3)
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500-level AGB electives (6)
Total 9

Semester IV
Nonthesis Option
500-level AGB emphasis or other electives (9)
Total 9
Thesis Option
AGB 592 Research (3)
AGB 599 Thesis (6)
Total 9
Total hours in program 36
Admission Requirements: Applicants to the program are expected to meet the minimum requirements for admission to the Graduate College. In addition, scores from the Graduate Record Examination, Miller Analogies Test, or Graduate Management Admission Test are required. Applications must include a vita and statement of purpose; letters of recommendation are suggested. 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. Applicants not meeting this last requirement may be considered for admission with deficiencies. The application deadline for admission in the fall semester is February 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.

## NEW COLLEGE OF INTERDISCIPLINARY ARTS AND SCIENCES

## Communication Studies (MA) ASCOMSTMA

NEW COLLEGE OF INTERDISCIPLINARY ARTS AND SCIENCES, WEST<br>Contact: http://newcollege.asu.edu/programs/comm_studies_ma/ | janis.lacey@asu.edu | FAC N301G | 602/543-6266 | 3051

At the outset of the 2008-09 academic year, this degree was offered by the College of Human Services on ASU's West campus. As a result of the academic reorganization that occurred during the 2008-09 academic year, this degree program was moved to the New College of Interdisciplinary Arts and Sciences at the West campus.

## Official Degree Awarded: Communication Studies (MA)

Program Description: Within the MA program 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.The 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 MA in Communication Studies seeks
to provide those interested in advocacy the opportunity to develop the intellectual and conceptual skills necessary to follow that calling.

Program Requirements: The degree consists of 36 semester hours of course work at the 500 -level or above, including these courses:

W CMN 502 Theory and Practice in Communication and Persuasion (3)
or W CMN 522 Argumentation and Advocacy (3)
W CMN 505 Methods in Applied Communication Research (3)
W CMN 506 Humanistic Inquiry and Field Research in Communication (3)

Electives* (21)

Thesis or applied project (6)
or a written comprehensive exam plus six semester hours of course work (6)

Total 36

* At least 21 semester hours of electives are selected in consultation with the student's program advisor. When appropriate, students may take up to six semester hours outside the department.


## Additional Requirements

COM 502 or 522 , 505 , and 506 must be completed with a grade of 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 semester hour of course work. Students who choose to complete the thesis or applied project option are permitted to register for thesis or applied project semester hours only concurrent with, or subsequent to, completion of their 24th semester 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 Department of Communication Studies office in FAB S116-1.

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:

1. a completed Graduate College application and official transcripts of all undergraduate and graduate work;
2. a 500-word personal statement indicating professional goals and addressing how the program will aid in the achievement of those goals;
3. three letters of recommendation, up to two of which may come from appropriate professional, nonacademic sources;
4. a writing sample of scholarly work or an example of professional activities (i.e., technical reports, grants, creative campaign); and
5. if the undergraduate cumulative GPA is below 3.00 for the last 60 semester hours, official Graduate Record Exam scores are required.

Students whose native language is not English must also achieve a minimum test score of 550 (paper-based test), 213 (computerbased test), or 83 (iBT score) 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).

## Interdisciplinary Studies (MA) ASINTERMA

NEW COLLEGE OF INTERDISCIPLINARY ARTS AND SCIENCES, WEST
Contact: http://newcollege.asu.edu | mais@asu.edu | 6025436241 | 3051
Official Degree Awarded: Interdisciplinary Studies (MA)
Program Description: The Master of Arts degree in Interdisciplinary Studies is a graduate program designed to fulfill the needs of postbaccalaureate students who wish to pursue an advanced degree for:

1. job advancement or redirection,
2. personal development and intellectual growth, or
3. preparation for further graduate study.

Prospective students include those working in the public educational system, particularly secondary education teachers who intend to increase and integrate their knowledge in content areas; those employed in the corporate sector and social service system; and professionals who wish to return to the university and pursue enrichment in liberal arts areas.

The degree is composed of 30 semester hours of course work. Three required core courses develop advanced critical thinking skills and knowledge of current research tools, technologies, and methodologies in a variety of fields. Working with a faculty mentor, each student plans a set of emphasis courses to meet their educational goals. Emphasis courses may be selected from graduate course offerings from departments throughout the New College of Interdisciplinary Arts and Sciences, as well as from other colleges and schools with approval from the director. Examples include a plan to study ethics and environment, media and ethnicity, urban studies, and the arts. The program of study may include one elective course and will conclude with a capstone experience requiring a written or applied project.

A minimum of 84 semester hours is required for the PhD degree; 12 (and only 12) of these hours must be 799 Dissertation. Of the 84 semester hours, at least 30 hours (which may include research credit) of the approved PhD program and 12 dissertation hours must be completed after admission to the student's PhD 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 units discretion, students may apply up to 30 semester hours from a previously awarded master's degree toward their doctoral program of study.

Students work with their study committees to determine an appropriate program of study. Common areas of functional specialization among doctoral studies include financial and managerial accounting, auditing, information systems, and taxation. With these functional areas, doctoral studies may emphasize experimental or archival research methods. All accountancy doctoral students are required to take a three-semester sequence of accountancy doctoral course work. A maximum of six approved graduate semester hours can be transferred to satisfy program requirements.

Program Requirements: This 30-semester-hour degree program requires a Capstone course and the following courses:

## Required courses

1. MAS 501 Models of Inquiry for Contemporary Issues (3)
2. MAS 502 Perspectives in Interdisciplinary Studies (3)
3. MAS 505 20th-Century Thought: Concepts of Change, Culture, and Mind (3)
4. MAS 585 Capstone Course (3)
5. Emphasis area $(15-18)$
6. Elective (0-3)

## Minimum total: 30

## Emphasis Area

Working with a faculty mentor, students select 15 to 18 semester hours of graduate-level course work that reflects a particular area of specialty or interest. Students may elect to take the degree in conjunction with the graduate Certificate in Gerontology.

1. Admission Requirements: Admission to the master's program is open to individuals who meet the following criteria:
2. holders of baccalaureate degrees from institutions with regional accreditation,
3. demonstrated promise of success through previous schooling and experience,
4. have academic and career goals that are compatible with the educational objectives of the program, and
5. have taken the Graduate Record Examination (GRE).

The GRE requirement may be waived if the applicant has attended a graduate or professional school that required a standardized admission test.

## Social Justice and Human Rights (MA) ASJHRMA

NEW COLLEGE OF INTERDISCIPLINARY ARTS AND SCIENCES, WEST
Contact: http://newcollege.asu.edu/programs/social_justice/ | William.simmons@asu.edu | FAB N241|602/543-6241|3051
Official Degree Awarded: Social Justice and Human Rights (MA)

## Program Description:

The MA in Social Justice and Human Rights (MASJHR) offers justice and human rights approaches to specific issues such as health, education, work, migration, child and family issues, and the environment. 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: Social Justice and Human Rights Research or 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.

Program Requirements: The 33-semester-hour program includes:

1. Core requirements (21 hours);
2. Career-Oriented Tracks (3 hours); and
3. Electives (6 hours).

## Core Requirements (21 Hours)

[^2]
## Career Oriented Tracks (Six Hours)

In consultation with the program director, each student will either select either two management courses or two research courses.

## Elective Courses (Six Hours)

In consultation with the program director, each student is required to complete two additional courses that fit their program.

Admission Requirements: Admission is granted on a competitive basis. To be admitted to the MASJHR program, candidates must have a four-year baccalaureate degree from a regionally accredited institution and must submit the following:

1. a completed graduate application;
2. official transcripts of all undergraduate and graduate course work;
3. official GRE scores;
4. a personal statement;
5. two letters of recommendation; and a
6. resume

Completion of an undergraduate research methods or statistics course is recommended but not required.

The GRE requirement may be waived if the applicant has attended a graduate or professional school that required a standardized admission test.

Applications should be submitted by November 1 for admission to the spring semester and June 1 for admission to the fall semester.

# NURSING AND HEALTHCARE INNOVATION, COLLEGE OF 

Adult Nurse Practitioner (DNP) NUANPADDNP

COLLEGE OF NURSING AND HEALTHCARE INNOVATION, DTPHX
Contact: http://nursing.asu.edu/index.htm | Pamela.kulikowski@asu.edu | NHI 358B | 602/496-0857 | 3020

Official Degree Awarded: Advanced Nursing Practice (Adult Nurse Practitioner) (DNP)
Program Description: The faculty in the College of Nursing and Healthcare Innovation offer a graduate program leading to the DNP degree in Nursing 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. Graduates of the DNP 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. Approximately one third of the curriculum in each course is delivered in a traditional classroom setting, and two thirds is completed in a web-based format. Several different modalities are used to enhance the student's learning, including multimedia presentations, asynchronous discussion boards and live chats. Travel to campus is required only 2 ' 3 times per semester for 3 ' 4 day sessions (depending on the courses being taught) where student encounters concentrated lab and interactive case-based seminar experiences. Focused clinical experiences are arranged with preceptors and administrators in the student's local healthcare setting. Rural health and experiences with disadvantaged and multi-cultural populations are encouraged. (this text taken from the online site)

Program Requirements: The Association of Nursing for Critical Care (ANCC) has recommended a minimum of 1000 postbaccalaureate hours for all students completing a DNP. The College of Nursing and Healthcare Innovation's program allows post-baccalaureate entry students to complete 630 hours of supervised clinical in their chosen specialty before receiving their Master of Science degree. This will allow students to then meet the requirements for certification and licensure in their specialty. The additional 450 hours are completed after certification and licensure while practicing as an advance practice nurse and completing the final DNP courses. The culminating document needed for completion of the Doctor of Nursing Practice is an Evidence-Base Mentoring Applied Project. Each student will have a primary mentor and at least one committee member working with them on the project. Clinical practice residency hours will be used to carry out the project in a practice setting (work settings may be included, but specific objectives will be developed that may be different from the student's job). Each project will be developed individually with each student. Post-master entry applicants should have some ideas for a project already developed before entry.

Admission Requirements: Admission to graduate status in the College of Nursing and Healthcare Innovation is based upon meeting the following requirements:

1. 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 baccalaureate or graduate degree attained;
2. a baccalaureate degree in nursing (or another field) accredited by a nationally recognized and regionally accredited agency;
3. 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;
4. satisfactory completion of only the analytical writing section of the Graduate Record Examination;
5. three professional recommendations from individuals knowledgeable about the applicant's academic and nursing leadership potential and one self-evaluation;
6. an interview with a representative of the specialty area;
7. eligibility for admission to the Graduate College;
8. completion of the TOEFL with a score of 550 or higher and of all requirements for the Commission on Foreign Graduate Nursing Schools (CFGNS) if considered an international student; and
9. completion of a baccalaureate-level health assessment course within the preceding three years (as may be required for some nurse practitioner concentrations).

## Adult Psychiatric Mental Health Nurse Practitioner (DNP) NUANPPMDNP

## COLLEGE OF NURSING AND HEALTHCARE INNOVATION, DTPHX

Contact: http://nursing.asu.edu/index.htm | Pamela.kulikowski@asu.edu | NHI 358B | 602/496-0857 | 3020
Official Degree Awarded: Advanced Nursing Practice (Adult Psychiatric Mental Health Nurse Practitioner) (DNP)
Program Description: Designed for nurses seeking to become an advanced practice nurse as a 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. Approximately one third of the curriculum in each course is delivered in a traditional classroom setting, and two thirds is completed in a webbased format. Several different modalities are used to enhance the student's learning, including multimedia presentations, asynchronous discussion boards and live chats.

Program Requirements: The Association of Nursing for Critical Care (ANCC) has recommended a minimum of 1000 postbaccalaureate hours for all students completing a DNP. The College of Nursing and Healthcare Innovation's program allows post-baccalaureate entry students to complete 630 hours of supervised clinical in their chosen specialty before receiving their Master of Science degree. This will allow students to then meet the requirements for certification and licensure in their specialty. The additional 450 hours are completed after certification and licensure while practicing as an advance practice nurse and completing the final DNP courses. The culminating document needed for completion of the Doctor of Nursing Practice is an Evidence-Base Mentoring Applied Project. Each student will have a primary mentor and at least one committee member working with them on the project. Clinical practice residency hours will be used to carry out the project in a practice setting (work settings may be included, but specif

Admission Requirements: Admission to graduate status in the College of Nursing and Healthcare Innovation is based upon meeting the following requirements:

1. 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 baccalaureate or graduate degree attained;
2. a baccalaureate degree in nursing (or another field) accredited by a nationally recognized and regionally accredited agency;
3. 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;
4. satisfactory completion of only the analytical writing section of the Graduate Record Examination;
5. three professional recommendations from individuals knowledgeable about the applicant's academic and nursing leadership potential and one self-evaluation;
6. an interview with a representative of the specialty area;
7. eligibility for admission to the Graduate College;
8. completion of the TOEFL with a score of 550 or higher and of all requirements for the Commission on Foreign Graduate Nursing Schools (CFGNS) if considered an international student; and
9. completion of a baccalaureate-level health assessment course within the preceding three years (as may be required for some nurse practitioner concentrations).

## Advanced Nursing Practice - DNP NUANPDNP

COLLEGE OF NURSING AND HEALTHCARE INNOVATION, DTPHX
Contact: http://nursing.asu.edu | NHI 358B | 602/496-0857 | 3020
Official Degree Awarded: Advanced Nursing Practice (DNP)
Program Description: The Doctor of Nursing Practice (DNP) degree program is focused on improving healthcare through facilitating a culture of best practice, and providing the additional skills necessary to develop the advanced practice nursing leader for the future. For information about the specific concentrations offered under this degree, see http:nursing.asu.edu/programs/graduate.

Program Requirements: The DNP requires 84 semester hours of course work. The American Nurses Credentialing Center (ANCC) has recommended a minimum of 1000 postbaccalaureate hours for all students completing a DNP. The College of Nursing and Healthcare Innovation's program allows postbaccalaureate entry students to complete 630 hours of supervised clinicals in their chosen specialty before receiving their master of science degree. This will allow students to then meet the requirements for certification and licensure in their specialty. The additional 450 hours are completed after certification and licensure while practicing as an advance practice nurse and completing the final DNP courses. The culminating document needed for completion of the Doctor of Nursing Practice is an Evidence-Base Mentoring Applied Project. Each student will have a primary mentor and at least one committee member working with them on the project. Clinical practice residency hours will be used to carry out the project in a practice setting (work settings may be included, but specific objectives will be developed that may be different from the student's job). Each project will be developed individually with each student. Post-master entry applicants should have some ideas for a project already developed before entry.

Admission Requirements: Admission to graduate status in the College of Nursing and Healthcare Innovation is based upon meeting the following requirements:

1. 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 baccalaureate or graduate degree attained;
2. completion of a baccalaureate degree in nursing accredited by a nationally recognized and regionally accredited agency;
3. 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;
4. satisfactory completion of only the analytical writing section of the Graduate Record Examination;
5. three professional recommendations from individuals knowledgeable about the applicant's academic and nursing leadership potential and one self-evaluation;
6. an interview with a representative of the specialty area;
7. eligibility for admission to the Graduate College; and
8. completion of the TOEFL with a score of 550 or higher and of all requirements for the Commission on Foreign Graduate Nursing Schools (CFGNS), if considered an international student.

While all interested applicants are encouraged to apply, applicants who reside and work, or plan to reside or work, in rural or Medically undeserved areas are especially encouraged to apply for admission. Applications to the program are due as follows: Postbaccaulaurete applicants, January 1; post-master's are due October 1.

Advanced Nursing Practice: Geriatric Nurse Practitioner - DNP NUGNPDNP<br>COLLEGE OF NURSING AND HEALTHCARE INNOVATION, DTPHX<br>Contact: http://nursing.asu.edu | Pamela.Kulikowski@asu.edu | CONHI 458 | 602/496-0907 | 3020

Official Degree Awarded: Advanced Nursing Practice (Geriatric Nurse Practitioner)

Program Description: The Doctor of Nursing Practice (DNP) at ASU is focused on improving healthcare through facilitating a culture of best practice, and providing the additional skills necessary to develop the advance practice nursing leader for the future. Graduates of this program will be able to facilitate the application and integration of research into clinical practice using innovative approaches across multiple settings to improve healthcare, patient outcomes, and healthcare systems.

Program Requirements: The Association of Nursing for Critical Care (ANCC) has recommended a minimum of 1000 postbaccalaureate hours for all students completing a DNP. The College of Nursing and Healthcare Innovation's program allows postbaccalaureate entry students to complete 630 hours of supervised clinical in their chosen specialty before receiving their Master of Science degree. This will allow students to then meet the requirements for certification and licensure in their specialty. The additional 540 hours are completed after certification and licensure while practicing as an advanced practice nurse and completing the final DNP courses. The culminating document needed for completion of the Doctor of Nursing Practice is an Evidence-Based Mentoring Applied Project. Each student will have a primary mentor and at least one committee member working with them on the project. Clinical practice residency hours will be used to carry out 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). Each project will be developed individually with each student. Post-master entry applicants should have some ideas for a project already developed before entry.

Admission Requirements: Admission to graduate status in the College of Nursing and Healthcare Innovation is based upon meeting the following requirements:

1. 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 baccalaureate or graduate degree attained;
2. a baccalaureate degree in nursing (or another field) accredited by a nationally recognized and regionally accredited agency;
3. 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;
4. satisfactory completion of only the Analytical Writing section of the Graduate Record Examination;
5. three professional recommendations from individuals knowledgeable about the applicant's academic and nursing leadership potential and one self-evaluation;
6. an interview with a representative of the specialty area;
7. eligibility for admission to the Graduate College;
8. completion of the TOEFL with a score of 550 or higher and all the requirements for the Commission on Foreign Graduate Nursing Schools (CFGNS) if considered an international student; and
9. completion of a baccalaureate-level health assessment course within the preceding three years (as may be required for some nurse practitioner concentrations).

## Assessment of Integrative Health Modalities (Grad Certificate) PPSWGGRCH

COLLEGE OF NURSING AND HEALTHCARE INNOVATION, DTPHX
Contact: http://ssw.asu.edu/certificates/index.html | social.work@asu.edu | UCENT 800 | 602/496-0800 | 3920

Official Degree Awarded: Assessment of Integrative Health Modalities (certificate) (CERT)
Program Description: The School of Social Work Graduate Certificate 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 evidenced-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.

Program Requirements: The certificate will require the completion of 15 semester hours, distributed among three core courses and two interdisciplinary electives. Each ASU campus, particularly the Polytechnic campus, offers a variety of courses that can meet the elective requirement. The core courses include: Quality of Life, Ancient Healing Traditions and Treating the Whole Person.

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.

## Child and Adolescent Mental Health Intervention Specialist (Grad Certificate) NUCAMHICE

COLLEGE OF NURSING AND HEALTHCARE INNOVATION, DTPHX
Contact: http://nursing.asu.edu | susan.callahan@asu.edu | NHI 472 | 602/496-0869 | 3020
Official Degree Awarded: Child and Adolescent Mental Health Intervention (certificate) (CERT)
Program Description: The College of Nursing and Healthcare 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, as well as physicians and other interdisciplinary healthcare 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.

Program Requirements: This 15-semester-hour 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. Nine semester hours of this program can be transferred into the college's online 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: Applicants must either have a Master of Science in Nursing degree 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 healthcare licensure in the applicant's state of residence is needed for admission to the certificate program.

## Child/Family Psychiatric Mental Health Nurse Practitioner - DNP NUANPCFDNP

COLLEGE OF NURSING AND HEALTHCARE INNOVATION, DTPHX
Contact: http://nursing.asu.edu/ | susan.callahan@asu.edu | NHI 158A | 602/496-0869 | 3020
Official Degree Awarded: Advanced Nursing Practice (Child/Family Psychiatric Mental Health Nurse Practitioner) (DNP)

Program Description: The Child/Family Psychiatric Mental Health Nurse Practitioner program is designed for nurses seeking to become an advanced practice nurse as a 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.

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. Approximately one-third of the curriculum in each course is delivered in a traditional classroom setting, and two-thirds is completed in a webbased format. Several different modalities are used to enhance the student's learning, including multimedia presentations, asynchronous discussion boards, and live chats.

Focused clinical experiences are arranged with preceptors and administrators in the student's local healthcare setting. Rural health and experiences with disadvantaged and multi-cultural populations are encouraged.

Program Requirements: The Association of Nursing for Critical Care (ANCC) has recommended a minimum of 1000 postbaccalaureate hours for all students completing a DNP. The College of Nursing and Healthcare Innovation's program allows postbaccalaureate entry students to complete 630 hours of supervised clinical in their chosen specialty before receiving their Master of Science degree. This will allow students to then meet the requirements for certification and licensure in their specialty. The additional 540 hours are completed after certification and licensure while practicing as an advanced practice nurse and completing the final DNP courses. The culminating document needed for completion of the Doctor of Nursing Practice is an Evidence-Based Mentoring Applied Project. Each student will have a primary mentor and at least one committee member working with them on the project. Clinical practice residency hours will be used to carry out 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). Each project will be developed individually with each student. Post-master entry applicants should have some ideas for a project already developed before entry.

Admission Requirements: Admission to graduate status in the College of Nursing and Healthcare Innovation is based upon meeting the following requirements:

1. 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 baccalaureate or graduate degree attained;
2. a baccalaureate degree in nursing (or another field) accredited by a nationally recognized and regionally accredited agency;
3. 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;
4. satisfactory completion of only the analytical writing section of the Graduate Record Examination;
5. three professional recommendations from individuals knowledgeable about the applicant's academic and nursing leadership potential and one self-evaluation;
6. an interview with a representative of the specialty area;
7. eligibility for admission to the Graduate College;
8. completion of the TOEFL with a score of 550 or higher and of all requirements for the Commission on Foreign Graduate Nursing Schools (CFGNS) if considered an international student; and
9. completion of a baccalaureate-level health assessment course within the preceding three years (as may be required for some nurse practitioner concentrations).

## Clinical Research Management (Grad Certificate) NUHCRGRCC

COLLEGE OF NURSING AND HEALTHCARE INNOVATION, DTPHX
Contact: http://nursing.asu.edu/ | fran.rees@asu.edu | NHI 411 | 602/496-0935 | 3020
Official Degree Awarded: Clinical Research Management (certificate) (CERT)
Program Description: The Graduate Certificate in Clinical Research Management (CRM) 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. The roles of clinical research managers (CRM) are rapidly growing. The career field is particularly suited for nurses, physicians and other health care professionals. Health care professionals from fields outside of nursing may complete the curriculum to obtain a certificate in CRM, with completion of stated prerequisites. The CRM specialty
takes a multidisciplinary approach in providing an education strong in clinical research, business and financial practices, ethical and regulatory aspects of research, and overall management of clinical drug, biological and Medical device trials. The program is designed to be flexible and conducive to the adult learner.

Program Requirements: The 15-semester-hour CRM graduate certificate is offered online with an initial three- or four-day immersion/practicum program. A three semester-hour capstone clinical research project is required and part-time study is available.

Admission Requirements: Must meet Graduate College admission requirements. For more information, call the program office at 602/496-0935 or visit the Web site at nursing.asu.edu/research/chict/crm/index.

## Community Health Nursing (MS) NUCHNDTMS

COLLEGE OF NURSING AND HEALTHCARE INNOVATION, DTPHX
Contact: http://nursing.asu.edu/ | renee.mcleod@asu.edu | ASU Downtown NHI458 | 602/496-0857 | 3020
Official Degree Awarded: Nursing (Community Health Advanced Practice Nursing) (MS)
Program Description: Community Health Nursing (MS)

## Community and Public Health Practice (Grad Certificate) NUCHPGRCH

COLLEGE OF NURSING AND HEALTHCARE INNOVATION, DTPHX
Contact: http://www.nursing.asu.edu/ | Tatiana.Thompson@asu.edu | NHI 461 | 602/496-0735 | 3020
Official Degree Awarded: Community and Public Health Practice (certificate) (CERT)
Program Description: The Graduate Certificate in Community and Public Health Practice is directed toward students with baccalaureate 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.

Program Requirements: The curriculum consists of 16 to 18 semester hours of graduate study that may be applied toward the Master of Science degree. Part-time study is available.

Admission Requirements: Admission to the certificate program requires a bachelor's degree (in nursing or a related field) and an interest in increasing knowledge in community/public health. Current students in master's or doctorate programs at ASU are also qualified. Applicants must meet admission criteria of the Graduate College for graduate certificates to be eligible to apply to the program.

# Evidence-Based Practice Nursing Science (Grad Certificate) NUEVIDNSCE 

COLLEGE OF NURSING AND HEALTHCARE INNOVATION, DTPHX
Contact: http://nursing.asu.edu/ | pamela.kulikowski@asu.edu | NHI 158A | 602/496-0857 | 3020
Official Degree Awarded: Evidence-Based Practice in Nursing and Healthcare (certificate) (CERT)
Program Description: The Graduate Certificate in Evidence-Based Practice in Nursing and Healthcare is an online graduate certificate program designed to prepare nurse clinicians, educators and other healthcare professionals as experts in evidencebased practice (EBP).

Program Requirements: This 17-semester-hour, 12-month graduate certificate program is user-friendly and constructed in a distance-learning, online format to facilitate involvement of participants throughout the U.S. and the world. Admission is granted once a year and classes begin in January. Two on-site visits to ASU are required. The initial visit is a three-day orientation and the final visit is a three-day immersion residency fellowship that culminates the program. In addition, there is an optional fourday "boot camp" at the beginning of course work.

Admission Requirements: Admission requirements include 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.

1. complete a CAEP admission form;
2. submit a letter of recommendation from an academic advisor or supervisor supporting the applicant's enrollment. Official transcripts from a master's program are required as well;
submit a curriculum vitae/resume;
meet Graduate College admission requirements.

## Family Nurse Practitioner - DNP NUANPFNDNP

## COLLEGE OF NURSING AND HEALTHCARE INNOVATION, DTPHX

Contact: http://nursing.asu.edu/index.htm | Pamela.kulikowski@asu.edu | NHI 358B | 602/496-0857 | 3020
Official Degree Awarded: Advanced Nursing Practice (Family Nurse Practitioner) (DNP)
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. Approximately one third of the curriculum in each course is delivered in a traditional classroom setting, and two thirds is completed in a web-based format. Several different modalities are used to enhance the student's learning, including multimedia presentations, asynchronous discussion boards and live chats. Travel to campus is required only two or three times per semester for three-four day sessions (depending on the courses being taught) where student encounters concentrated lab and interactive case-based seminar experiences. Focused clinical experiences are arranged with preceptors and administrators in the student's local healthcare setting. Rural health and experiences with disadvantaged and multi-cultural populations are encouraged. Graduate students will learn: advanced health assessment skills, including physical examination, diagnostic studies and lab tests; physiology/pathophysiology, and the diagnosis and management of common acute and chronic health problems of individuals across the lifespan.

To be eligible for FNP certification, students must complete approximately 600 hours of clinical experience. At the completion of the program, students are eligible to take the American Nurses Credentialing Center or the American Academy of Nurse Practitioners exam for national certification. Focused clinical experiences are arranged with preceptors and administrators in the student's local healthcare setting. Rural health and experiences with disadvantaged and multi-cultural populations are encouraged. Family nurse practitioners are professionals who provide comprehensive healthcare to individuals across the lifespan in primary care health service settings. Graduates of this program will provide the diagnosis and management of common acute and chronic health problems of individuals from infancy through adulthood. Emphasis is placed on an evidence-based family centered approach to health promotion and illness intervention.

Program Requirements: The Association of Nursing for Critical Care (ANCC) has recommended a minimum of 1000 postbaccalaureate hours for all students completing a DNP. The College of Nursing and Healthcare Innovation's program allows post-baccalaureate entry students to complete 630 hours of supervised clinical in their chosen specialty before receiving their Master of Science degree. This will allow students to then meet the requirements for certification and licensure in their specialty. The additional 450 hours are completed after certification and licensure while practicing as an advance practice nurse and completing the final DNP courses. The culminating document needed for completion of the Doctor of Nursing Practice is an Evidence-Base Mentoring Applied Project. Each student will have a primary mentor and at least one committee member working with them on the project. Clinical practice residency hours will be used to carry out the project in a practice setting (work settings may be included, but specif

Admission Requirements: Admission to graduate status in the College of Nursing and Healthcare Innovation is based upon meeting the following requirements:

1. 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 baccalaureate or graduate degree attained;
2. a baccalaureate degree in nursing (or another field) accredited by a nationally recognized and regionally accredited agency;
3. 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;
4. satisfactory completion of only the analytical writing section of the Graduate Record Examination;
5. three professional recommendations from individuals knowledgeable about the applicant's academic and nursing leadership potential and one self-evaluation;
6. an interview with a representative of the specialty area;
7. eligibility for admission to the Graduate College;
8. completion of the TOEFL with a score of 550 or higher and of all requirements for the Commission on Foreign Graduate Nursing Schools (CFGNS) if considered an international student; and
9. completion of a baccalaureate-level health assessment course within the preceding three years (as may be required for some nurse practitioner concentrations).

## Healthcare Innovation (MHI) NUHCINNMHI

COLLEGE OF NURSING AND HEALTHCARE INNOVATION, DTPHX
Contact: http://nursing.asu.edu/ | renee.mcleod@asu.edu | CONHI | 602/496-0907 | 3020
Official Degree Awarded: Healthcare Innovation (MHI)
Program Description: The Master of Healthcare Innovation (MHI) is a 33-credit (one-year) master's degree program using a hybrid online format open to nursing and non-nursing students working and living at a distance. This program is an initiative led by the ASU College of Nursing and Healthcare Innovation in collaboration with the College of Design and the Hugh Downs School of Human Communications.

Program Requirements: The MHI requires 33 credit hours. The curriculum also requires the completion of an applied project as the culminating experience. 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 healthcare leaders during four to five day immersion sessions. These sessions entail eight-hour days at the beginning of each semester and two days at mid-semester. 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-
utilizing voiced-over lectures or discussion boards, such as the Blackboard course management system.
Admission Requirements: Admission to graduate status in the College of Nursing and Healthcare Innovation is based upon meeting the following requirements:

1. 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 baccalaureate or graduate degree attained,
2. a baccalaureate degree in nursing (or another field) accredited by a nationally recognized and regionally accredited agency,
3. satisfactory completion of only the analytical writing section of the Graduate Record Examination,
4. three professional recommendations from individuals knowledgeable about the applicant's academic and nursing leadership potential and one self-evaluation,
5. an interview with a representative of the specialty area,
6. eligibility for admission to the Graduate College,
7. completion of the TOEFL with a score of 550 or higher and of all requirements for the Commission on Foreign Graduate Nursing Schools (CFGNS) if considered an international student, and
8. completion of a baccalaureate-level health assessment course within the preceding three years.

## International Health For Healthcare Professionals (Grad Certificate) NUHCRGRCI

COLLEGE OF NURSING AND HEALTHCARE INNOVATION, DTPHX
Contact: http://nursing.asu.edu/ | renee.mcleod@asu.edu | NHI 456 | 602/496-0791 | 3020

Official Degree Awarded: International Health for Healthcare Professionals (certificate) (CERT)
Program Description: The Graduate Certificate in International Health for Healthcare Professionals targets and prepares primary care providers and other healthcare professionals in Arizona and throughout the nation who provide care for an increasingly diverse clientele. The program provides an overview of transborder and international health issues that incorporate language and cultural health immersion experiences.

Program Requirements: The 16 semester-hour International Health for Healthcare Professionals graduate certificate is offered as a hybrid online distance program with scheduled immersion sessions.

Admission Requirements: Applicants must meet the admissions criteria of the Graduate College for graduate certificates to be eligible to apply to the program. For more information, call the program office at 602/496-0791.

## Neonatal Nurse Practitioner - DNP NUANPNDNP

COLLEGE OF NURSING AND HEALTHCARE INNOVATION, DTPHX
Contact: http://nursing.asu.edu/index.htm | Pamela.kulikowski@asu.edu | NHI 358B | 602/496-0857 | 3020
Official Degree Awarded: Advanced Nursing Practice (Neonatal Nurse Practitioner) (DNP)
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. The program features individually designed plans of study for nurses seeking to become neonatal nurse practitioners. 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. We continue to offer this program in a hybrid-online format! Approximately one third of the curriculum in each course is delivered in a traditional classroom setting, and two thirds is completed in a webbased format. Several different modalities are used to enhance the student's learning, including multimedia presentations, asynchronous discussion boards and live chats. Focused clinical experiences are arranged with preceptors and administrators in the student's local healthcare setting. Rural health and experiences with disadvantaged and multi-cultural populations are encouraged. The neonatal nurse practitioner role includes emphasis on genetics, embryology, and the extra skills needed to practice in a critical care environment. Courses focus on the needs of the high risk infant and family. Developmental assessment of the infant and family and smooth transition of the high risk infant to the primary care setting are emphasized.

Program Requirements: The Association of Nursing for Critical Care (ANCC) has recommended a minimum of 1000 postbaccalaureate hours for all students completing a DNP. The College of Nursing and Healthcare Innovation's program allows post-baccalaureate entry students to complete 630 hours of supervised clinical in their chosen specialty before receiving their Master of Science degree. This will allow students to then meet the requirements for certification and licensure in their specialty. The additional 450 hours are completed after certification and licensure while practicing as an advance practice nurse and completing the final DNP courses. The culminating document needed for completion of the Doctor of Nursing Practice is an Evidence-Base Mentoring Applied Project. Each student will have a primary mentor and at least one committee member working with them on the project. Clinical practice residency hours will be used to carry out the project in a practice setting (work settings may be included, but specif

Admission Requirements: Admission to graduate status in the College of Nursing and Healthcare Innovation is based upon meeting the following requirements:

1. 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 baccalaureate or graduate degree attained;
2. a baccalaureate degree in nursing (or another field) accredited by a nationally recognized and regionally accredited agency;
3. 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;
4. satisfactory completion of only the analytical writing section of the Graduate Record Examination;
5. three professional recommendations from individuals knowledgeable about the applicant's academic and nursing leadership potential and one self-evaluation;
6. an interview with a representative of the specialty area;
7. eligibility for admission to the Graduate College;
8. completion of the TOEFL with a score of 550 or higher and of all requirements for the Commission on Foreign Graduate Nursing Schools (CFGNS) if considered an international student; and
9. completion of a baccalaureate-level health assessment course within the preceding three years (as may be required for some nurse practitioner concentrations).

## Nurse Education in Academic and Practice Settings (Grad Certificate) NUNURSEDCE

COLLEGE OF NURSING AND HEALTHCARE INNOVATION, DTPHX
Contact: http://nursing.asu.edu/ | Tatiana.Thompson@asu.edu | NHI 461 | 480/727-6930 | 3020
Official Degree Awarded: Nurse Education in Academic and Practice Settings (certificate) (CERT)
Program Description: The Graduate Certificate in Nurse Education in Academic and Practice Settings is an innovative program that is offered mostly online for nurses who have at least a bachelor's degree and who are interested in teaching in academic or practice settings.

Program Requirements: The 14-semeter-hour graduate certificate program includes courses covering curriculum development, teaching in the classroom, teaching online, and producing and evaluating educational programs in academic and practice settings. A three semester-hour teaching practicum (comprised of 135 clock hours) is also an integral part of the program. Most of the courses are offered online.

Admission Requirements: Registered nurses who have completed a bachelor's degree are qualified for this program. Applicants must meet the admissions criteria of the Graduate College for graduate certificates to be eligible to apply to the program.

## Nursing Education (MS) NUNURSEDMS

COLLEGE OF NURSING AND HEALTHCARE INNOVATION, DTPHX
Contact: http://nursing.asu.edu/ | renee.mcleod@asu.edu | CONHI 458 | 602/496-0907 | 3020
Official Degree Awarded: Nursing (Nursing Education) (MS)
Program Description: The faculty in the College of Nursing and Healthcare Innovation offer a graduate program leading to the MS degree in Nursing with a concentration as a nurse educator. The purpose of the MS program is to provide an academic environment that fosters scholarship, critical thinking, and creativity, and prepares nurses for leadership as educators. The MS program offers advanced-level courses that can be used as a basis for doctoral study and for functional role development in teaching.

Program Requirements: This degree program requires a minimum total of 42 semester hours. An applied project and thesis option are available. The core of the program consists of 15 hours of courses and a practicum which focus on the science and art of nursing education. Students who choose the nurse educator concentration pathway must have a bachelor's degree (or higher) in Nursing. At the completion of the program, graduates may be eligible to take the National League for Nursing certification examination.

Admission Requirements: Admission to graduate status in the College of Nursing and Healthcare Innovation is based upon meeting the following requirements:

1. 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 baccalaureate or graduate degree attained;
2. a baccalaureate degree in nursing accredited by a nationally recognized and regionally accredited agency;
3. 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;
4. satisfactory completion of only the analytical writing section of the Graduate Record Examination;
5. three professional recommendations from individuals knowledgeable about the applicant's academic and nursing leadership potential and one self-evaluation;
6. an interview with a representative of the specialty area;
7. eligibility for admission to the Graduate College; and
8. completion of the TOEFL with a score of 550 or higher and of all requirements for the Commission on Foreign Graduate Nursing Schools (CFGNS), if considered an international student.

# Nursing and Healthcare Innovation (PhD) NUNHIPHD 

COLLEGE OF NURSING AND HEALTHCARE INNOVATION, DTPHX

Contact: http://nursing.asu.edu | PhDnursing@asu.edu | CONHI | 602/496-0930 | 3020
Official Degree Awarded: Nursing and Healthcare Innovation (PhD)
Program Description: The College of Nursing and Healthcare Innovation continues to offer this program in a hybrid-online format. Approximately one third of the curriculum in each course is delivered in a traditional classroom setting, and two thirds is completed in a Web-based format. Several different modalities are used to enhance the student's learning, including multimedia presentations, asynchronous discussion boards and live chats.

Program Requirements: The PhD curriculum consists of a minimum of 84 credit hours. 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.

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. The program may incorporate courses from other disciplines to further refine substantive areas of study. With approval of the supervisory committee, students may include course work from other departments. ASU offers a flexible menu of graduate courses in the various fields, in some cases team taught.

Both written and comprehensive oral examinations are required. Students must also complete and successfully defend a written dissertation.

Admission Requirements: Admittance to the PhD program requires a master's degree from an accreditaed program.

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 TOEFL. Acceptable TOEFL scores are 550 (PBT) or 213 (CBT) or 83 (iBT).

## Pediatric Nurse Practitioner - DNP NUANPPDNP

COLLEGE OF NURSING AND HEALTHCARE INNOVATION, DTPHX
Contact: http://nursing.asu.edu/index.htm | Pamela.kulikowski@asu.edu | NHI 358B | 602/496-0857 | 3020
Official Degree Awarded: Advanced Nursing Practice (Pediatric Nurse Practitioner) (DNP)

Program Description: The Doctor of Nursing Practice program may be completed for certification to be a pediatric 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. Nursing of children theory and clinical courses focus on the development of a framework for family centered, culturally appropriate, advanced nursing practice with children and families. Individual courses focus on well child maintenance as well as diagnosis, clinical decision making, and intervention strategies for children with common health problems.

Program Requirements: The Association of Nursing for Critical Care (ANCC) has recommended a minimum of 1000 postbaccalaureate hours for all students completing a DNP. The College of Nursing and Healthcare Innovation's program allows post-baccalaureate entry students to complete 630 hours of supervised clinical in their chosen specialty before receiving their Master of Science degree. This will allow students to then meet the requirements for certification and licensure in their specialty. The additional 450 hours are completed after certification and licensure while practicing as an advance practice nurse and completing the final DNP courses. The culminating document needed for completion of the Doctor of Nursing Practice is an evidence-based mentoring applied project. Each student will have a primary mentor and at least one committee member working
with them on the project. Clinical practice residency hours will be used to carry out the project in a practice setting (work settings may be included, but speci

Admission Requirements: Admission to graduate status in the College of Nursing and Healthcare Innovation is based upon meeting the following requirements:

1. 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 baccalaureate or graduate degree attained;
2. a baccalaureate degree in nursing (or another field) accredited by a nationally recognized and regionally accredited agency;
3. 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;
4. satisfactory completion of only the analytical writing section of the Graduate Record Examination;
5. three professional recommendations from individuals knowledgeable about the applicant's academic and nursing leadership potential and one self-evaluation;
6. an interview with a representative of the specialty area;
7. eligibility for admission to the Graduate College;
8. completion of the TOEFL with a score of 550 or higher and of all requirements for the Commission on Foreign Graduate Nursing Schools (CFGNS) if considered an international student; and
9. completion of a baccalaureate-level health assessment course within the preceding three years (as may be required for some nurse practitioner concentrations).

## Women's Health Nurse Practitioner - DNP NUANPWHDNP

COLLEGE OF NURSING AND HEALTHCARE INNOVATION, DTPHX
Contact: http://nursing.asu.edu/index.htm | Pamela.kulikowski@asu.edu | NHI 358B | 602/496-0857 | 3020
Official Degree Awarded: Adv Nursing Practice (Women's Health NP) (DNP)
Program Description: Women's Health Nurse Practitioner - DNP

## PUBLIC PROGRAMS, COLLEGE OF

## Community Resources and Development PhD PPCRDPHD

COLLEGE OF PUBLIC PROGRAMS, DTPHX
Contact: http://crdPhD.asu.edu | scrd@asu.edu | UCENT 550 | 602/496-0550 | 4020
Official Degree Awarded: Community Resources and Development (PhD)
Program Description: The School of Community Resources and Development and the Department of Recreation and Tourism Management offer a graduate program leading to the PhD degree in Community Resources and Development.

The PhD 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: parks and recreation management, tourism development and management, nonprofit leadership and management, and community studies. 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) and the Department of Recreation and Tourism Management (at West campus). In addition, the PhD builds on current collaborations with faculty with related research interests from many ASU departments, schools, and centers.

Program Requirements: The PhD program consists of a minimum of 84 semester hours. Up to 30 hours from a previously awarded master's degree can count toward the PhD requirements. All students are advised initially by the PhD graduate program director as a cohort. Students are required to take 18 semester 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 PhD graduate program coordinator, advisor and supervisory committee. Students complete at least 12 semester 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 700 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 exam. 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 statement of academic and professional goals in sufficient detail to indicate compatibility with the educational objectives and capabilities of the PhD program. GRE test scores, a current and professional resume, and 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. International applicants are also required to submit TOEFL scores and a financial guarantee statement. Admissions recommendations are made only once a year, with admitted students beginning their studies in 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 development-related course work at the master's-level, appropriate classes are suggested.

## Criminal Justice (MA) PPCRIMJMA

COLLEGE OF PUBLIC PROGRAMS, DTPHX
Contact: http://ccj.asu.edu/ | sccj@asu.edu | FAB South 301 | 602/543-0023 | 3250

At the outset of the 2008-09 academic year, this degree was offered by the College of Human Services on ASU's West campus. As a result of the academic reorganization that occurred during the 2008-09 academic year, this degree program was moved to the College of Public Programs at the Downtown Phoenix campus.

## Official Degree Awarded: Criminal Justice (MA)

Program Description: The Master of Arts in Criminal Justice degree (MACJ) is a 33 semester-hour program designed to provide criminal justice agency professionals with course work in criminology and the operation of the criminal justice system, as well as training in research methods and statistics. The MACJ degree program also provides students with advanced training in program planning and management, policy analysis, and program evaluation.

Admission Requirements: Students must submit an 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 MACJ will help the applicant achieve those goals.

For more information on these application procedures, access the school's Web site at http://chs.asu.edu/ccj/ma/.

The letters of recommendation and personal statement should be sent to

MA in Criminal Justice Program
College of Human Services
Arizona State University
4701 W. Thunderbird Rd.
Mail Code 3250
Glendale AZ 85306-4908

## Criminology and Criminal Justice (MS) PPCRJMS

COLLEGE OF PUBLIC PROGRAMS, DTPHX

Contact: http://ccj.asu.edu/ | sccj@asu.edu | FAB South 301 West Campus | 602/543-0023 | 3250
At the outset of the 2008-09 academic year, this degree was offered by the College of Human Services on ASU's West campus. As a result of the academic reorganization that occurred during the 2008-09 academic year, this degree program was moved to the College of Public Programs at the Downtown Phoenix campus.

Official Degree Awarded: Criminology and Criminal Justice (MS)
Program Description: The Master of Science 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 semester hours of coursework and a six-hour thesis.

Admission Requirements: Students must submit an 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 November 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 MSCCJ will help the applicant achieve these goals.

For more information on these application procedures, access the school's web site at http://chs.asu.edu/ccj/ma/.

The letters of recommendation and personal statement should be sent to

MS in Criminology and Criminal Justice Program
College of Human Services
Arizona State University
4701 W. Thunderbird Rd.
Mail Code 3250
Glendale AZ 85306-4908

## Criminology and Criminal Justice (PhD) PPCRJPHD

COLLEGE OF PUBLIC PROGRAMS, DTPHX
Contact: http://ccj.asu.edu/ | sccj@asu.edu | FAB South 301 West Campus | 602/543-0023 | 3250
At the outset of the 2008-09 academic year, this degree was offered by the College of Human Services on ASU's West campus. As a result of the academic reorganization that occurred during the 2008-09 academic year, this degree program was moved to the College of Public Programs at the Downtown Phoenix campus.

Official Degree Awarded: Criminology and Criminal Justice (PhD)

Program Description: The School of Criminology and Criminal Justice at Arizona State University offers a program of coursework and research leading to the PhD 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 PhD program in criminology and criminal justice is organized around five components:

1. a core of required courses in theory and research on crime and the criminal justice system;
2. a core of required courses on research methods and analytical techniques;
elective courses in criminology, criminal justice and related fields;
a comprehensive examination; and
a dissertation.

Admission Requirements: Students must submit an application for admission, an official transcript from every university or institution attended, GRE scores and the application fee to the Graduate College. The application deadline is February 1 for fall semester.

In addition to the basic requirements established by the Graduate College, the School of Criminology and Criminal Justice requires the following:

- An earned master's degree or a juris doctor degree 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 baccalaureate degree may be admitted directly into the PhD program. These students' work will be reviewed after completion of 30 semester hours of graduate coursework. Students whose work passes the review are awarded the Master of Arts 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.
- Applicants who wish to apply for a graduate assistantship must also submit the school's application for a graduate assistantship.
- 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://www.asu.edu/graduate/admissions/international.html.

For more information on these application procedures, access the school’s web site at http://chs.asu.edu/programs/ccj/.

The letters of recommendation and personal statement should be sent to:

PhD in Criminology and Criminal Justice Program
College of Human Services
Arizona State University
4701 W. Thunderbird Rd.
Mail Code 3250
Glendale AZ 85306-4908

## Downtown Phoenix - Social Work (PhD) PPSW2PHD

COLLEGE OF PUBLIC PROGRAMS, DTPHX
Contact: http://ssw.asu.edu/ | social.work@asu.edu | ASU DOWNTOWN UCEN 800 | 6024960800 | 3920

## Official Degree Awarded: Social Work (PhD)

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 Chicano and Chicana 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:

1. applied social work research in diverse community settings and populations of the Southwest;
2. teaching, from syllabus development to classroom teaching across the professional continuum;
3. participation in collegial decision making; and
4. participation in field education and community services.

Students are expected to participate fully in research teaching, and field liaison activities during their course of studies.
Program Requirements: Students must demonstrate scholarly competencies that are tailored to individuals interests. These competencies include micro/macro theories and perspectives on critical issues in social work and social welfare, research methodologies (qualitative and quantitative), and professoriate/leadership training in research, teaching and service.

Our doctoral degree requires that a student take a minimum of 36 course credit hours beyond the MSW degree and 84 beyond the baccalaureate 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 semester 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 PhD 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:

1. 12 hours of required 700 -level social work courses approved by the Doctoral Program Committee,
2. 12 hours of research methods and statistics courses selected from an approved list provided by the Doctoral Program Committee,
3. three hours of theory course in a social science discipline, and
4. 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.

Once the 36 minimum course 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 PhD program in the School of Social Work is based on the following criteria:

1. A MSW from an accredited school of social work preferably with two or more years of post-MSW employment in human services. Though an MSW is preferred, exceptions may be made for students with a BSW from an accredited school of social work and a master's degree in a related field and for students from countries without accreditation;
2. Undergraduate and graduate grade point averages;
3. Scores of the Graduate Record Exam (GRE), with emphasis on verbal and analytic scores;
4. Quality and extensiveness of social work experience;
5. Experience with diverse populations;
6. Experience in social work teaching or research and other scholarly activities;
7. Research potential and creativity as demonstrated in requested essays and references;
8. Goodness-of-fit with program goals; and
9. Good professional standing.

Admission to the PhD program requires completion of all admission requirement and procedures set forth by the Graduate College. Applications are accepted up to February 1 preceding the fall semester to which the applicant is seeking admission.

All PhD program applicants must submit the following to the School of Social Work:

1. an application to the PhD program in Social Work;
2. a writing sample-Social Problem Essay;
3. examples of written work (students may submit samples of their professional and/or academic writing); and
4. 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:

1. a completed Graduate College application form;
2. the application fee;
3. an official transcript of all academic work completed or in progress; and
4. TOEFL of Speak exam results for international students whose native language is not English.

## Downtown Phoenix - Social Work - Adv Standing - Adv Direct Practice (MSW) PPAPDTMSW

COLLEGE OF PUBLIC PROGRAMS, DTPHX

Contact: http://ssw.asu.edu/ | social.work@asu.edu | UCENT 800 | 6024960800 | 3920
Official Degree Awarded: Social Work (Advanced Direct Practice) (MSW)
Program Description: The professional program leading to the Master of Social Work (MSW) degree prepares social workers for advanced direct practice or planning, administration, and community 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.

Program Requirements: This degree program requires 36 semester hours of course work. Students must start the program in summer (beginning with the first summer session) and complete a total of three semester hours in each summer session for a total of six hours. The six semester hours of summer courses are not offered in Tucson. Students also complete one internship 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 written comprehensive examination, a thesis, or a capsone course.

## Summer Session Course Work

D SWG 598 ST: Advanced Standing Bridge Seminar (3) D SWG 598 ST: Advanced Standing Bridge Seminar (3)
Total: Six

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.

Total 30

## 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 : Nine hours. Two electives must be from an approved list of electives

Total 30

## 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: Six hours. Which must be from an approved list of electives

Total 30

Admission Requirements: Applicants must follow the procedures for admission to the Graduate College. Advanced Standing Program applicants must have a BSW degree from a Council on Social Work. 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:

1. a School of Social Work MSW application form;
2. an MSW advanced standing application;
3. a statement of educational and career goals;
4. a professional résumé that includes volunteer and paid work experience;
5. a written case example covering areas specified in the advanced standing application; and
6. 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 BSW field instructor, or if employed in a social work-related job for two or more years, a recommendation from the applicant's supervisor. Applicants must have received their BSW degree no more than five years before the date of admission.

In addition, all applicants must submit the following to the Graduate College:

1. a completed Graduate College application form;
2. the application fee; and
3. an official transcript of all academic work completed or in progress.

## Downtown Phoenix - Social Work - Adv Standing-Plan, Admin and Comm Practice (MSW) PPCPDTMSW

COLLEGE OF PUBLIC PROGRAMS, DTPHX
Contact: http://ssw.asu.edu/ | social.work@asu.edu | UCENT 800 | 6024960800|3920
Official Degree Awarded: Social Work (Planning, Administration and Community Practice) (MSW)

Program Description: The professional program leading to the Master of Social Work (MSW) degree prepares social workers for advanced direct practice or 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 MSW degree program is accredited by the Council on Social Work Education, and is located at the Downtown Phoenix campus and in Tucson.

Program Requirements: This degree program requires 36 semester hours of course work. Students must start the program in summer (beginning with the first summer session) and complete a total of three semester hours in each summer session for a total of six hours. The six semester hours of summer courses are not offered in Tucson. Students also complete one internship. The planning, administration, and community practice courses are generally not offered in Tucson. A written comprehensive examination, thesis, or capstone course is also required.

## Summer Session Course Work

D SWG 598 ST: Advanced Standing Bridge Seminar (3)
D SWG 598 ST: Advanced Standing Bridge Seminar (3)

Total 6

## Planning, Administration, and Community Practice (PAC)

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D SWG 623 Agency and Community-Based Research in Social Work (3)
D SWG }632\mathrm{ Social Policy and Services II (3)
D SWG }643\mathrm{ Advanced Practicum: Planning, Social Work Administration, and Community Practice I (3)
D SWG }644\mathrm{ Advanced Practicum: Planning, Social Work Administration, and Community Practice II (3)
D SWG }681\mathrm{ Social Work Administration (3)
D SWG }682\mathrm{ Community Participation Strategies (3)
D SWG }685\mathrm{ P: Program Planning in Social Services (3)
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Electives (9)

Total 30

Electives may be selected from offerings at the School of Social Work or courses offered through other departments with the approval of the MSW program coordinator.

Admission Requirements: Applicants must follow the procedures for admission to the Graduate College. Advanced Standing Program applicants must have a BSW degree from a Council on Social Work Education's accredited program with at least a 3.50 GPA (on a 4.00 scale) in required upper-division social work courses. A GPA of at least 3.00 (on a 4.00 scale) for the last two years of work leading to the BSW degree is also required. In addition, all applicants are required to successfully complete a course in human biology and statistics before enrolling 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:

1. a School of Social Work MSW application form;
2. an MSW advanced standing application;
3. a statement of educational and career goals;
4. a professional résumé that includes volunteer and paid work experience;
5. a written case example covering areas specified in the advanced standing application; and
6. 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 BSW field instructor, or if employed in a social work-related job for two or more years, a recommendation from the applicant's supervisor. Applicants must have received their BSW degree no more than five years before the date of admission.

In addition, all applicants must submit the following to the Graduate College:

1. a completed Graduate College application form;
2. the application fee; and
3. an official transcript of all academic work completed or in progress.

## Latino Cultural Competency in Social Work (Grad Certificate) PPSWGGRCL

COLLEGE OF PUBLIC PROGRAMS, DTPHX
Contact: http://ssw.asu.edu | social.work@asu.edu | UCENT 800 | 602/496-0800|3920
Official Degree Awarded: Latino Cultural Competency in Social Work (certificate) (CERT)
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:

1. Learn the social/cultural context and theoretical principles of social work practice with Latinos.
2. Learn the critical cross-cultural factors that influence a worker's competency in forming professional helping relationships with Latinos.
3. Learn the social service delivery issues involved in providing services for bilingual and limited- or non-Englishspeaking Latino populations.
4. Expand their employment potential by adding an expertise in professional services with Latinos.

Program Requirements: For an MSW graduate student 15 semester hours of course work is required for the Latino Cultural Competency Certificate.

Element Requirements:

1. Field Practice, six semester hours of Field Practicum.
2. Completion of 480 hours of field practicum with Latino clients/communities ( 60 percent of case load is to be Spanishspeaking.)
3. Social Work Course Work, three semester hours: Diversity and Oppression in a Social Work Contex.
4. 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.

For a Community Professional Social Worker and Community Worker, the Latino Cultural Competency Graduate Certificate requires 15 semester hours of course work.

Element Requirements:

1. Field Practice, six semester 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.
2. Social Work Course Work, three semester hours: Diversity and Oppression in a Social Work Context, MSW or BSW professional who has completed this course in the past five years may substitute this course with a Latino-oriented course.
3. 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.

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 Master of Social Work or Bachelor of Social Work, or a related master's degree, 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.

## Nonprofit Leadership and Management (Grad Certificate) PPNONPROCE

COLLEGE OF PUBLIC PROGRAMS, DTPHX

Contact: http://www.asu.edu/copp/nonprofit/edu/grad_op.htm | Carlton.Yoshioka@asu.edu | UCENT 500 | 602/496-0500 | 4120
Official Degree Awarded: Nonprofit Leadership and Management (certificate) (CERT)
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.

## Program Requirements:

Admission Requirements: 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 or may not 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 School of Community Resources and Management Web site, or call 602/496-0500.

## Nonprofit Studies (MNpS) PPNPSMNS

COLLEGE OF PUBLIC PROGRAMS, DTPHX
Contact: http://nonprofit.asu.edu | carlton.yoshioka@asu.edu | 411 N Central Ave, STE 500 | 602/496-0500 | 4120
Official Degree Awarded: Nonprofit Studies (MNPS)
Program Description: The Master of Nonprofit Studies (MNpS) degree 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.

Program Requirements: The MNpS consists of a minimum of 33 semester hours. Students are required to take 18 semester 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 also complete 15 semester hours of related elective course work. In addition to the NLM courses, courses are selected from two contributing disciplines (public affairs and social work) to foster the interdisciplinary nature of the degree. Students may include two three-semester-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.

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NLM }501\mathrm{ Program Evaluation and Information Management (3)
NLM }510\mathrm{ Foundations in Nonprofit Management (3)
NLM 520 Financial Management in Nonprofit (3)
NLM 540 Volunteer and Human Resource Management in Nonprofit (3)
NLM 550 Philanthropy: Theory and Practice (3)
NLM }620\mathrm{ Capstone: Critical Issues in Nonprofit Management (3)
Electives (15)
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Total minimum semester hours required: 33
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 MNpS: completed application form 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, and a curriculum vitae or résumé. 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 MNpS program must apply to the degree program before the completion of nine semester hours in their certificate program.

## Public Administration (MPA) - Downtown Phoenix PPPADTMPA

COLLEGE OF PUBLIC PROGRAMS, DTPHX
Contact: http://spa.asu.edu/MPA | spa@asu.edu | UCENT 450 | 6024960450|3720
Official Degree Awarded: Public Administration (MPA)
Program Description: The MPA 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 MPA degree is accredited by the National Association of Schools of Public Affairs and Administration.

Program Requirements: The MPA program consists of 42 hours of graduate credit. 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 semester hours of ASU graduate courses taken before admission to the school and approved by the MPA 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 MPA Committee. Other courses taken within the last two years may be substituted upon approval of the MPA director. Competency in American government is a demonstrated understanding of American government institutions and processes. Students may be required to take an undergraduate class in American government (PAF 110 , PAF 300, POS 310, or POS 340).

Admission Requirements: Applicants to the MPA program are considered for admission irrespective of undergraduate major, although students may be required to complete additional courses to prepare themselves for the core courses.

The applicant's undergraduate GPA, GRE scores (verbal, quantitative, and analytical writing), letters of recommendation, statement of educational and career goals are all considered in the admissions process. In addition, TOEFL scores ( 550 or higher) are required for international students. Admission may be limited by space availability.

Applications for admission can be sent at any time. Students requesting financial aid should have their application files completed by February 15.

All applicants must submit the following materials to the Graduate College:

1. an official application;
2. official transcripts of all undergraduate and graduate work;
3. scores on the GRE (verbal, quantitative, and analytical writing; special subject tests not required); and
4. TOEFL scores for international students.

All applicants must submit the following materials to the School of Public Affairs:

1. three letters of recommendation, at least two of which should be written by faculty who can evaluate the applicant's academic performance;
2. a written statement of applicant's educational and career goals, which also is used as a sample of the applicant's writing abilities; and
3. résumé or additional documents as the applicant sees fit.

# Public Administration (Nonprofit Administration) (MPA) PPNONPRMPA 

COLLEGE OF PUBLIC PROGRAMS, DTPHX
Contact: http://spa.asu.edu/MPA | spa@asu.edu | UCENT 450 | 6024960450 | 3720
Official Degree Awarded: Public Administration (Nonprofit Administration) (MPA)
Program Description: The MPA is an interdisciplinary, professional degree designed to prepare students for public service, public management, and policy analysis at the local, state, and national levels of government. The MPA degree is accredited by the National Association of Schools of Public Affairs and Administration.

Program Requirements: The MPA program consists of 42 hours of graduate credit. 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 semester hours of ASU graduate courses taken before admission to the school and approved by the MPA 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, SWU 321, or SOC 390) within the last two years or passing a diagnostic test approved by the MPA Committee. Other courses taken within the last two years may be substituted upon approval of the MPA director. Competency in American government is a demonstrated understanding of American governmental institutions and processes. Students may be required to take an undergraduate class in American Government (PAF 300, PAF 340, POS 110, or POS 310).

Admission Requirements: Applicants to the MPA program are considered for admission irrespective of undergraduate major, although students may be required to complete additional courses to prepare themselves for the core courses.

The applicant's undergraduate GPA, GRE scores (verbal, quantitative, and analytical writing), letters of recommendation and statement of educational and career goals are all considered in the admissions process. In addition, TOEFL scores (550 or higher) are required for international students. Admission may be limited by space availability.

Applications for admission can be sent at any time. Students requesting financial aid should have their application files completed by February 15.

All applicants must submit the following materials to the Graduate College:

1. an official application;
2. official transcripts of all undergraduate and graduate work;
3. scores on the GRE (verbal, quantitative, and analytical writing; special subject tests not required); and
4. TOEFL scores for international students.

All applicants must submit the following materials to the School of Public Affairs:

1. three letters of recommendation, at least two of which should be written by faculty who can evaluate the applicant's academic performance;
2. a written statement of applicant's educational and career goals, which also is used as a sample of the applicant's writing abilities; and
3. résumé or additional documents as the applicant sees fit.

## Public Administration (PhD) PPPUBADPHD

COLLEGE OF PUBLIC PROGRAMS, DTPHX
Contact: http://spa.asu.edu/PhD | spa@asu.edu | UCENT 450 | 6024960450 | 3720

## Official Degree Awarded: Public Administration (PhD)

Program Description: The School of Public Affairs offers a graduate program leading to the PhD degree in Public Administration. The PhD in Public Administration is a theoretically grounded research degree designed to prepare students for an academic career. The degree may also be appropriate for high-level practitioners who want to strengthen their practice through theory-based research. The program is designed to emphasize both normative and conceptual content pertaining to value assessments, theoretical assumptions, ethics, and modes of decision making, as well as problem-solving skills in budgeting, public personnel management, public finance, planning, program evaluation, and policy analysis.

This PhD degree program is offered through the School of Public Affairs; students are encouraged to pursue a course of study to fit individual needs and goals.

Program Requirements: The PhD program requires 96 semester hours of course work. The program of study consists of a minimum of 42 semester hours of graduate course work beyond the master's degree, plus a minimum of 24 semester hours of dissertation and research credit. A minimum of 30 semester hours of approved course work (exclusive of dissertation and research) must be taken at ASU after admission to the program. A sequence of four core courses ( 12 hours) is required of all students, followed by successfully passing a screening examination. Then students establish a program of study committee that works with them to develop an appropriate interdisciplinary course of study. In addition to the four core courses, an approved program of study must have a course listed in each of the following areas: quantitative research methods, qualitative research methods, political economy, and democratic theory and governance. In addition, students are expected to develop areas of specialization.

Admission Requirements: Applications are reviewed by an admissions committee appointed by the director of the program. Recommendations for admission are made by the director to the dean of the Graduate College. Minimum Graduate College admission requirements must be met. Additionally, each applicant must provide a letter of career goals and statement of reasons for seeking the degree, GRE test scores, a professional résumé, and three letters of recommendation. Letters may be a mix of academic and professional references, but all must address the applicant's capacity to successfully complete the doctoral program. International students must submit both TOEFL and TSE scores. Admissions recommendations are made only once each year, with admitted students beginning their studies in the fall semester. To assure consideration for the ensuing fall semester, submit applications for admission and financial aid forms by January 15. Only applicants already holding maste's degrees are considered. If deficiencies exist in public administration course work at the master's level, appropriate classes are prescribed.

# Public Administration (Urban Management) (MPA) PPPAFUMPA 

COLLEGE OF PUBLIC PROGRAMS, DTPHX
Contact: http://spa.asu.edu/MPA | spa@asu.edu | UCENT 450|602/496-0450|3720

Official Degree Awarded: Public Administration (Urban Management) (MPA)
Program Description: The MPA degree program with a concentration in urban management provides knowledge and skills to students seeking careers in local urban government management. This program enables students to develop the skills and techniques used by city and urban leaders and managers to implement policies, projects, and programs that resolve important problems, while addressing organizational, human resource and budgetary challenges.

Program Requirements: The MPA program consists of 42 semester hours of graduate course work. Students complete 27 of these hours in nine core classes within the School of Public Affairs. They take 12 additional hours of concentration courses, and three semester hours of elective credit.

No more than nine semester hours of graduate-level courses taken before admission to the school can be counted toward the program of study.

Students enrolling in the core courses must first demonstrate minimum competency in statistics and American government. Courses taken to fulfill the competency do not count toward the required 42 semester hours.

Competency in statistics is met through a grade of "B" or higher in one of the approved courses (PAF 401, POS 401, PSY 230, QBA 221, SWU 321 or SOC 390) within the past two years or by passing a diagnostics test approved by the MPA committee. Other courses taken within the past two years may be substituted upon the approval of the MPA director.

Competency in American government is considered a demonstrated knowledge of American governmental institutions and processes. Students may be required to take an undergraduate course in American government (PAF 300, PAF 340, POS 110, or POS 310).

Admission Requirements: Applicants to the MPA program are considered for admission irrespective of their undergraduate major, although students may be required to complete additional courses to prepare themselves for the core courses.

An applicant's undergraduate GPA, GRE scores (verbal, quantitative and analytical writing), letters of recommendation, and statement of career and educational goals are all considered in the admissions process. In addition, TOEFL scores (550 or higher) are required of international students. Admission may be limited by space availability.

Applications can be submitted at anytime. Students requesting financial aid should have their application files completed by February 15, however.

All applicants must submit the following materials to the Graduate College: an official ASU Graduate College application and application fee, official transcripts of all undergraduate and graduate course work, scores on the GRE (verbal, quantitative and analytical writing), and TOEFL scores (for international students).

All applicants must also submit the following materials to the School of Public Affairs: three letters of recommendation (at least two of these should be from faculty who can evaluate the candidate's academic performance), a written statement of the applicant's educational and career goals (which is also used as a sample of the applicant's writing ability), and a resume or additional documents as the applicant sees fit.

## Public Administration (Urbanism) PHD PPPAURBPHD

COLLEGE OF PUBLIC PROGRAMS, DTPHX
Contact: http://spa.asu.edu | spa@asu.edu | UCENT 400 | 6024960450 | 3720
Official Degree Awarded: Public Administration (Urbanism) (PhD)

Program Description: 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.

Program Requirements: The Ph.D. program consists of a minimum of 66 semester hours of graduate work beyond the master's degree. The program of study consists of a minimum of 42 semester hours of graduate course work beyond the master's degree, plus a minimum of 24 semester hours of dissertation and research credit. A minimum of 30 semester hours of approved course work (exclusive of dissertation and research) must be taken at ASU after admission to the program. A sequence of four core courses ( 12 hours) is required of all students in their first year, followed by successfully passing a screening examination. Then students establish a program of study committee that works with them to develop an appropriate interdisciplinary course of study. In addition to the four core courses, an approved program of study must include required courses in quantitative and qualitative methods (taken during their second year) and a professional development workshop (taken during their third year). Students also take 15 credit hours selected from an approved list of applicable courses related to urbanism for the concentration.

Admission Requirements: Applicants must apply to the Graduate College for admission to the Urbanism concentration program under the Ph.D. in Public Administration degree and meet the Graduate College criteria as well as PhD program criteria for admission. The successful candidate for admission to the Ph.D. degree has a Master of Public Administration or Master of Public Policy degree. 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 January 15.

All applicants must submit the following materials to the ASU Graduate College:

An official ASU Graduate application online http://www.asu.edu/gradapp
Application fee
Official transcripts of all undergraduate and graduate work

Send transcripts to:
Arizona State University
Graduate College Admissions
Interdisciplinary Building, B-Wing, Room 170
PO Box 871003
Tempe, Arizona 85287-1003

Scores on the GRE (verbal, quantitative, analytical)

International students must submit TOEFL and TSE scores to be considered for admission. This is true even for those who have a master's degree from a United States 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 TOEFL iBT) will not be admitted. Only test scores from within the past 5 years will be accepted.

In addition to the above, applicants submit the following materials directly to the School of Public Affairs:

A written statement of educational and career goals indicating a strong interest in urbanism.
A current resume or 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).

Mail materials to:
ASU School of Public Affairs
Mail Code 3720
411 N. Central Avenue, Ste. 450
Phoenix, AZ 85004-0687

## Public Policy (MPP) PPPUBPMPP

COLLEGE OF PUBLIC PROGRAMS, DTPHX
Contact: http://spa.asu.edu/mpp | spa@asu.edu | UCENT 450 | 6024960450|3720
Official Degree Awarded: Public Policy (MPP)
Program Description: The Master of Public Policy (MPP) program allows students to approach the study of public policy with a focus on public policy in the urban setting. The MPP 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.

Program Requirements: Course work for the Master of Public Policy program requires a minimum of 42 semester hours, including 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 MPP 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" 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 MPP Committee. Other courses taken within the last two years may be substituted upon approval of the director of graduate studies. Competency in microeconomics is met through PAF 504 Public Affairs Economics or a similar course.

## Recreation and Tourism Studies (MS) PPRECDTMS

COLLEGE OF PUBLIC PROGRAMS, DTPHX
Contact: http://scrd.asu.edu | scrd@asu.edu | UCENT 550 | 6024960550 | 3720
Official Degree Awarded: MS Recreation and Tourism Studies

Program Description: The faculty in the School of Community Resources and Development (Downtown Phoenix campus) and the faculty in the Department of Recreation and Tourism Management (West campus) jointly offer a program leading to the MS degree in Recreation and Tourism Studies. The MS degree 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.

Program Requirements: Completion of the MS degree 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 semester hours. The 30 semester hours include 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 which 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)

Total minimum semester hours required 30

## Program Requirements: Professional Option

The professional option consists of 36 semester 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)

Total minimum semester hours required 36

Admission Requirements: Students applying to the MS 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 their application, application fee, all undergraduate transcripts, Graduate Record Examination (or Miller's Analogy Test) scores, a statement of professional and academic goals, and three letters of recommendation to the Graduate College by March 1 to be considered for fall admission. They should submit a current resume, a statement of professional and academic goals and three letters of recommendation to the Graduate Program Coordinator also by March 1 . 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 semester hours of deficiency course work in addition to the MS degree requirements. Deficiency course work may be taken in conjunction with MS degree classes.

## Trauma and Bereavement (ct) HSCTBGRCT

COLLEGE OF PUBLIC PROGRAMS, DTPHX
Contact: http://ssw.asu.edu | social.work@asu.edu | UCENT 800 | 6024960800 | 3720

# Tucson / Downtown Phoenix / West Campus - Social Work - Standard Program (MSW) PPSWDMSW 

COLLEGE OF PUBLIC PROGRAMS, WEST
Contact: http://ssw.asu.edu/ | social.work@asu.edu | ASU DOWNTOWN UCEN 800 | 6024960800 | 3920

At the outset of the 2008-09 academic year, this degree was offered by the College of Human Services on ASU's West campus. As a result of the academic reorganization that occurred during the 2008-09 academic year, this degree program was moved to the College of Public Programs at the West campus.

Official Degree Awarded: Social Work (MSW)
Program Description: The professional program leading to the Master of Social Work (MSW) degree prepares social workers for advanced direct practice or 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 MSW degree program is accredited by the Council on Social Work Education.

Program Requirements: Students begin the Standard MSW Program in the fall. It is divided into a foundation year (core curriculum) and a concentration year. In the concentration year, students pursue a concentration in either (1) Advanced Direct Practice, or (2) Planning, Administration and Community Practice.

The planning, administration and community practice courses are generally not offered in Tucson. Students who select the Advanced Direct Practice Concentration also select on of the following three specializations: (1) Children, Youth and Families, (2) Health, Behavioral Health or (3) Public Child Welfare. All specializations may not be available in Tucson. During both years, students spend two days a week in a practicum setting.

The following foundation courses are required:

D SWG 501 Micro Human Behavior in the Social Environment (3)
D SWG 502 Macro Human Behavior in the Social Environment (3)
D SWG 510 Foundation Practice I (3)
D SWG 511 Foundation Practice II (3)
D SWG 519 Research Methods in Social Work (3)
D SWG 531 Social Policy and Services I (3)
D SWG 533 Diversity and Oppression in a Social Work Context (3)
D SWG 541 Field Practicum I (3)
D SWG 542 Field Practicum II (3)
D SWG 585 Macro Social Work Practice (3)

Total 30

The following concentration courses are required for the Planning, Administration and Community Practice concentration:

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 Program Planning in Social Services (3)
Electives: Nine hours

Total 30

Elective credit may be selected from offerings at the School of Social Work or courses offered through other departments with the approval of the MSW program coordinator.

The Advanced Direct Practice Concentration requires completion of one of the following three groups of required specialization courses.

## 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.

Total 30

## 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: Nine hours. Two electives must be from an approved list of electives.

Total 30

## 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: Six hours. Which must be from an approved list of electives.

Total 30

Admission Requirements: Applicants must follow the procedures for admission to the Graduate College. Applications to the standard MSW program are accepted from November 1 to March 1, or for priority review by February 1, preceding the fall semester to which the applicant is seeking admissions. Applicants admitted to the standard MSW program begin classes in the fall.

All applicants for the standard MSW program must submit the following to the School of Social Work:

1. a School of Social Work application form;
2. a statement of educational and career goals;
3. a professional resume that includes volunteer and paid work experience; and
4. three letters of reference.

A combination of academic and professional references is desirable References from friends, family members, or personal therapists are not accepted.

Test scores from either the Graduate Record Exam or the Miller Analogies test are required only if the applicant's GPA was below a 3.00 (on a 4.00 scale) during his or her junior and senior years. In addition, all applicants must submit to the Graduate College the following:

1. a completed graduate College application form
2. the application fee; and
3. an official transcript of all academic work completed or in progress.

The School of Social Work requires one of the following:

1. a liberal arts undergraduate degree;
2. a BSW from a Council on Social Work Education accredited school of social work; or
3. another undergraduate degree, with 30 semester hours in liberal arts courses at the undergraduate or graduate level.

The 30 semester hours describe in item 3 above must include course work from the social/behavioral sciences, natural sciences, and humanities. The distribution should approximate the current curriculum for the BSW program: 18 hours in social and behavioral sciences, six hours in natural sciences with at least one course in human biology, and six hours in humanities.

All students are required to successfully complete a course in human biology before enrollment in the graduate program. Additionally, all students must have successfully completed a course in statistics before admission. If the statistics requirement has not been met, then an equivalent course must be successfully completed either by December 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 semester hours) earned at another CSWE accredited school of social work may be transferred and applied toward the MSW degree at ASU. Under these circumstances, the student must complete the second full year of graduate study (at least 30 semester hours of graduate work) at ASU, resulting in a 60 hour program composed of the work form both schools. A full report from the school at which the intended transfer credit was obtained is required.

## Nondegree Course Work

A maximum of nine graduate semester hours earned as a nondegree student in the ASU School of Social Work or six semester hours earned at another graduate degree program at ASU may be applied toward the program of study. A combination of credit earned as a nondegree student at ASU or transferred from another university may not exceed nine hours, and of those nine hours, no more than six hours may be electives. Consideration for acceptance of nondegree work must be applied for at the time of admission.

## Exemption and Waiver Examinations

The number of hours required to complete the Standard MSW degree ranges from 45 to 60 credit hours. In addition to transferring in credit (see previous section on transfer credit), admitted students may acquire up to 15 hours of credit towards the degree by a combination of: (1) exempting up to fifteen hours of foundation course work without examination or (2) passing an examination in any of the following foundation courses: SWG 501, SWG 502, or SWG 519.

Exemptions. Only students with BSW degrees from CSWE accredited programs can be considered for exemptions. To be eligible for an exemption from any course, students must have received their BSW degree no more than five years prior to the date of admission. Students awarded a BSW degree by ASU are exempted from the courses listed below (if the GPA requirement is met). BSW students from other accredited programs may also be exempted from the same courses but must submit their course content material (course description, syllabus and outline) for an equivalency review. BSW students may be exempted from the following courses:

1. SWG 501, if the student completed SWU 301 prior to Fall 2007 and SWU 340 prior to Spring 2008 and completed both courses with an "A"; or if the student completed SWU 301 after Spring 2007 with an "A"; or completed an equivalent social work course(s);
2. SWG 502, if the student completed SWU 301 prior to Fall 2007 and SWU 340 prior to Spring 2008 and completed both courses with an "A"; or if the student completed SWU 340 after Fall 2007 with an "A"; or completed an equivalent social work course(s);
3. SWG 519, if the student has at least an "A" in SWU 320 or 420; or an equivalent social work course;
4. SWG 531, if the student has at least an "A" in SWU 171 and SWU 332 or 432 ; or an equivalent social work course;
5. SWG 533, if the student has at least an "A" in SWU 374 or 474 ; or an equivalent social work course.

Waiver Examinations. Students who believe they have successfully completed equivalent undergraduate courses or have related work experience covering content taught in the MSW courses listed below can request to take a written waiver examination.

SWG 501 Human Behavior in the Soc Envir I (3 )
SWG 502 Human Behavior in the Soc Envir II (3 )
SWG 519 Research Methods in Social Work (3)

## Academic Standing and Curriculum Sequencing

In order to remain in good academic standing, the student must maintain an overall GPA of 3.00 at the end of each semester. Most courses in the program are sequential; successful completion of the prior course in the sequence is required to enroll in the following courses.

# West Campus - Social Work - Advanced Standing (MSW) PPASWMSW 

COLLEGE OF PUBLIC PROGRAMS, WEST

Contact: http://ssw.asu.edu | social.work@asu.edu | UCENT 800 | 602/496-0800 | 3251

At the outset of the 2008-09 academic year, this degree was offered by the College of Human Services on ASU's West campus. As a result of the academic reorganization that occurred during the 2008-09 academic year, this degree program was moved to the College of Public Programs at the West campus.

Official Degree Awarded: Social Work - Advanced Standing (MSW)
Program Description: The Social Work program at the West campus is designed to meet the needs of traditional and nontraditional students with flexible class scheduling, a variety of internships, and close mentoring relationships with faculty. This student-centered program offers a strong practice oriented approach to social work. Program graduates are able to find meaningful employment in a variety of settings. The social work program is fully accredited by the Council on Social Work Education.

## Program Requirements:

Admission Requirements: Eligibility requires the applicant to have received a BSW from a CSWE accredited program within six years of the semester one is planning to begin studies (e.g., for 2008, the BSW date would be May or August, 2002) with a cumulative GPA of 3.00 for all Social Work courses. Social Work related experience (paid or volunteer) is highly desirable. Some applicants to the advanced standing program who are not offered admission to that program may be offered the option of admission into their choice of either of the two standard programs.

Application materials from the ASU Graduate College and the department of Social Work on the West campus are generally available online after September 1 of the year preceding your desired admission date. Application to the Social Work graduate program is a two-part parallel process requiring all applicants to:

- Submit a completed online application to the Graduate College and;
- A completed online Social Work application. This application will require an applicant to designate the specific program for which they are seeking admission: AS/FT, AS/PT, Standard/2 or Standard/3;
- As part of the Social Work application, applicants must submit a personal statement online; and
- At least three letters of reference.


## SUSTAINABILITY, SCHOOL OF

## Sustainability (MA) SUSUSTMA

SCHOOL OF SUSTAINABILITY, TEMPE
Contact: http://schoolofsustainability.asu.edu/ | schoolofsustainability@asu.edu | GIOS 108 | 4807276963 | 3211
Official Degree Awarded: Sustainability (MA)
Program Description: The Master of Arts (MA) in Sustainability is offered for students who have completed a bachelor's degree. The degree requirement is 33 semester hours of work beyond the bachelor's level. 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, in research, and in 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 MA degree (vs. the MS) is best suited to students inclined towards social sciences, humanities, planning, or related fields.

1. the breadth of vision to recognize the interconnectedness of social, economic, and environmental systems;
2. the critical thinking skills to approach sustainability challenges from a systems perspective;
3. the technical skills to formulate and solve problems at the appropriate scale;
4. an understanding of the need for an interdisciplinary approach to solving sustainability challenges;
5. the skills needed to work effectively in interdisciplinary teams; and
6. the ability to communicate their work to professionals in other disciplines, policy-makers, and the general public.

In addition to the common learning outcomes, MA students will be able to:

1. 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;
2. 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;
3. apply appropriate metrics and indicators to evaluate the sustainability of environmental institutions, legal frameworks, property rights, and culture; and
4. research particular problems in the sustainability of social institutions.

Program Requirements: This degree program requires 33 credit hours. Each student will formulate a program of study in consultation with their supervisory committee. The master's programs are divided into the following four areas: core courses, problem-focused seminars and workshops, required research (for the thesis option), and elective courses. 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 admission to the program and 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 graduate applicants to provide Graduate Record Examination scores, a statement of intent, and three letters of recommendation. The statement of intent should not exceed 600 words and should:

1. explain why the student is applying to the School of Sustainability;
2. outline the student's relevant background information;
3. describe the outcomes expected from the program;
4. identify potential faculty advisors and areas of research/study; and
5. elaborate on how the degree will support the student's aspirations and goals.

## Sustainability (MS) SUSUSTMS

## SCHOOL OF SUSTAINABILITY, TEMPE

Contact: http://schoolofsustainability.asu.edu/ | schoolofsustainability@asu.edu | GIOS 108 | 4807276963 | 3211
Official Degree Awarded: Sustainability (MS)
Program Description: The Master of Science (MS) in Sustainability is offered for students who have completed a bachelor's degree. The degree requirement is 33 semester hours of work beyond the bachelor's level. 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, in research, and in 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 MS degree (vs. the MA) is best suited to students inclined towards natural sciences or engineering.

All sustainability graduate students will possess:

1. the breadth of vision to recognize the interconnectedness of social, economic, and environmental systems;
2. the critical thinking skills to approach sustainability challenges from a systems perspective;
3. the technical skills to formulate and solve problems at the appropriate scale;
4. an understanding of the need for an interdisciplinary approach to solving sustainability challenges;
5. the skills needed to work effectively in interdisciplinary teams; and
6. the ability to communicate their work to professionals in other disciplines, policy-makers, and the general public.

In addition to the common learning outcomes, MS students will be able to:

1. 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;
2. 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;
3. apply appropriate metrics and indicators to evaluate the sustainability of technology, the built environment, and their environmental regulations, and policy; and
4. research particular problems in the sustainability of the economic and natural environment.

Program Requirements: This degree program requires 33 credit hours. Each student will formulate a program of study in consultation with their supervisory committee. The master's programs are divided into the following four areas: core courses, problem-focused seminars and workshops, required research (for the thesis option), and elective courses. 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 admission to the program and 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 graduate applicants to provide Graduate Record Examination scores, a statement of intent, and three letters of recommendation. The statement of intent should not exceed 600 words and should:

1. explain why the student is applying to the School of Sustainability;
2. outline the student's relevant background information;
3. describe the outcomes expected from the program;
4. identify potential faculty advisors and areas of research/study; and
5. elaborate on how the degree will support the student's aspirations and goals.

## Sustainability (PhD) SUSUSTPHD

SCHOOL OF SUSTAINABILITY, TEMPE
Contact: http://schoolofsustainability.asu.edu/ | schoolofsustainability@asu.edu | GIOS 108|4807276963|3211
Official Degree Awarded: Sustainability (PhD)
Program Description: The PhD in Sustainability is offered for students who have completed a bachelor's or master's degree. The degree requirement is 84 semester hours of work beyond the bachelor's level. The doctoral program prepares students to become scientists and leaders in research to investigate the urgent sustainability challenges of the 21st century. PhD graduates will possess an advanced understanding of the dynamics of coupled socio-ecological 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:

1. the breadth of vision to recognize the interconnectedness of social, economic, and environmental systems;
2. the critical thinking skills to approach sustainability challenges from a systems perspective;
3. the technical skills to formulate and solve problems at the appropriate scale;
4. an understanding of the need for an interdisciplinary approach to solving sustainability challenges;
5. the skills needed to work effectively in interdisciplinary teams; and
6. the ability to communicate their work to professionals in other disciplines, policy-makers, and the general public.

In addition to the common learning outcomes, PhD students will be able to:

1. understand the concepts and methods of a number of critical disciplines bearing on the sustainability of systems at different spatial/temporal scales;
2. 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;
3. lead others in the analysis and design of the built environment and institutions' policies, regulations, and technologies to support sustainable development; and
4. conduct research on particular sustainability challenges using standard skills, including the capacity to: identify problems; to formulate and test hypotheses; to use statistical, econometric, and geographical-information-system techniques to construct and analyze datasets; and build and apply models.

Program Requirements: Students may be admitted to the program with a bachelor's or master's degree from relevant fields. Up to 30 semester hours of master's-level work in a related field can be accepted toward the fulfillment of the PhD requirements. Each student formulates a program of study in consultation with his or her supervisory committee. The doctoral program is divided into the following four areas: core courses, problem-focused seminars and workshops, required research, and elective courses. Each program of study must include 24 semester 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 admission to the program and 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 graduate applicants to provide Graduate Record Examination scores, a statement of intent, and three letters of recommendation. The statement of intent should not exceed 600 words and should:

1. explain why the student is applying to the School of Sustainability;
2. outline the student's relevant background information;
3. describe the outcomes expected from the program;
4. Identify potential faculty advisors and areas of research/study; and
5. elaborate on how the degree will support the student's aspirations and goals.

# TEACHER EDUCATION AND LEADERSHIP, COLLEGE OF 

Early Childhood Education - West Campus (MEd) TEECDMED<br>COLLEGE OF TEACHER EDUCATION AND LEADERSHIP, WEST<br>Contact: http://www.ctel.asu.edu/programs/ | Nancy.Perry@asu.edu | FAB S214 | 602.543.6371 | 3151<br>Official Degree Awarded: Curriculum and Instruction (Early Childhood Education) (MEd)<br>Program Description: Early Childhood Education - West campus (MEd)

# Educational Administration and Supervision - Principalship (MEd) TEPRINMED 

COLLEGE OF TEACHER EDUCATION AND LEADERSHIP, WEST<br>Contact: http://www.west.asu.edu/ctel/graduate/gsadmin.htm | ctelgrad@asu.edu | FAB S236 | 6025433634|3151<br>Official Degree Awarded: Educational Administration and Supervision (Principalship) (MEd)

Program Description: The MEd in Educational Administration and Supervision with a concentration in Principalship is designed to lead towards the Arizona Principal Certificate Prekindergarten-12. Principalship specialization is based on the Interstate School Leaders Licensure Consortium (ISLLC) Standards. Students completing the program (including the internship) and providing evidence of three years of K-12 teaching experience may obtain an Institutional Recommendation (IR) to expedite their certification as principals.

Program Requirements: This program requires 36 credit hours. Students in the Master of Education in Educational Administration and Supervision program complete core requirements (nine semester hours), program requirements (six semester hours), and concentration requirements ( 21 to 30 semester hours). A written comprehensive exam is required.

Admission Requirements: All requirements of the ASU Graduate College; three letters from professional references; résumé; 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. Graduate Records Examination scores are not required for admission.

## Educational Administration and Supervision - Supervision (MEd) TESPRVIMED <br> COLLEGE OF TEACHER EDUCATION AND LEADERSHIP, WEST <br> Contact: http://ctel.asu.edu/programs/ | ctelgrad@asu.edu | FAB S236 | 6025433634|3151 <br> Official Degree Awarded: Educational Administration and Supervision (Supervision) (MEd)

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.

Program Requirements: This program requires 36 credit hours. Students in the Master of Education in Educational Administration and Supervision program complete core requirements (nine semester hours), program requirements (six semester hours), and concentration requirements ( 21 to 30 semester hours). An applied project (electronic portfolio) is required.

Admission Requirements: All requirements of the ASU Graduate College; three letters from professional references; résumé; 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. Graduate Records Examination scores are not required for admission.

Educational Ldrship and Innovation - Policy/Admin (EdD) TEINNPAEDD<br>COLLEGE OF TEACHER EDUCATION AND LEADERSHIP, WEST<br>Contact: http://ctel.asu.edu/programs/ | CTELgrad@asu.edu | ASU West FAB S220 | 6025433634 | 3151<br>Official Degree Awarded: Leadership and Innovation (Policy and Administration) (EdD)<br>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. Courses are designed to meet the needs of working professionals integrating face-to-face and online learning.

Program Requirements: This program requires 90 credit hours, including a master's degree. Professional core, 12 hours; research core, nine hours; electives, 18 hours; participation in Leader Scholar Communities(directed field-based studies), nine hours; comprehensive examination; Dissertation, 12 hours.

Admission Requirements: All requirements of the ASU Graduate College plus a Master's degree in education or a related field from a regionally accredited institution; three letters from professional references; résumé; two-page personal statement describing professional goals.

## Educational Leadership and Innovation - Teaching (EdD) TEINNTEEDD <br> COLLEGE OF TEACHER EDUCATION AND LEADERSHIP, WEST <br> Contact: http://ctel.asu.edu/programs/ | CTELgrad@asu.edu | ASU West FAB S220 | 6025433634 | 3151 <br> Official Degree Awarded: Leadership and Innovation (Teaching) (EdD)

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 the deep understanding, dispositions and skills to lead change and examine its impact in the workplace. Courses are designed to meet the needs of working professionals integrating face-to-face and online learning.

Program Requirements: This program requires 90 credit hours including a master's degree. Professional core, 12 hours; research core, nine hours; electives, 18 hours; participation in Leader Scholar Communities (directed field-based studies), nine hours; comprehensive examination, 12 hours.

Admission Requirements: All requirements of the ASU Graduate College plus a Master's degree in education or a related field from a regionally accredited institution; three letters from professional references; résumé; two-page personal statement describing professional goals.

## Elementary Education (Content Academy) (MEd) TECONTMED

COLLEGE OF TEACHER EDUCATION AND LEADERSHIP, WEST
Contact: http://ctel.asu.edu/programs/ | ctelgrad@asu.edu | 6025433634 | 3151
Official Degree Awarded: Elementary Education (Content Academy) (MEd)
Program Description: The master's degree in Elementary Education with Content Academy specialization is available only for students in districts with a Professional Development Partnership Agreement with the College of Teacher Education and Leadership at ASU's West campus. The Content Academies focus on reading, mathematics, and science for primary, intermediate, and middle school levels. The Content Academies are $80 \%$ content and $20 \%$ pedagogy. Courses are taught via distance learning.

Program Requirements: "Students must complete a total of 33 credit hours to complete the M.Ed. and 36 hours to complete both the M.Ed. and meet requirements for highly qualified status. The master's requirements include: nine hours M.Ed. core; three hours of elementary or early childhood education; and 21 hours of Content Academy options. A comprehensive examination completes the master's program. Three additional content academy credits (for a total of 24 ) will satisfy the requirements for high qualified status."

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 undergraduate and/or graduate GPAs. Also considered are letters of recommendation, personal statements, work and academic experiences, and the availability of faculty to supervise academic areas of interest. Applicants to the elementary or secondary programs must hold valid Arizona teaching certificates for those grade levels unless they are pursuing an MEd with certification.

# Elementary Education (Ed Technology) (MEd) TEEDTECMED 

COLLEGE OF TEACHER EDUCATION AND LEADERSHIP, WEST
Contact: http://ctel.asu.edu/programs | CTELquestions@asu.edu | FAB Second Floor | 602/543-3658|3151

Official Degree Awarded: Elementary Education (Educational Technology) (MEd)
Program Description: The master's degree in Elementary Education with a specialization in Educational Technology is designed to serve classroom teachers and computer specialists. The program leads toward an Arizona state endorsement in computer science, but it does not fulfill all credit hour requirements for this endorsement.

Program Requirements: Key International Society for Technology in Education (ISTE) standards are incorporated into the coursework. Students must complete a total of 33 credit hours consisting of: nine hours of M.Ed. core; three hours of elementary or early childhood education; 21 hours of EDT courses including an Applied Project.

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 undergraduate and/or graduate GPAs. Also considered are letters of recommendation, personal statements, work and academic experiences, and the availability of faculty to supervise academic areas of interest. Applicants to the elementary or secondary programs must hold valid Arizona teaching certificates for those grade levels unless they are pursuing an MEd with certification.

## Elementary Education (Reading) (MEd) TERDGMED

COLLEGE OF TEACHER EDUCATION AND LEADERSHIP, WEST
Contact: http://ctel.asu.edu/programs/ | ctelgrad@asu.edu | 6025433634 | 3151
Official Degree Awarded: Elementary Education (Reading) (MEd)
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. 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.

Program Requirements: Students must complete a total of 33 credit hours consisting of: nine hours of M.Ed. core; three hours of elementary or early childhood education; nine hours of RDG core; six hours of RDG elective; and six hours of electives. RDG 505 is a prerequisite for RDG 556 and RDG 550 and is offered each fall. A comprehensive examination 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 undergraduate and/or graduate GPAs. Also considered are letters of recommendation, personal statements, work and academic experiences, and the availability of faculty to supervise academic areas of interest. Applicants to the elementary or secondary programs must hold valid Arizona teaching certificates for those grade levels unless they are pursuing an MEd with certification.

## Elementary Education (General) (MEd) TEELEMMED

COLLEGE OF TEACHER EDUCATION AND LEADERSHIP, WEST
Contact: http://ctel.asu.edu/programs | ctelgrad@asu.edu | 6025433634 | 3151
Official Degree Awarded: Elementary Education (MEd)
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

Program Requirements: Students must complete a total of 45 credit hours consisting of: nine hours of M.Ed. core; three hours of elementary or early childhood education; 18 hours of electives; 15 hours of certification work. A comprehensive examination 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 undergraduate and/or graduate GPAs. Also considered are letters of recommendation, personal statements, work and academic experiences, and the availability of faculty to supervise academic areas of interest. Applicants to the elementary or secondary programs must hold valid Arizona teaching certificates for those grade levels unless they are pursuing an MEd with certification.

# Elementary Education (Teacher Certification Accelerated) (MEd) TEEEACLMED <br> COLLEGE OF TEACHER EDUCATION AND LEADERSHIP, WEST <br> Contact: http://ctel.asu.edu/programs/ | ctelgrad@asu.edu | FAB 236 | 6025433634 | 3151 

Official Degree Awarded: Elementary Education (Teacher Certification Accelerated) (MEd)
Program Description: Elementary Education (Teacher Certification Accelerated) (MEd)

# Secondary Education (Educational Technology) (MEd) TESEDTCMED 

COLLEGE OF TEACHER EDUCATION AND LEADERSHIP, WEST
Contact: http://ctel.asu.edu/programs | barbara.giles@asu.edu | FAB Second Floor | 602/543-3658 | 3151
Official Degree Awarded: Secondary Education (Educational Technology) (MEd)
Program Description: This program advances the knowledge of the role of technology in education and the abilities to use technology to advance teaching and learning of practicing or future high school teachers, middle school teachers and computer specialists. Depending upon previous coursework and experience in this area this program's coursework may lead to the Arizona computer science endorsement.

Program Requirements: This program requires 33 credit hours and an applied project.
Admission Requirements: Applicants must apply to the ASU Graduate College and to the specific program and concentration where they seek admission.

Secondary Education (Teacher Certification) (MEd) TESCERTMED<br>COLLEGE OF TEACHER EDUCATION AND LEADERSHIP, WEST<br>Contact: http://ctel.asu.edu/programs | CTELquestions@asu.edu | FAB Second Floor | 602/543-3658 | 3151<br>Official Degree Awarded: Secondary Education (Teacher Certification) (MEd)<br>Program Description: The master's degree in Secondary Education with Teacher Certification is a specialization designed for those with bachelor's degrees who wish to earn an MEd degree along with dual Arizona Certifications in K-12 Education and one through eight elementary education. In addition, students receive a mild cross-categorical endorsement and a provisional ESL endorsement. See, Arizona Department of Education requirements at http://www.ade.state.az.us/certifcation/requirements.

Program Requirements: The MEd in Special Education requires 36 semester hours and an applied project. Students must complete a total of 51 hours in order to receive Arizona certification. Course work includes:

MEd Core Classes:
nine hours (TEL 501, SPE 541, SPE 540)

Elementary Education Course:
three hours ( EED 412)

ESL/BLE Course:
Six hours (BLE 520 and BLE 522)

A Reading Course:
three hours (RDG 531)

Special Education Courses:
15 hours (SPE 322, SPE 532, SPE 533, SPE 534, SPE 535)

Applied Project::
three hours (SPE 593)

Field Experience:
No credit hours (SPE 397, SPE 496)

Student Teaching:
12 hours (SPE 578)

Admission Requirements: Applicants must apply to the ASU Graduate College through the online application. Two types of prerequisites must be met

## Content Mathematics:

Courses include MTE 180, MTE 181, or a course above MTE 180. Candidates may also have the math requirement waived by passing the Arizona Educator Proficiency Assessments subject knowledge examination for elementary education. Proof of a passing score must be provided before beginning the program.

Introductory Special Education Course Work:
SPE 222, SPE 311, or SPE 511.

## Secondary Education (Reading) (MEd) TESERDGMED

COLLEGE OF TEACHER EDUCATION AND LEADERSHIP, WEST
Contact: http://www.west.asu.edu/ | barbara.giles@asu.edu | West Campus FAB S231S | 602/543-6371 | 3151
Official Degree Awarded: Secondary Education (Reading) (MEd)
Program Description: This program advances the knowledge and skill of future high school or middle school teachers and is intended to meet Arizona's requirements for teacher certification. It is designed for those with bachelor's degrees and who have sufficient (generally 24 semester hours) content classes in one area (such as history, English, science, math, dramatic arts, etc.). The program leads to certification and an MEd degree.

Admission Requirements: Applicants must apply to the ASU Graduate College.

## Secondary Education (Tailored) (MEd) TESECEDMED

COLLEGE OF TEACHER EDUCATION AND LEADERSHIP, WEST
Contact: http://ctel.asu.edu/programs | CTELquestions@asu.edu | FAB Second Floor | 602/543-6358 | 3151
Official Degree Awarded: Secondary Education (MEd)

Program Description: This program in tailor-made to meet the needs of practicing or future high school or middle school teachers. The five free electives can be used in a variety of ways that are chosen in consultation with an academic advisor. Typical configurations include content classes (such as history teachers taking history classes), educational technology, literacy and English as a Seond Language courses. This tailor-made program is designed to help teachers advance their knowledge and skills to become well-rounded teachers. For teachers needing more course work in one content area, the electives may enable them to become highly qualified.

Program Requirements: This program requires 33 credit hours and an applied project.
Admission Requirements: Applicants must apply to the ASU Graduate College and to the specific program and concentration where they seek admission.

## Special Education (Teacher Certification) (MEd) TESECRTMED

COLLEGE OF TEACHER EDUCATION AND LEADERSHIP, DTPHX
Contact: http://ctel.asu.edu/programs/special_ed/ | ctelgrad@asu.edu | FAB 2nd floor | 602/543-6358 | 3151
Official Degree Awarded: Special Education (Teacher Certification) (MEd)
Program Description: The Master's Degree in Special Education with Arizona certification is a specialization designed for those individuals with a bachelor's degree who want to earn an MEd degree along with dual Arizona certifications in K-12 Special Education and one-eight Elementary Education. Students also receive a Mild Cross-Categorical Endorsement and provisional ESL endorsement. See, Arizona Department of Education requirements at http://www.ade.state.as.us/certifcation/requirements.

Program Requirements: The MEd in Special Education requires 33 semester hours of course work and completion of an applied project. Students must complete 51 semester hours, however, in order to receive Arizona certification.

The 51 hours consists of:

MEd Core Courses: Nine hours of TEL 501, SPE 540 and SPE 541.

Elementary Education Courses: Three hours of EED 412.

ESL/BLE Courses: BLE 520 and BLE 522.

A Reading Course: RDG 531.

Special Education Courses: 15 hours of SPE 322, SPE 532, SPE 533, SPE 534 and SPE 535.

An Applied Project: Three hours of SPE 593.

Field Experience: SPE 397 and SPE 496 (no credit hours).

Student Teaching: SPE 578.

Admission Requirements: Applicants must submit a Graduate College online application. Two types of prerequisites must also be met:

Content Mathematics (e.g., MTE 189, MTE 181 or a higher level mathematics course). Students can have this requirement waived by completing the Arizona Educator Proficiency Assessments subject knowledge examination for Elementary Education. A passing score must be presented to the College of Teacher Education and Leadership office as proof before beginning the program.

Introductory Special Education Courses: These include SPE 222, SPE 311 and SPE 511.

# TECHNOLOGY AND INNOVATION, COLLEGE OF 

## Aeronautical Engineering Technology (MSTech) TSARMSTECH

POLY
Contact: http://poly.asu.edu/technology/mmet | MMet@asu.edu | SIM 294 | 480/727-1584 | 0180
Official Degree Awarded: Technology (Aeronautical Engineering Technology) (MSTech)
Program Description: At the graduate level, the Mechanical and Manufacturing Engineering Technology Department offers a Master of Science in Technology (MSTech) degree with a concentration in aeronautical 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 aeronautical engineering. This 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 aeronautical-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 modeling and simulation, "smart" materials, composite materials, hydrogen power and fuel cells and other alternative energy sources, optimization of turbine engines, machinability and manufacturing processes, manufacturing and program management, manufacturing cost economics, automation and design.

Applied research projects are carried out in a number of well-equipped laboratories and facilities: computer-aided design and computer-aided manufacturing laboratory, CNC-machining center laboratory, composite materials laboratory, energy conversion and combustion laboratory, automation laboratory, welding and casting laboratory, materials inspection and metrology laboratory and metallurgy/materials testing laboratory.

For more information on research areas and laboratories, please access the Department of Mechanical and Manufacturing Engineering Technology Web site.

Program Requirements: There are two basic options in the Master of Science in Technology degree program with a concentration in aeronautical engineering technology: Thesis and applied project. Both options require the completion of 33 semester hours. All course work applied toward the minimum 33 semester-hour total must be at the 400 -level or higher with a minimum grade of "B" or higher. 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 Mechanical and Manufacturing Engineering Technology must be pre-approved and included in the program of study.

## Thesis Option

In the thesis option, a minimum of 24 semester hours must be 500 -level courses, allowing students to take up to nine semester 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. Students are required to complete six semester hours of AET 599 Thesis, write a thesis and present an oral defense.

Technical concentration area (18)
Supporting area (6)
Research methods courses:

MET 591 Research Seminar (1) and a research writing course (2)
AET 599 Thesis (6)

Total minimum semester hours: 33

## Applied Project Option

In the applied project option, a minimum of 24 semester hours must be 500-level courses, allowing students to take up to nine semester 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 Course Work Requirements:

Technical concentration area (18)
Supporting area (9)
Research methods courses:

MET 591 Research Seminar (1) and a research writing course (2)
AET 593 Applied Project (3)
Total minimum semester hours: 33

Admission Requirements: Applicants are expected to satisfy all requirements for admission to the Graduate College. 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.

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 TOEFL exam is required.

# Aviation Management/Human Factors (MSTech) TSHFMSTECH 

POLY
Contact: http://eastair.poly.asu.edu/ | aerotech@asu.edu | SIM 201 | 480/727-1021 | 0180
Official Degree Awarded: Technology (Aviation Management and Human Factors) (MSTech)

Program Description: The Master of Science in Technology degree program offers a concentration in aviation management and human factors in the Department of Aeronautical Management Technology (AMT) within the College of Technology and 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. 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.

Program Requirements: The following are the core requirements for meeting the AMT 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 (12 semester hours for Thesis option and 9 semester hours for Applied Project option)

AMT 593 Applied Project (3) or AMT 599 Thesis (6)
ITM 549 Research Techniques and Applications or equivalent
PSY 530 Statistics or equivalent

Students have a choice of selecting a thesis option (12 semester hours of core courses plus 21 semester hours of selected course work) or an applied project option (nine semester hours of core courses plus 24 semester hours of selected course work). The detailed design of the graduate student's total program requirements ( 33 semester 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 AMT 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 (21 semester hours for Thesis option and 24 semester hours for Applied Project option)

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AMT 520 Airline Pricing and Yield Management
AMT }521\mathrm{ Air Transportation Regulations
AMT 522 Aviation Law
AMT 523 Intermodal Transportation Management (former Aviation Systems Management)
AMT 524 Airport Management Operations
AMT }525\mathrm{ Airport Planning and Design
AMT 526 Aviation Labor Relations
AMT 527 Airline Management Strategies
AMT }528\mathrm{ International Aviation
AMT }529\mathrm{ Fixed-Base Operations Management
AMT 532 Managing Diversity in Aviation
AMT 541 Aviation Physiology
AMT }542\mathrm{ Human Factors in Automation
AMT }545\mathrm{ Human Factors in Aviation
AMT 546 Crew Resource Management/LOFT
AMT 549 Applied Human Factors Research
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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 Master of Science in Technology degree program requires the completion of all general admission requirements and procedures set forth by the Graduate College. The College of Technology and Innovation requires an appropriate baccalaureate degree from an accredited college or university, with a minimum of 30 semester hours in
technology or equivalent and 16 semester hours of physical science and mathematics appropriate to the program pursued. The specific requirements vary within each department. To be considered for admission, a 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 Master of Science in Technology degree program is based on a number of factors. These include, but are not limited to:

- undergraduate GPA,
- the TOEFL score for applicants whose native language is not English,
- references from individuals qualified to judge academic potential,
- statement of purpose,
- resume,
- likelihood for success,
- potential for successful placement, and
- the number of students currently enrolled in the program.


## Computer Systems (MSTech) TSCOMSTECH

COLLEGE OF TECHNOLOGY AND INNOVATION, POLY
Contact: http://poly.asu.edu/technology/dcst/Admission/graduate.html | dcst@asu.edu | Sutton Hall 140L | 4807271257 | 180
Official Degree Awarded: Technology (Computer Systems) (MSTech)
Program Description: The Master of Science in Technology (MSTech) degree offered through the College of Technology and Innovation promotes greater depth of understanding in the chosen discipline. A minimum of 33 semester hours of graduate course work is required. The Division of Computing Studies supports the MSTech concentration in computer systems. 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 component provides students with an opportunity to develop research and application skills directly related to individual educational objectives. The graduate courses are designed to furnish students with technical and professional knowledge necessary for career advancement and positions of leadership in industry education, government and the military.

Program Requirements: The MSTech degree with a concentration in computer systems requires a minimum of 33 semester hours, including course work and research components. A maximum of three semester hours of CST 584 Supervised Internship or CST 590 Reading and Conference may be used to fulfill program requirements. Students may select the thesis option or nonthesis option. Specialization and supporting area course work are taken from the following four areas:

1. distributed and web-based applications,
2. embedded systems,
3. software systems and visualization, and
4. operating systems and networks.

## Thesis Option

Specialization (15-16)
Supporting area (8-9)
Research methods courses (7-9):
CST 500 RM: Research/Writing (2)
CST 591 Seminar (1)
CST 599 Thesis (6)
Total minimum semester hours: 33

A minimum of 21 semester hours must be in 500-level courses, including CST 598 courses. At least nine semester hours of 500level course work must be included in the primary technical specialization. Students may take up to 12 semester hours of 400level course work to broaden their technical knowledge within the specialization or supporting areas. Thesis students are required to complete six semester hours of CST 599 Thesis, write a thesis, and make an oral defense. All course work applied toward the minimum 33 semester-hour total must be at the 400 - and 500-level.

## Nonthesis Option

Specialization (15-18)
Supporting area (9-12)
Research methods courses (4-6):
CST 500 RM: Research/Writing (2)
CST 591 Seminar (1)
CST 593 Applied Project (3)
Total minimum semester hours: 33
A minimum of 21 semester hours must be in 500-level courses, including CST 598 courses. At least nine semester hours of 500level course work must be included in the primary technical specialization. Students may take up to 12 semester hours of 400level course work to broaden their technical knowledge within the specialization or supporting areas. Thesis students are required to complete six semester hours of CST 599 Thesis, write a thesis, and make an oral defense. All course work applied toward the minimum 33 semester-hour total must be at the 400 - and 500 -level.

Admission Requirements: Applicants are expected to satisfy all requirements for admission to the Graduate College with high success in completing 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 Graduate Record Examination, including verbal, quantitative, and analytical. International applicants must submit results of the Test of English as a Foreign Language. 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 October 1.

## Computing Studies - Polytechnic Campus (MCST) TSCOMPMCST

## COLLEGE OF TECHNOLOGY AND INNOVATION, POLY

Contact: http://poly.asu.edu/technology/dcst/Admission/graduate.html | dcst@asu.edu | Poly ISTB3 103 | 4807271257 | 0180

## Official Degree Awarded: Computing Studies (MCSt)

Program Description: The faculty of the Division of Computing Studies (DCS) offers the Master of Computing Studies (MCST) graduate degree 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, software systems, visualization and operating systems. Graduates of the MCST degree 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, DCS faculty have extensive industry experience.

Program Requirements: The program of study must contain a minimum of 33 semester hours of approved graduate-level course work. At least 18 of these semester hours must be 500-level courses (excluding CST 598 ST: Special Topics courses). A maximum of six semester hours may be taken at the 400 -level. In keeping with the learning objectives of the Polytechnic campus, students must complete three semester hours of CST 584 Supervised Internship or three semester hours of CST 590 Reading and Conference to fulfill the degree requirements. Students must complete at least 12 semester hours in a primary area of specialization that is also used as the technical area for the research component. To promote breadth, MCST degree students must take a total of nine semester hours in at least two additional specialization areas distinct from the primary specialization area. Areas of specialization are:

1. distributed and web-based applications,
2. embedded systems,
3. software systems and visualization, and
4. operating systems and networks.

## Thesis Option

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)
Total minimum semester hours: 33

## Nonthesis Option

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)
Total minimum semester hours: 33

All MCST degree students must completed a combined three semester hours in CST 500 Seminar and CST 591 Research/Writing.

Admission Requirements: Applicants are expected to satisfy all requirements for admission to the Graduate College with high success in completing 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 Graduate Record Examination, 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. 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 October 1.

## Electronic Engineering Technology (Alt Energy Tech) (MSTECH) TSATMSTECH

## COLLEGE OF TECHNOLOGY AND INNOVATION, POLY

Contact: http://www.poly.asu.edu/technology/esd | esd@asu.edu | Technology Center, Room 101E | 480/727-1514 | 0180
Official Degree Awarded: Electrical Engineering Technology (Alternative Energy Technologies) (MSTech)
Program Description: The Master of Science in Technology (MSTech) degree 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 solarhydrogen 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.

## Thesis Option:

Concentration (15-16)
Supporting Area (8-9)
Research Methods Courses:

```
EET }500\mathrm{ Research/Writing (2)
EET }591\mathrm{ Graduate Seminar (1)
EET }592\mathrm{ Research (3)
EET 599 Thesis (3)
```

Total minimum semester hours: 33
A minimum of 20 semester 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 nine semester hours of 400-level course work to broaden their technical knowledge within the concentration or supporting area. Students are required to complete three hours of EET 592 Research and three hours of EET 599 Thesis, write a thesis and make an oral defense. All course work applied toward the minimum 33 semester-hour total must be at the 400- and 500-level.

## Nonthesis Option

Concentration (15-18)
Supporting Area (9-12)
Research Methods Courses:

```
EET 500 Research/Writing (2)
EET }591\mathrm{ Graduate Seminar (1)
EET }593\mathrm{ Project (3)
```

Total minimum semester hours: 33
Admission Requirements: Prerequisites: Applicants are required to have an earned baccalaureate degree that includes a minimum of 30 semester hours or equivalent in a technology area including course work applicable to the concentration being sought, and a minimum of 16 semester hours of mathematics and science. Depending upon the background of the student, the following information is necessary:

1. an application form,
2. application fee,
3. official transcripts from every college and university previously attended,
4. test score reports (TOEFL report may be necessary for international students). NOTE: The GRE is not required by the Department of Electronic Systems,
5. domicile affidavit (for applicants claiming Arizona residency), and
6. a financial guarantee form (required for international students). Visit the Graduate College Web site for more information.

# Electronic Engineering Technology (Integrated Electronic Sys) (MSTECH) TSESMSTECH 

COLLEGE OF TECHNOLOGY AND INNOVATION, POLY
Contact: http://www.poly.asu.edu/technology/esd/ | esd@asu.edu | Technology Center 101 | 480/727-1514 | 0180
Official Degree Awarded: Technology (Integrated Electronic Systems) (MSTech)

Program Description: The Master of Science in Technology (MSTech) degree 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 Electronic Systems, include circuit applications and digital design. Research is conducted in the areas of microelectronics/intergrated 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. MSTech degree candidates will find a broad range of research topics that can lead to an applied project or thesis.

## Program Requirements:

## Thesis Option:

Concentration (15-16)
Supporting Area (8-9)
Research Methods Courses:

```
EET }500\mathrm{ Research/Writing (2)
EET }591\mathrm{ Graduate Seminar (1)
EET }592\mathrm{ Research (3)
EET }599\mathrm{ Thesis (3)
```

Total minimum semester hours: 33

A minimum of 20 semester 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 nine semester hours of 400 -level course work to broaden their technical knowledge within the concentration or supporting area. Students are required to complete three hours of EET 592 Research and three hours of EET 599 Thesis, write a thesis and make an oral defense. All course work applied toward the minimum 33 semester-hour total must be at the 400- and 500-level.

## Nonthesis Option

Concentration (15-18)
Supporting Area (9-12)
Research Methods Courses:

> EET 500 Research/Writing (2)
> EET 591 Graduate Seminar (1)
> EET 593 Project (3)

Total minimum semester hours: 33
Admission Requirements: Prerequisites: Applicants are required to have an earned baccalaureate degree that includes a minimum of 30 semester hours or equivalent in a technology area including course work applicable to the concentration being sought, and a minimum of 16 semester hours of mathematics and science. Depending upon the background of the student, the following information is necessary:

1. an application form,
2. application fee,
3. official transcripts from every college and university previously attended,
4. test score reports (TOEFL report may be necessary for international students). NOTE: The GRE is not required by the Department of Electronic Systems,
5. domicile affidavit (for applicants claiming Arizona residency), and
6. a financial guarantee form (required for international students). Visit the Graduate College Web site for more information.

# Electronic Systems Engineering Technology (MSTech) TSSYMSTECH 

COLLEGE OF TECHNOLOGY AND INNOVATION, POLY
Contact: http://www.poly.asu.edu/technology/esd | esd@asu.edu | Technology Center 101 | 480/727-1514 | 0180
Official Degree Awarded: Technology (Electronic Systems Engineering Technology) (MSTech)
Program Description: The Master of Science in Technology degree program promotes greater depth of understanding in electronics and its applications at a system level. A minimum of 33 semester hours of graduate credit is required for degree completion. 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 Electronic Systems provides students with a concentration in electronic systems engineering technology.

Program Requirements: The degree requirements for the Master of Science in Technology degree with a concentration in electronic systems engineering technology offered by the Department of Electronic Systems include:

## Thesis Option:

Concentration (15-16)
Supporting Area (8-9)
Research Methods Courses:

EET 500 Research/Writing (2)
EET 591 Graduate Seminar (1)
EET 592 Research (3)
EET 599 Thesis (3)

Total minimum semester hours: 33

At least nine hours of 500-level course work must be included in the technical concentration. Students may take up to nine semester hours of 400-level course work to broaden their technical knowledge within the concentration or supporting area. Students are required to complete three hours of EET 592 Research and three hours of EET 599 Thesis, write a thesis and make an oral defense.

## Nonthesis Option:

Concentration (15-18)
Supporting Area (9-12)
Research Methods Courses:

Total minimum semester hours: 33
At least nine hours of 500-level course work must be included in the technical concentration. At least nine hours of 500-level course work must be included in the technical concentration. A maximum of three semester hours of EET 593 Applied Project may be applied toward the 20 semester-hour, 500-level minimum. Additional background deficiency hours may be required. All course work outside the Department of Electronic Systems must be pre-approved by the department chair.

Final Examination: 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.

## Program 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 Electronic Systems 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 Teaching Factory clean-room facilities. Electronic systems and alternative energy technologies are also topics of research by department faculty and graduate students. Master of Science in Technology degree 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 an earned baccalaureate degree that includes a minimum of 30 semester hours or equivalent in a technology area including course work applicable to the concentration being sought, and a minimum of 16 semester hours of mathematics and science. Depending upon the background of the student, the following information is necessary:

1. an application form,
2. application fee,
3. official transcripts from every college and university previously attended,
4. test score reports (TOEFL report may be necessary for international students). NOTE: The GRE is not required by the Department of Electronic Systems,
5. domicile affidavit (for applicants claiming Arizona residency), and
6. a financial guarantee form (required for international students). Visit the Graduate College Web site for more information.

Admission to the Graduate College and the Department of Electronic Systems 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:

1. academic attainments in undergraduate course work, including junior/senior grade index, overall undergraduate grade index, and grade index in major courses;
2. academic preparation in the chosen field of study for the master's degree;
3. academic attainments in post bachelor course work, if appropriate; and
4. any other supporting information provided by the applicant, such as educational and career objectives, explanation of background or letters of reference.

# Environmental Technology Management (Polytechnic Campus) (MSTech) TSMGMSTECH 

COLLEGE OF TECHNOLOGY AND INNOVATION, ONLINE<br>Contact: http://technology.poly.asu.edu/dtm | hazel.caldera@asu.edu | Tech Center 102 | 4807271781 | 0180<br>Official Degree Awarded: Technology (Environmental Technology Management) (MSTech)

Program Description: The Master of Science in Technology (MSTech) degree with a concentration in environmental technology management provides three areas of study: Environmental management, emergency management and 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.

Program Requirements: The MSTech degree with a concentration in environmental technology management is a 33 semesterhour degree program. A thesis or an applied project is required for this degree program. Concentration area course work includes 12 semester hours of core classes and 15 semester hours of approved electives in the following areas of study:

1. environmental management,
2. emergency management, and
3. international environmental management and sustainability.

Supporting course work includes the following areas of study:

- air pollution,
- soils and groundwater contamination;
- comprehensive emergency management;
- terrorism, WMD and current issues;
- international environmental management;
- international environmental law;
- environmental risk assessment;
- sustainability and sustainable development;
- environmental chemistry; and
- principles of hazardous materials/waste.

Admission Requirements: Admission to the MSTech degree program requires the completion of all general admissions requirements and procedures set forth by the Graduate College. The College of Technology and Innovation also requires an appropriate baccalaureate degree from an accredited college or university, with a minimum of 30 semester hours in technology or its equivalent and 16 semester 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 3.00 GPA is required. Applicants should submit a letter of application and a current resume to the Department of Technology Management for review by the graduate faculty in the technical concentration.

## Fire Service Administration (MSTech) TSFSMSTECH

COLLEGE OF TECHNOLOGY AND INNOVATION, ONLINE
Contact: http://technology.poly.asu.edu/dtm/ | Tech Center 102 | 4807271781|0180
Official Degree Awarded: Technology (Fire Service Administration) (MSTech)

Program Description: The faculty in the Department of Technology Management offers the Master of Science in Technology degree with a concentration in fire service administration. The concentration is the advanced study of fire administration and leadership concepts. Students learn concepts and develop skills needed to be effective fire administrators. This program is designed to build a bridge between grounded theory and applied practice. Students completing this program are able to perform the functions of a fire chief in any size public sector fire department, administer fire related programs in the private sector, and conduct meaningful research applicable to fire service programs.

Program Requirements: The Master of Science in Technology program requires 33 semester hours of course work. The technical concentration is a 21 -semester-hour program, of which five courses and an applied research project are required of all students. Students select classes from a list of technical courses or related support electives to complete the balance of the 33 required semester hours. Related areas of support cannot exceed six semester hours. A Web-based distance learning format is also available.

Admission Requirements: Admission to the MS in Technology degree program requires the completion of all general admission requirements and procedures set forth by the Graduate College. The College of Technology and Innovation also requires an appropriate baccalaureate degree from an accredited college or university, with a minimum of 30 semester hours in technology or equivalent and 16 hours of science and mathematics course work appropriate to the program pursued.

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 is also evaluated and taken into consideration when determining admission classification.

To be considered for regular admission, a 3.00 GPA is required.
Applicants should submit a letter of application and a current resume to the Department of Technology Management for review by the graduate faculty in the technical concentration.

## Global Technology and Development (MSTech) TSGTMSTECH

COLLEGE OF TECHNOLOGY AND INNOVATION, POLY
Contact: http://technology.poly.asu.edu/dtm/ | hazel.caldera@asu.edu | Technology Center 102 | 480/727-1781|0180
Official Degree Awarded: Technology (Global Technology and Development) (MSTech)
Program Description: The Master of Science in Technology degree 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 technology-related public policy, government service, international development and international management.

Program Requirements: A minimum of 33 semester hours are required for the Master of Science in Technology degree with a concentration in global technology and development. Thesis and nonthesis options are available. At least 24 semester hours must be 500 -level courses. A maximum of nine semester 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 on-line application. Students applying to the global technology and development concentration must have:

1. an appropriate baccalaureate degree from an accredited college or university;
2. a combination of course work in the social sciences and technology/science; and
3. some element of international or intercultural knowledge, which could be fluency in a foreign language, academic course work, or having resided in another country.

## Graphic Infomation Technology (MSTech) TSGIMSTECH

COLLEGE OF TECHNOLOGY AND INNOVATION, ONLINE
Contact: http://technology.poly.asu.edu/dtm/ | thomas.schildgen@asu.edu | Tech Center 102 | 4807271781 | 0180
Official Degree Awarded: Technology (Graphic Information Technology) (MSTech)
Program Description: The Master of Science in Technology degree with a concentration in graphic information technology provides students with the opportunity to study within the various areas of graphics. The areas include traditional and digital printing and publishing, multimedia, 3-D modeling, Web development, digital photography and animation. 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 management information systems program. The degree program is offered either as an on-campus or Web-based distance learning format.

Program Requirements: All candidates for the Master of Science in Technology degree program are required to complete a minimum of 33 semester hours of graduate course work. Of these, a minimum of 18 semester 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

Technical area of emphasis (18)
Supporting area (6)
Research course (3)
Research (6)

Total minimum semester hours: 33

## Applied Project Option

Technical area of emphasis (18)
Supporting area (9)
Research course (3)
Research (3)

Total minimum semester hours: 33

A maximum of nine semester 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 Master of Science in Technology degree program requires the completion of all general admissions requirements and procedures set forth by the Graduate College. The College of Technology and Innovation also requires an appropriate baccalaureate degree from an accredited college or university, with a minimum of 30 semester hours in technology or its equivalent and 16 semester 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 3.00 GPA is required. Applicants should submit a letter of application and a current resume to the Department of Technology Management for review by the graduate faculty in the technical concentration.

# Instrumentation and Measurement Technology (MSTech) TSINMSTECH 

COLLEGE OF TECHNOLOGY AND INNOVATION, POLY
Contact: http://www.poly.asu.edu/technology/esd/ | esd@asu.edu | Technology Center 101|480/727-1514 | 0180
Official Degree Awarded: Technology (Instrumentation and Measurement Technology) (MSTech)
Program Description: At the graduate level, the Department of Electronic Systems and the Department of Mechanical and Manufacturing Engineering Technology jointly offer a Master of Science in Technology (MSTech) degree with a concentration in instrumentation and measurement 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, some courses are offered either during the late afternoon or early evening.

The program presupposes that the student has a sound technical undergraduate degree. The degree concentrations are 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.

Program Requirements: There are two basic options in the MSTech degree program: Thesis and applied project. Both options require the completion of 33 semester hours. All course work applied toward the minimum 33 semester hour total must be at the 400 -level or higher with a grade of " B " or higher. 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 Departments of Mechanical and Manufacturing Engineering Technology or Electronic Systems must be pre-approved and on the program of study.

## Thesis Option

In the thesis option, a minimum of 24 semester hours must be 500 -level courses, allowing students to take up to nine semester 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. Students are required to first complete EET or MET 592 Research (3), then EET or MET 599 Thesis (3), write a thesis and present an oral defense.

Thesis Option Course Work Requirements:

Technical concentration area (18)
Supporting area (6)
Research methods courses:

MET or EET 591 Research Seminar (1) and a research writing course (2)
MET or EET 599 Thesis (6)
Total minimum semester hours: 33

## Applied Project Option

In the applied project option, a minimum of 24 semester hours must be 500-level courses, allowing students to take up to nine semester 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 Course work Requirements:

Technical concentration area (18)
Supporting area (9)
Research methods courses:

> MET or EET 591 Research Seminar (1) and a research writing course (2) MET or EET 593 Applied Project (3)

Total minimum semester hours: 33
Admission Requirements: Applicants are expected to satisfy all requirements for admission to the Graduate College. 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.

Applicants who hold a bachelor's degree from a regionally-accredited U.S. institution do not need 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 TOEFL exam is required.

## Management of Technology (MSTech) TSMRMSTECH

## COLLEGE OF TECHNOLOGY AND INNOVATION, POLY

Contact: http://technology.poly.asu.edu/dtm/ | hazel.caldera@asu.edu | Tech Center 102 | 4807271781 | 0180

## Official Degree Awarded: Technology (Management of Technology) (MSTech)

Program Description: The purpose of the Master of Science in Technology (MSTech) degree 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.

Program Requirements: For the MSTech degree, 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 semester hours) from the following list:

OMT 503 Marketing Management
OMT 504 Law and Ethics for Technical Professionals
OMT 540 International Management

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OMT 548 Statistical Methods for Research
OMT }550\mathrm{ Industrial Training and Development
OMT 552 Global Management Philosophies
OMT }592\mathrm{ Research (1-3)
TMC }584\mathrm{ Internship (1-3)
OMT }598\mathrm{ ST: Forecasting and Evolution of Technology
OMT }598\mathrm{ ST: Simulation of Operations
OMT }598\mathrm{ ST: Advanced Quality Topics
OMT }598\mathrm{ 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 semester 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: The admission requirements include:

1. bachelor's degree or the equivalent from a regionally accredited institution,
2. equivalent to a " B " (3.00) average for the undergraduate program of study (in the last 60 semester 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.), and
3. international applicants must meet the previous qualifications, plus have a valid minimum TOEFL score of 550 on the paper test or a score of 213 on the computer-based TOEFL. For more information on the TOEFL, go to www.asu.edu/graduate/international.html.

The College of Science and Technology admission requirements include:

1. an appropriate baccalaureate degree from an accredited college or university, with a minimum of 30 semester hours in technology or its equivalent and 16 semester hours of science and mathematics appropriate to the program pursued;
2. a 3.00 GPA is required for regular admission; and
3. a letter of application and a current resume.

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.

## Manufacturing Engineering Technology (MSTech) TSMFMSTECH

COLLEGE OF TECHNOLOGY AND INNOVATION, POLY
Contact: http://poly.asu.edu/technology/mmet | MMet@asu.edu | SIM 294 | 480/727-1584 | 0180
Official Degree Awarded: Technology (Manufacturing Engineering Technology) (MSTech)
Program Description: At the graduate level, the Department of Mechanical and Manufacturing Engineering Technology offers a Master of Science in Technology (MSTech) degree with a concentration in manufacturing engineering technology. MSTech 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.

Program Requirements: There are two basic options in the Master of Science in Technology degree program with a concentration in manufacturing engineering technology: Thesis and applied project. Both options require the completion of 33 semester hours. All course work applied toward the minimum 33 semester-hour total must be at the 400 -level or higher with a grade of "B" or higher. 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 Mechanical and Manufacturing Engineering Technology must be pre-approved and on the program of study.

## Thesis Option

In the thesis option, a minimum of 24 semester hours must be 500 -level courses, allowing students to take up to nine semester 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. Students are required to complete six semester hours of MET 599 Thesis, write a thesis and present an oral defense.

## Thesis Option Course Work Requirements:

Technical concentration area (18)
Supporting area (6)
Research methods courses:

MET 591 Research Seminar (1) and a research writing course (2) MET 599 Thesis (6)

Total minimum semester hours: 33

## Applied Project Option

In the applied project option, a minimum of 24 semester hours must be 500-level courses, allowing students to take up to nine semester 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 Course Work Requirements:

Technical concentration area (18)
Supporting area (9)
Research methods courses:

> MET 591 Research Seminar (1) and a research writing course (2) MET 593 Applied Project (3)

Total minimum semester hours: 33
Admission Requirements: Applicants are expected to satisfy all requirements for admission to the Graduate College. 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.

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 TOEFL exam is required.

## Mechanical Engineering Technology (MSTech) TSMHMSTECH

## COLLEGE OF TECHNOLOGY AND INNOVATION, POLY

Contact: http://poly.asu.edu/technology/mmet | MMet@asu.edu | SIM 294 | 480/727-1584 | 0180
Official Degree Awarded: Technology (Mechanical Engineering Technology) (MSTech)
Program Description: At the graduate level, the Department of Mechanical and Manufacturing Engineering Technology offers a Master of Science in Technology (MSTech) degree 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 modeling and simulation, "smart" materials, composite materials, hydrogen power and fuel cells and other alternative energy sources, optimization of turbine engines, machinability and manufacturing processes, manufacturing and program management, manufacturing cost economics, automation and design and mechanics education.

Applied research projects are carried out in a number of well-equipped laboratories and facilities: computer-aided design and computer-aided manufacturing laboratory, CNC-machining center laboratory, composite materials laboratory, energy conversion and combustion laboratory, automation laboratory, welding and casting laboratory, materials inspection and metrology laboratory and metallurgy/materials testing laboratory.

For more information on research areas and laboratories, please access the Department of Mechanical and Manufacturing Engineering Technology Web site.

Program Requirements: There are two basic options in the Master of Science in Technology degree program with a concentration in mechanical engineering technology: Thesis and applied project. Both options require the completion of 33 semester hours. All course work applied toward the minimum 33 semester hour total must be at the 400 -level or higher with a grade of " B " or higher. 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 Mechanical and Manufacturing Engineering Technology must be pre-approved and on the program of study.

## Thesis Option

In the thesis option, a minimum of 24 semester hours must be 500 -level courses, allowing students to take up to nine semester 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. Students are required to complete six semester hours of MET 599 Thesis, write a thesis and present an oral defense.

Thesis Option Course Work Requirements:
Technical concentration area (18)
Supporting area (6)
Research methods courses:

MET 591 Research Seminar (1) and a research writing course (2)
MET 599 Thesis (6)

Total minimum semester hours: 33

## Applied Project Option

In the applied project option, a minimum of 24 semester hours must be 500-level courses, allowing students to take up to nine semester 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 Course Work Requirements:

Technical concentration area (18)
Supporting area (9)
Research methods courses:

MET 591 Research Seminar (1) and a research writing course (2) MET 593 Applied Project (3)

Total minimum semester hours: 33
Admission Requirements: Applicants are expected to satisfy all requirements for admission to the Graduate College. 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.

Applicants who hold a bachelor's degree from a regionally-accredited U.S. institution do not need 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 TOEFL exam is required.

## UNDERGRADUATE PROGRAMS

## Minors (Program Descriptions and Requirements)

African and African American Studies Minor LAAFRMIN<br>LIBERAL ARTS AND SCIENCES, COLLEGE OF<br>African and African American Studies Program

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 researchbased 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 Requirement: The minor requires 18 semester hours. All African and African American Studies minors must take the following six core hours:

AFH 300 Precolonial Africa (3)
AFS 200 Introduction to African and African Diaspora Studies (3)
Choose one of the following regional courses (3)
AFH 319 Black Experience in Latin America (3)
AFR 210 Introduction to African American Studies C (3)
AFS 340 The Making of Modern Africa (3)
AFS 355 Democracy and Civil Society in Africa (3)
Related courses* (9)

* Nine semester hours are required, with one 300 or 400 level course from each of the following thematic areas: Culture and Literature; Politics and Governance; and Family, Gender, and Society. At least 50 percent of the course content (which may be AFH or AFS) must deal with African peoples inside and outside the African continent. At least nine of the 18 semester hours in this minor must be completed at ASU.

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.

## Aging and Lifespan Development Minor HSALDMIN <br> LIBERAL ARTS AND SCIENCES, COLLEGE OF

Description: The Aging and Lifespan Development minor is designed to explore the study of aging from an interdisciplinary perspective.

Program Requirement: The minor in Aging and Lifespan Development requires 18 semester hours of course work. Students select two of the three aging and lifespan development core courses and four additional aging-related courses that are approved as electives. The Aging and Lifespan Development program allows double counting of courses from the student's major in the minor; however, students should consult with their major department to determine if it has more stringent requirements. A 2.50 GPA or higher must be earned in the six courses. Undergraduates may begin taking courses for the minor upon completion of 56 semester hours with a minimum cumulative GPA of 2.00.

## Core Courses:

GRN 400 Perspectives on Aging SB (3)
Choose one of the following courses (3)
GRN 420 Health Aspects of Aging SB* (3)
PGS 427 Psychology of Aging SB (3)
Electives** (12)
Total 18
*An approved course can be substituted.
**All courses carrying a GRN prefix can be counted as elective courses in the program. A list of elective courses carrying other disciplinary prefixes that may be used toward completion of the minor and certificate in gerontology is available from the Aging and Lifespan Development Program office.

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, and 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.

## American Indian Studies Minor LAAISMIN

## LIBERAL ARTS AND SCIENCES, COLLEGE OF

American Indian Studies Program
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 Requirement: Fifteen semester hours are required, including AIS 180, 285 and 380 and six elective semester hours from either of the two areas of emphasis. 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 $C(2.00)$ 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: the college and/or
department of the minor officially certifies, through established verification procedures, that all requirements for the minor have been met, and 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/americanindian/POS.htm.

## American Studies Minor ASAMSMIN

INTERDISCIPLINARY ARTS \& SCIENCES, NEW COLLEGE OF
Division of Humanities, Arts, \& Cultural Studies
Description: The minor in American Studies 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 Requirement: The minor consists of 18 semester hours, 12 of which must be upper-division hours:
AMS 301 Introduction to American Studies L (3)
Choose from the folllowing 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)
AMS 330 Introduction to American Lives HU (3)

## Supporting Courses

Select two courses (six semester hours) with substantial American content that must be approved by the American Studies faculty 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 and sign the minor check sheet and adjust their Declaration of Graduation to have the minor added to their official record. 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. 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://newcollege.asu.edu/programs/amer_studies/minor_certs/index.shtml.

## Anthropology Minor LAASBMIN

LIBERAL ARTS AND SCIENCES, COLLEGE OF
School of Human Evolution and Social Change
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 which 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 Requirement: The Anthropology minor requires a minimum of 18 semester hours. Two of the introductory coursesfrom 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 semester hours must be upper division and represent at least two of the three subfields of anthropology.

The three subfields are:

1. sociocultural anthropology (with linguistics),
2. archaeology, and
3. physical anthropology.

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) 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: the college and/or department of the minor officially certifies, through established verification procedures, that all requirements for the minor have been met, and 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://shesc.asu.edu/node/252.

## Applied Biological Sciences Minor TSABSMIN

## APPLIED ARTS AND SCIENCES, SCHOOL OF

Department of Applied Biological Sciences

Description: The Department of Applied Biological Sciences offers rigorous and practical programs in applications of the biological sciences. Consistent with a polytechnic vision, programs involve extensive student interaction with faculty through experience-based learning activities, including laboratories, field trips, internships, and faculty-guided research and servicelearning projects. 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 Requirement: The Applied Biological Sciences minor consists of 24 semester hours, including BIO 187 General Biology I, BIO 188 General Biology II, and at least 15 hours selected with the approval of an advisor; at least 12 hours must be in the upper-division courses offered by the Department of Applied Biological Sciences.

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, and 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.poly.asu.edu/saas/appliedbiologicalsciences/abs_minor.html.

Applied Psychology Minor ECPSYMIN<br>APPLIED ARTS AND SCIENCES, SCHOOL OF<br>Faculty of Applied Psychology

Description: Applied Psychology offers a traditional psychology core with emphasis on human-computer interaction, aviation, or manufacturing.

Program Requirement: The minor in applied psychology consists of 22 semester 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) or equivalent statistics course
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)

* This PSY course is offered only by the Polytechnic campus. All other PSY courses listed above are offered by the Polytechnic and Tempe campuses.

A maximum of three semester hours from the following courses can be used to satisfy minor requirements:

PGS 399 Supervised Research (3)
PGS 499 Individualized Instruction (3) or PSY 499 Individualized Instruction (3)
PSY 492 Honors Directed Study (3)

Note: A minimum of three classes (two of which are in the upper division) must be taken in residence at ASU.

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, and 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.poly.asu.edu/saas/minors/.

## Architectural Studies Minor ARSTDMIN

DESIGN, COLLEGE OF
School of Architecture and Landscape Architecture

Description: The Architectural Studies minor is available to nonarchitecture 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 Requirement: A minimum of 18 semester hours are required for the minor.
Required Courses:
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 L/HU, G, H (3)
APH 314 History of Architecture II L/HU, G, H (3)
Total 12

Six additional semester hours of electives in the architectural history and theory concentration must be selected from the following list for a total of 18 semester hours of which 12 hours must be taken at the 300 or 400 level:

```
ANP494 Special Topics (1-3)
APH 300 World Architecture I/Western Cultures HU, G (3)
APH 304 American Architecture (3)
APH 305 Contemporary Architecture (3)
APH 394 Special Topics (3)
APH 414 History of the City H (3)
APH }441\mathrm{ Ancient Architecture (3)
APH 444 Baroque Architecture (3)
APH 446 20th-Century Architecture I HU (3)
APH }447\mathrm{ 20th-Century Architecture II HU (3)
APH }494\mathrm{ Culture of Place C (3)
APH 494 Special Topics (3)
APH }499\mathrm{ Individualized Instruction* (3)
APH 511 Energy Environmental Theory (3)
APH }598\mathrm{ Special Topics (3)
ARP }451\mathrm{ Architectural Field Studies (6)
ATE 494 Special Topics (3)
ATE }598\mathrm{ Special Topics (3)
LPH 311 History of Contemporary Landscape Architecture (3)
LPH }411\mathrm{ Theory of Landscape Architecture (3)
LPH 310 History of Landscape Architecture H (3)
LPH 420 Theory of Urban Design (3)
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* These courses require 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 be counted toward the minor. Students pursuing the BS 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: the college and/or department of the minor officially certifies, through established verification procedures, that all requirements for the minor have been met, and 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://design.asu.edu/sala/salaminors.shtml.

## Art History Minor FAARTHMIN

ARTS, HERBERGER COLLEGE OF THE
School of Art
Program Requirement: The School of Art offers a minor in Art History consisting of 18 semester hours of course work, including 12 upper-division electives. A minimum grade of $\mathrm{C}(2.00)$ is required in all classes in the minor. For those pursuing a minor, a minimum overall GPA of 2.00 is required. Courses may not be double counted in a major and the minor, and a minimum of 12 semester hours of resident credit at the Tempe campus is 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 four required courses:

ARS 101 Art from Prehistory Through Middle Ages HU, H (3)
ARS 102 Art from Renaissance to Present HU, H (3)
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-semester-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: http://art.asu.edu/undergraduate/minorinfo.html.

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.

## Asian Languages (Chinese/Japanese) Minor MINOR47

LIBERAL ARTS AND SCIENCES, COLLEGE OF

School of International Letters and Cultures

## Program Requirement:

Each minor in Asian Languages (Chinese/Japanese), consists of 18 semester hours, of which 12 semester hours must be in the upper division. 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.

Chinese Required:

Two CHI 200-level courses (6)
CHI 313 Third-Year Chinese I G (3)

CHI 314 Third-Year Chinese II G (3)
Consult with the departmental advisor for an additional six hours of Chinese course credit.

Japanese Required:

Two 200-level JPN courses (6)
JPN 313 Third-Year Japanese I G (3)
JPN 314 Third-Year Japanese II G (3)
Consult with the departmental advisor for an additional six semester hours of JPN 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/or department of the minor officially certifies, through established verification procedures, that all requirements for the minor have been met, and 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/silc/academics/undergraduate/degrees/.

## Astronomy Minor LAASTMIN

LIBERAL ARTS AND SCIENCES, COLLEGE OF
School of Earth and Space Exploration

Program Requirement: The minor in Astronomy consists of a minimum of 24 semester hours. At least 12 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 (4)

PHY 150 Physics I SQ (4)
----or----
PHY 121 University Physics I: Mechanics SQ*** (3) and PHY 122 University Physics Laboratory I SQ*** (1)

Choose between the course combinations below (4)

PHY 151 Physics II SQ (4)
----or----
HY 131 University Physics II: Electricity and Magnetism SQ**** (3) and PHY 132 University Physics Laboratory II SQ**** (1)

Total 24

* 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

Electives are chosen with approval of an astronomy advisor from upper division courses in physics and astronomy.

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://sese.asu.edu/students.

# Biochemistry Minor LABCHMIN 

LIBERAL ARTS AND SCIENCES, COLLEGE OF
Department of Chemistry and Biochemistry
Program Requirement: A minor in Biochemistry is awarded to students who complete the following required courses:

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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\mathrm{ Elementary Physical Chemistry** (3)
Minimum total }2
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* CHM 117, 118, 333, 334, 337, and 338 are strongly recommended for qualified students
** CHM 345 may be taken in place of CHM 341

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, and 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.

## Biological Sciences Minor LABIOMIN

## LIBERAL ARTS AND SCIENCES, COLLEGE OF

School of Life Sciences

Description: The Biological Sciences minor is designed to provide students interested in biology with a flexible curriculum that can be tailored to their interests.

Program Requirement: The minor consists of 24 semester hours, including BIO 187 General Biology I and BIO 188 General Biology II. PLB 200 Biology of Plants and PLB 201 Biology of Plants Laboratory or MIC 206 Microbiology Laboratory and MIC 220 Biology of Microorganisms may together be substituted for BIO 187 or 188. Alternatively, MBB 245 Cellular and Molecular Biology may be substituted for BIO 188. The remaining 16 hours are selected by the student with the approval of an advisor. At least 12 of these 16 hours must be in upper-division courses in the life sciences. Courses not available for credit in the Life Science majors cannot be used for the minor (e.g., BIO 100 The Living World and BIO 201 Human Anatomy and Physiology I). This minor is not available to students majoring in the life sciences.

Any one of these combinations may be used:

$$
\begin{aligned}
& \text { BIO } 187 \text { and BIO } 188 \\
& \text { BIO } 187 \text { and PLB } 200 \text { and } 201 \\
& \text { BIO } 188 \text { and PLB } 200 \text { and } 201 \\
& \text { BIO } 187 \text { and MIC } 206 \text { and } 220 \\
& \text { BIO } 188 \text { and MIC } 206 \text { and } 220 \\
& \text { BIO } 187 \text { and MBB } 245 \text {. }
\end{aligned}
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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, and 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://sols.asu.edu/ugrad/degree_prog/index.php.

## Business Minor BABUSMIN

BUSINESS, W. P. CAREY SCHOOL OF
W. P. Carey School of Business

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 a broad range of topics important to managers.

Program Requirement: Students must complete 36 semester hours of the specified business courses with a grade of C 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 semester 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 hours)

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
CIS 220 Programming Concepts for Accountancy Majors
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 Honor Organizational Strategies, Leadership and Behavior
MKT 300 Marketing and Business Performance OR MKT 302 Applied Marketing Management \& 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: the college and/or department of the minor officially certifies, through established verification procedures, that all requirements for the minor have been met, and 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/up/current-students/academics/minors/business-minor.cfm.

## Chemistry Minor LACHMMIN

LIBERAL ARTS AND SCIENCES, COLLEGE OF
Department of Chemistry and Biochemistry
Program Requirement: A minor in Chemistry is awarded to students who complete the following required courses:
CHM 113 General Chemistry I SQ1 (4)
CHM 116 General Chemistry II SQ (4
CHM 325 Analytical Chemistry (3)
CHM 326 Analytical Chemistry Laboratory (1)

Choose between the course combinations below (8)

BCH 361 Principles of Biochemistry (3)
BCH 367 Elementary Biochemistry Laboratory (1)
CHM 231 Elementary Organic Chemistry SQ 2 (3)
CHM 235 Elementary Organic Chemistry Laboratory SQ 2 (1)

Choose between the course combinations below (4 or 8)
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)

Total 24

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, and 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.

## Communication Minor LNACOMMI

LIBERAL ARTS AND SCIENCES, COLLEGE OF

Hugh Downs School of Human Communication

Program Requirement: The minor in Communication consists of 18 semester 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, APAS, AAAS, Chicana/Chicano Studies, or AIS (6)
Nine of the 18 semester 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 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:
the college and/or department of the minor officially certifies, through established verification procedures, that all requirements for the minor have been met, and
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/.

## Communication Studies Minor HSCMNMIN

New College of Interdisciplinary Arts and Sciences
Division of Social and Behavioral Sciences

At the outset of the 2008-09 academic year, this degree/certificate/major was offered by the College of Human Services on ASU's West campus. As a result of the academic reorganization that occurred during the 2008-09 academic year, this degree/certificate/major program was moved to the New College of Interdisciplinary Arts and Sciences at the West campus.

Description: The Communication Studies Minor offers students the opportunity to understand the role and function of communication in various cultural, public, organizational and relational contexts. The program offers a variety of courses and is designed for students majoring in another field. A maximum of six semester hours are allowed from lower-division course work.

Program Requirement: The minor consists of 18 semester hours of Communication Studies courses. Students wishing to pursue a minor must meet with a Communication Studies faculty advisor to construct a minor that reflects a particular area of specialty and interest. At least 12 semester hours must come from upper-division courses. To graduate with the minor, students must earn a minimum cumulative GPA of 2.00 in Communication Studies courses. All courses must be passed with a minimum grade of C (2.00).

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, and 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://chs.asu.edu/program_minors/comm_studies.php.

## Computational Mathematical Sciences Minor LACMSMIN

Liberal Arts and Sciences, College of
Department of Mathematics and Statistics

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 Requirement: The minor in Computational Mathematical Sciences consists of a minimum of 18 semester hours. Required courses are the following:

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)
Total 18

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, and 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: http://math.asu.edu/undergrd/degree_opt.html.

## Dance Minor FADANMIN

ARTS, HERBERGER COLLEGE OF THE
Department of Dance
Description: The Department 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. Contemporary technique, performance and choreography define the core of the program, and the rich educational experience is further enhanced by studies in dance cultures, music, digital media, dance history, philosophy and criticism, movement science, somatics, and stage and screen production.

Program Requirement: The department offers a minor in Dance consisting of 18 semester hours of course work, including twelve upper-division hours. A minimum grade of C (2.00) or higher is required in all courses that fulfill the Dance minor. Students must maintain an overall cumulative GPA of 3.00 or higher for Dance minor courses.

Additional Dance minor requirements include the following:
Choose from the following courses (3):
DAH 101 Introduction to Dance G (3)
DAH 201 Dance in World Cultures HU, G (3)
Choose from the following courses (3):
DAH 301 Philosophy and Criticism of Dance L/HU (3)
DAH 302 Cross-Cultural Dance Studies L/HU, G (3)
DAH 401 Dance History HU (3)

Choose from the following courses (4):

DAN 130 Dance (2)
DAN 194 Special Topics (2)
DAN 294 Special Topics (2)
DAN 394 Special Topics (2)
Dance electives* 8

Total 18

* Topics include Modern, Ballet, Jazz, Argentine Tango, Capoeira, Country Western, Dances of India, Tai Chi, Hip Hop, Latin Salsa, Latin/Swing/Ballroom, Pilates/Yoga, Oriental/Belly Dancing, and Dances of Africa. For more information, contact the Herberger Student Academic Services office.

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, and 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://dance.asu.edu/undergraduate/faq.htm.

## Design Studies Minor ARDSNMIN

## DESIGN, COLLEGE OF

Department of Industrial Design

Description: Students interested in design can earn a minor in Design Studies. The courses may also appeal to students who wish to pursue the study of design within the Bachelor of Interdisciplinary Studies degree.

Program Requirement: Courses selected must satisfy the minimum requirement of 18 semester hours for the minor. Twelve of the semester hours must be in 300- 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 411 First Concepts (3)
LPH 311 Contemporary Land Arch. HU (3)
APH 598 South American Architecture

Design:
DSC 101 Design Awareness HU, G (3)

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Graphic Design:
GRA }111\mathrm{ Graphic Design History I HU (3)
GRA }112\mathrm{ Graphic Design History II (3)
GRA }225\mathrm{ Communication/Interaction Design Theory (3)
GRA 345 Design Rhetoric L (3)
GRA 440 Finding Purpose (3)
Industrial Design:
IND 242 Materials and Design (3)
IND }243\mathrm{ Process and Design (3)
IND }316\mathrm{ 20th-Century Design I HU, H (3)
IND }317\mathrm{ 20th-Century Design II HU, H (3)
IND }344\mathrm{ Human Factors in Design (3)
IND }354\mathrm{ 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\mathrm{ Introduction to Computer-Aided Design of Built Environments (3)
INT 131 Design and Human Behavior SB (3)
INT }310\mathrm{ History of Interior Design I HU, H (3)
INT }311\mathrm{ History of Interior Design II HU, H (3)
INT }412\mathrm{ History of Decorative Arts in Interiors HU (3)
INT 413 History of Textiles in Interior Design (3)
INT 494 Latin American Design (3)
Urban Planning:
PUP}100\mathrm{ Introduction to Environmental Design HU, G, H (3)
PUP }190\mathrm{ Sustainable Cities HU/SB, G (3)
PUP }200\mathrm{ The Planned Environment HU, H (3)
PUP }301\mathrm{ Introduction to Urban Planning L (3)
PUP }363\mathrm{ History of Planning (3)
PUP }412\mathrm{ History of the City (3)
PUP}425\mathrm{ Urban Housing Analysis (3)
PUP }430\mathrm{ Transportation Planning and the Environment (3)
PUP}432\mathrm{ Planning and Development Control Law (3)
PUP442 Environmental Planning (3)
PUP }444\mathrm{ Preservation Planning (3)
PUP445 Women and Environments C (3)
PUP475 Environmental Impact Assessment (3)
PUP }485\mathrm{ International Field Studies in Planning G (3)
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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, and 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://design.asu.edu/students/minors.shtml.

## Economics for Students Planning a Career in Law Minor LAECNLMIN <br> LIBERAL ARTS AND SCIENCES, COLLEGE OF <br> Economics

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 Requirement: This minor requires 18 semester hours of course work that includes ECN 211, 212, 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: the college and/or department of the minor officially certifies, through established verification procedures, that all requirements for the minor have been met, and 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.

## Economics Minor LAECNMIN

LIBERAL ARTS AND SCIENCES, COLLEGE OF
Economics

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 Requirement: This minor (and BIS area of concentration) requires 18 semester 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: the college and/or department of the minor officially certifies, through established verification procedures, that all requirements for the minor have been met, and 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.

## English Minor ASENGMIN

INTERDISCIPLINARY ARTS \& SCIENCES, NEW COLLEGE OF

Program Requirement: The minor in English requires 21 semester hours in English, at least nine of which must be in upperdivision courses.

Lower-Division Required Courses
ENG 221 Survey of English Literature HU (3)
ENG 222 Survey of English Literature HU (3)
ENG 241 Literatures of the United States to 1860 HU (3)
ENG 242 Literatures of the United States, 1860 to Present HU (3)

Upper-Division Required Courses
ENG 311 Persuasive Writing L (3)
ENG 323 Rhetoric and Grammar L (3)
ENG 421 Shakespeare HU (3)

Total 21

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 and sign the minor check sheet and adjust their Declaration of Graduation to have the minor added to their official record. 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. 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://newcollege.asu.edu/programs/english/minor_certs/minor.shtml.

## English Minor with a Concentration in Linguistics LAENGMINN

## LIBERAL ARTS AND SCIENCES, COLLEGE OF <br> Department of English

Program Requirement: The minor in English with a concentration in linguistics consists of 24 semester 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: the college and/or department of the minor officially certifies, through established verification procedures, that all requirements for the minor have been met, and 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/english/.

## English Minor with a Concentration in Literature LAENGMINT <br> LIBERAL ARTS AND SCIENCES, COLLEGE OF <br> Department of English

Program Requirement: The minor in English with a concentration in literature consists of 24 semester hours.

Required course:
ENG 200 Critical Reading and Writing About Literature L/HU (3)

## Distribution Courses

Choose 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

Note: At least one of these courses must be at the 400-level. To complete the 24 semester hours, students chose electives from among the department's offerings. At least 12 of the 24 hours must be upper-division courses. 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: the college and/or department of the minor officially certifies, through established verification procedures, that all requirements for the minor have been met, and 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/english/.

## Ethnic Studies Minor ASETHMIN

INTERDISCIPLINARY ARTS \& SCIENCES, NEW COLLEGE OF
Division of Humanities, Arts, \& Cultural Studies
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 that 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 Requirement: The minor consists of 21 semester 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 semester 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:

ETH 300 Principles of Ethnic Studies C (3)
ETH 484 Ethnic Studies Internship (3)
Electives* (15)

Total 21

* 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 and sign the minor check sheet and adjust their Declaration of Graduation to have the minor added to their official record. 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. 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://newcollege.asu.edu/programs/erfns/minor_cert/minor.shtml.

## Family and Human Development Minor LAFASMIN

LIBERAL ARTS AND SCIENCES, COLLEGE OF
School of Social and Family Dynamics
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 Requirement: The minor in Family and Human Development consists of 18 semester hours in which students specialize in family studies/child development. At least 12 of the 18 semester hours must be in upper-division courses. Students take the following courses:

CDE 232 Human Development SB (3)
FAS 331 Marriage and Family Relationships SB (3)
FAS 370 Family, Ethnic, and Cultural Diversity SB, C (3)
Total 9

Three courses (or nine semester hours) must be selected from the following and at least one course must be a CDE course:

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CDE 337 Early Childhood Intervention (3)
CDE }430\mathrm{ Infant/Toddler Development in the Family SB (3)
CDE }444\mathrm{ Risk and Variation in Child Development (3)
CDE }498\mathrm{ Pro-Seminar (3) or FAS }498\mathrm{ Pro-Seminar (3)
FAS }431\mathrm{ Parent-Adolescent Relationships SB (3)
FAS 440 Fundamentals of Marriage and Family Therapy (3)
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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, and 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/ssfd/undergrad/minor.html.

## Film and Media Production Minor FAFMPMIN

ARTS, HERBERGER COLLEGE OF THE
School of Theatre and Film
Contact: http://theatrefilm.asu.edu | theatre@asu.edu, theatrefilm@asu.edu, or film@asu.edu | GHALL 232 | 480/965-5337
Description: As a student pursuing this minor, you will study the basic production processes of film while exploring its history and contemporary social issues.

Program Requirement: The school offers a minor in Film and Media Production consisting of 15 semester hours of course work. The following courses are required:

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, Part 1 (3)
THE 403: Independent Film (3)
Upper division elective in FMP, THP, or THE related to film and media production (3)
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. All prerequisites for the minor courses must be met (see course listings). Transfer students may transfer up to six semester hours toward their minor. A grade of C (2.00) or higher is required for all courses in the minor.

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.

Enrollment Requirements: Contact the Herberger College of the Arts advising office for information:
http://theatrefilm.asu.edu/students/current/undergrad-minors.php.

## Film and Media Studies LAFMSMIN

LIBERAL ARTS AND SCIENCES, COLLEGE OF
Film and Media Studies
Contact: http://film.asu.edu/ | Language \& Literature 641 | 480-965-6747
Program Requirement: 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 (HU)
FMS 300 Media and Cultural Studies (HU/L)

Plus three upper division courses from the areas of emphasis course list. For more information contact the Film and Media Studies advisor at 480-965-6747.

Food and Nutrition Management Minor ECFNTMIN<br>APPLIED ARTS AND SCIENCES, SCHOOL OF<br>Department of Nutrition

Description: This minor program 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 Requirement: The minor requires that students take the following courses:
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)
Total 18

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, and 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.poly.asu.edu/saas/nutrition/undergraduate/minors.html.

## French Minor LAFREMIN

LIBERAL ARTS AND SCIENCES, COLLEGE OF
School of International Letters and Cultures

Program Requirement: The French minor requires 18 upper-division semester 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

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: the college and/or department of the minor officially certifies, through established verification procedures, that all requirements for the minor have been met, and 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/silc/academics/undergraduate/degrees/minor_French.html.

## Geography Minor LAGCUMIN

LIBERAL ARTS AND SCIENCES, COLLEGE OF
School of Geographical Sciences

Description: The mission of the School of Geographical Sciences lies in social and cultural dynamics of space and place, complex land use systems, climate and environmental change, and GIScience.

Program Requirement: 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:

GCU 102 Introduction to Human Geography SB (3)
GPH 111 Introduction to Physical Geography SQ (4) or GPH 411 Physical Geography (3) Total 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: the college and/or department of the minor officially certifies, through established verification procedures, that all requirements for the minor have been met, and 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://geography.asu.edu/education/degrees.php.

## Geological Sciences Minor LAGLGMIN

## LIBERAL ARTS AND SCIENCES, COLLEGE OF

School of Earth and Space Exploration
Contact: sese.asu.edu | sesinfo@asu.edu | PSF 686 | 480/965-5081

Program Requirement: A minor in Geological Sciences is awarded to students who complete a minimum of 21 hours of geological science courses. Required courses are as follows:

```
GLG }101\mathrm{ Introduction to Geology I (Physical) SQ,* G (3)
GLG }102\mathrm{ Introduction to Geology II (Historical) SG,** H (3)
GLG 103 Introduction to Geology I-Laboratory SQ* (1)
GLG }104\mathrm{ Introduction to Geology II-Laboratory SG** (1)
GLG 310 Structural Geology (3)
GLG 321 Mineralogy (3)
GLG }400\mathrm{ Geology Colloquium (1)
Total }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: the college and/or department of the minor officially certifies, through established verification procedures, that all requirements for the minor have been met, and 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://sese.asu.edu/students.

## German Minor LAGERMIN

## LIBERAL ARTS AND SCIENCES, COLLEGE OF

School of International Letters and Cultures

Program Requirement: Required:

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)
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 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, and 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/silc/ger/programs.html.

## Global Studies LASGSMIN

LIBERAL ARTS AND SCIENCES, COLLEGE OF
School of Global Studies
Contact: http://www.asu.edu/clas/globalstudies/ | globalstudies@asu.edu | West Hall, Rm. 140 | 480-727-8286
Description: Students may pursue a minor in Global Studies.

Program Requirement: The Global Studies minor consists of 18 credit hours, with at least 12 hours in upper division courses. Required courses are SGS 103 or SGS 394 Contemporary Global Trends. The remaining 12 credit hours may be chosen among the other upper division 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. For minor verification, students must consult the school advisor.

## History Minor LAHISMIN

LIBERAL ARTS AND SCIENCES, COLLEGE OF
Department of History

Program Requirement: The History minor consists of 18 semester 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 Department of History 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:
the college and/or department of the minor officially certifies, through established verification procedures, that all requirements for the minor have been met, and 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/history/undergrad/undergrad.html.

## History Minor ASHISMIN

INTERDISCIPLINARY ARTS \& SCIENCES, NEW COLLEGE OF
Division of Humanities, Arts, \& Cultural Studies

Program Requirement: The minor in History consists of 18 semester hours of history course work with a grade of C (2.00) or higher, of which six semester hours may be lower division.

Choose one of the following combinations (6):
A two-semester survey in U.S. history, European history, or world history (6)
--- or ---
AMS 310 History of American Systems to 1865 L, C, H (3)
or AMS 320 American Cultural History I SB, H (3)
or HIS 303 American Cultural History I SB, H (3)
or HIS 305 History of American Systems to 1865 L, C, H (3)
AMS 311 History of American Systems since 1865 II H (3)
or AMS 321 American Cultural History II SB, H (3)
or AMS 330 Introduction to American Lives HU (3)
or HIS 304 American Cultural History II SB, H (3)
or HIS 306 History of American Systems since 1865 H (3)
--- or ---
HIS 355 World History to 1500 G, H (3)
HIS 356 World History since 1500 G, H (3)

Upper Division Requirements:

HIS 300 Historical Methods L, H (3)
History Electives (9)
Total 18

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 and sign the minor check sheet and adjust their Declaration of Graduation to have the minor added to their official record. 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. 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://newcollege.asu.edu/programs/history/minor_certs/minor.shtml.

## Human Nutrition Minor ECNTRMIN <br> APPLIED ARTS AND SCIENCES, SCHOOL OF <br> Department of Nutrition

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 Requirement: The minor requires that students take the following courses:

```
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)
Total }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: the college and/or department of the minor officially certifies, through established verification procedures, that all requirements for the minor have been met, and 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.poly.asu.edu/saas/nutrition/undergraduate/minors.html.

## Interdisciplinary Organizational Studies Minor ASIOSMIN

## INTERDISCIPLINARY ARTS \& SCIENCES, NEW COLLEGE OF

Department of Social and Behavioral Sciences
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 Requirement: The minor consists of 21 semester hours, of which 18 must be upper-division course work.

## Required Courses

```
Research methods course* (3)
ASB 440 Women in the Global Factory SB, G (3) or POL 435 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)
Electives (Other approved courses may be used to secure credit.)
```

Cluster 1: Courses Focused on Organizations
Choose two from the following courses (6)

```
CMN 450 Theory and Research in Organizational Communication SB** (3)
CMN 451 Employee Participation Processes in Organizations** (3)
CMN 453 Communication Training and Development** (3)
GLB }303\mathrm{ Relationship Management (3)
MGT }301\mathrm{ Principles of Management (3)
MGT }412\mathrm{ 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\mathrm{ 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, CMN 484, or SOC }484
PGS 484, CMN 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 (3)
CMN 463 Cultural and Intercultural Communication Theory and Research SB, G3 (3)
PGS 480 Cross-Cultural Social Psychology SB, G (3)
POL 435 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 350 Race, Class, and Gender SB, C (3)
WST 487 Gender and International Development SB, G (3)

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* SBS advisor's approval is required.
** Prerequisites CMN 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. 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. No more than six credits may be
applied from major requirements toward completion of the minor. Please contact the department for more information: http://newcollege.asu.edu/programs/interdisciplinary_org_studies/.

## Interior Design Minor ARINTMIN

DESIGN, COLLEGE OF

Department of Interior Design

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 Department 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 Requirement: The selected courses satisfy the minimum requirement ( 18 semester 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)
Total 18

The minor is open to students of all majors. 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: the college and/or department of the minor officially certifies, through established verification procedures, that all requirements for the minor have been met, and 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://design.asu.edu/students/minors.shtml.

## Italian Minor LAITAMIN

LIBERAL ARTS AND SCIENCES, COLLEGE OF
School of International Letters and Cultures
Program Requirement: The Italian minor requires 18 upper-division semester 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:

ITA 201 Intermediate Italian G (4)
ITA 202 Intermediate Italian G (4)
ITA 311 Italian Composition and Conversation G (3) or ITA 312 Italian Composition and Conversation G (3) or ITA
315 Italian for Business (3)
ITA 325 Introduction to Italian Literature HU (3)
One 300 or 400 -level ITA course (3)
One 400-level ITA 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 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, and 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/silc/academics/undergraduate/degrees/minor_Italian.html.

## Justice Studies Minor LAJUSMIN

LIBERAL ARTS AND SCIENCES, COLLEGE OF
School of Justice and Social Inquiry
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 Requirement: Eighteen hours of graded classroom JUS course work are required, including JUS 105 or 305 and JUS 303. No pass/fail or credit/noncredit course work may be applied to the minor. A minimum of nine semester hours must be resident credit at Tempe campus, and at least 12 hours must be upper-division credit. 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: http://sjsi.clas.asu.edu/page/home.

## Kinesiology Minor LAKINMIN

LIBERAL ARTS AND SCIENCES, COLLEGE OF
Department of Kinesiology

Description: The Kinesiology minor is for the student interested in gaining a disciplinary knowledge of anatomical, biomechanical, developmental, physiological, psychological, and sociological aspects of human movement and physical activity.

Program Requirement: The minor in Kinesiology consists of the 21 semester hours shown below and 15 to 21 semester hours of prerequisite courses. All prerequisite courses must be completed with a grade of $\mathrm{C}(2.00)$ or higher before taking the respective Kinesiology core course. All Kinesiology courses must also be completed with a grade of C (2.00) or higher.

KIN 200 Introduction to Kinesiology (3)
Choose nine credits from among the courses below:
KIN 335 Biomechanics (3)
KIN 340 Physiology of Exercise (3)
KIN 345 Motor and Developmental Learning (3)
KIN 352 Psychosocial Aspects of Physical Activity SB, C (3)
KIN additional coursework* (9)
Total 21
*Excluding KIN 305, 310, 484, 492, 493, 498, and 499
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, and 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/kines/.

## Landscape Architecture Studies Minor MINOR11

DESIGN, COLLEGE OF
School of Architecture and Landscape Architecture
Contact: http://design.asu.edu/sala | design.advising@asu.edu | CDN 162 | 480/965-3536
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. A minimum of 18 semester hours are required for the minor.

## Program Requirement:

A minimum of 18 semester hours are required for the minor of which 12 semester hours must be taken at the 300 - or 400 - level.

## Required Courses:

ALA 100 Introduction to Environmental Design HU, G, H (3)
ALA 102 Architecture, Landscape Architecture, and Society G (3)
LPH 310 History of Landscape Architecture (3)
LPH 311 Contemporary Landscape Architecture (3)
Total 12

Six additional semester hours of electives in the landscape architecture history and theory concentration must be selected from the following list for a total of 18 semester hours of which 12 hours must be taken at the 300 - or 400 - level:

```
APH 494 Culture of Place C (3)
APH 511 Energy Environment Theory (3)
ANP }494\mathrm{ Special Topics (1-3)
LPH }394\mathrm{ Special Topics (3)
LPH 410 Social Factors in Landscape & Urban Planning (3)
LPH }411\mathrm{ Landscape Architecture Theory & Criticism (3)
LPH }412\mathrm{ Landscape Ecology & Planning (3)
LPH 413 Southwest Landscape Interpretation (3)
LPH }494\mathrm{ Special Topics (3)
LPH 499 Individualized Instruction* (3)
LPH }598\mathrm{ Special Topics (3)
LPH }485\mathrm{ International Field Studies in Landscape Architecture (6)
```

* These courses require 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 Landscape Architecture Studies. In addition, students may not use a core course to be counted toward the minor. Students pursuing the BS in Design 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.
Please contact the department for more information: http://design.asu.edu/sala/salaminors.shtml.

## Landscape Studies Minor ARLNDMIN

DESIGN, COLLEGE OF
School of Architecture and Landscape Architecture
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 Requirement: Students must complete a minimum of 18 semester hours of which 12 hours must be taken at the 300 or 400 level.

Required Courses:
ALA 102 Architecture and Landscape Architecture and Society HU, G (3)
LPH 310 History of Landscape Architecture H (3)
LPH 311 Contemporary Landscape Architecture HU (3)

Nine additional semester hours of electives in the landscape architectural history and theory concentration must be selected from the following list for a total of 18

LAP 485 International Field Studies in Planning G (3)
LPH 394 Special Topics (3)
LPH 410 Social Factors in Landscape and Urban Planning (3)
LPH 411 Landscape Architecture Theory and Criticism L (3)
LPH 412 Landscape Ecology and Planning (3)
LPH 413 Southwest Landscape Interpretation (3)
LPH 494 Special Topics (3)
LPH 499 Individualized Instruction* (3)

* This course requires a petition to the School of Architecture and Landscape Architecture A minimum GPA of 3.00 in minor courses is required to earn the minor in Landscape Architecture Studies. In addition, students may not use a core course to be counted toward the minor. Students pursuing the BSD degree in Architecture Studies 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: the college and/or department of the minor officially certifies, through established verification procedures, that all requirements for the minor have been met, and 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://design.asu.edu/sala/salaminors.shtml.

## Life Sciences Minor ASLSCMIN

INTERDISCIPLINARY ARTS \& SCIENCES, NEW COLLEGE OF
Integrated Natural Sciences

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 Requirement: Required Courses:

BIO 187 General Biology I SG (4)
BIO 188 General Biology II SQ (4)
CHM 113 General Chemistry SQ (4)
CHM 116 General Chemistry II SQ (4)
LSC 320 Fundamentals of Ecology (3)
LSC 322 Fundamentals of Ecology Laboratory (1)
LSC 347 Fundamentals of Genetics (3)
LSC 348 Fundamentals of Genetics Laboratory (1)
LSC 353 Cell Biology (3)
LSC 355 Cell Biology Laboratory (1)
Total 28

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, and 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://newcollege.asu.edu/depts_schools/dins/.

## Materials Science and Engineering ESMSEMIN

ENGINEERING, IRA A. FULTON SCHOOL OF
School of Materials
Contact: http://som.asu.edu | som@asu.edu | ECG 303 | 480-727-9311
Description: The Minor in Materials Science and Engineering is designed to allow other science and engineering majors an indepth understanding of materials, including their structure, processing, properties, performance, and their relationships.

Program Requirement: Students would be required to take six courses (20-21 credits), listed below:
CHM 114 ( 4 cr ) or CHM 113 ( 4 cr ) \& 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)
MSE 3xx two 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)
MSE 3xx any 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.

## Mathematics Minor LAMATMIN

LIBERAL ARTS AND SCIENCES, COLLEGE OF
Department of Mathematics and Statistics
Program Requirement: The minor in Mathematics consists of a minimum of 18 semester hours. Required courses are as follows:
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)
Total 9

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, and 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://math.asu.edu/undergrd/degree_opt.html.

## Mathematics Minor ASMATHMIN

INTERDISCIPLINARY ARTS \& SCIENCES, NEW COLLEGE OF
Mathematical Sciences and Applied Computing
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, as well as those who are preparing for further graduate study.

Program Requirement: The minor in Mathematics consists of a minimum of 27 semester hours, of which nine semester hours must be taken in the Mathematical Sciences and Applied Computing Department.

## Required Courses:

> 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* (9)

```
MAT }310\mathrm{ Introduction to Geometry (3)
MAT }371\mathrm{ Advanced Calculus I (3)
MAT 411 History and Philosophy of Mathematics HU, H (3)
MAT 443 Abstract Algebra (3)
MAT }445\mathrm{ Theory of Numbers (3)
STP 420 Introductory Applied Statistics CS (3)
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Total 27

* Select three of these courses, or other approved course, in 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. 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.

## Media Analysis Minor CSCMOMINA

JOURNALISM, WALTER CRONKITE SCHOOL OF
Walter Cronkite School of Journalism and Mass Communication

Description: The mass media, more than ever before, play 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 Requirement: The Minor of Media Analysis consists of 18 semester 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 semester 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)
OR
MCO 418 History of Mass Communication SB, H (3)
MCO 498 Media Analysis Senior Seminar (3)
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In addition, students select three additional courses (nine hours) from the list of electives offered by the Walter Cronkite 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.)

MCO 200 Introduction to the Electronic Media (3)
MCO 240 Media Issues in American Pop Culture (3)
MCO 418 History of Mass Communication SB, H (3)
MCO 430 International Mass Communication G (3)
MCO 435 Emerging Media Technologies (3)
MCO 440 Applied Media Research (3)
MCO 450 Visual Communication. HU (3)
MCO 460 Race, Gender, and Media C (3)
MCO 473 Sex, Love, and Romance in the Mass Media SB (3)
Or Special Topic courses such as:

MCO 494 Sports and Media (3)

MCO 494 War and the Mass Media (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, and 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.

## Music Minor FAMUSMIN

ARTS, HERBERGER COLLEGE OF THE
School of Music
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 Requirement: The School of Music offers a minor in Music consisting of 21 semester hours of course work. A minimum grade of $\mathrm{C}(2.00)$ is required in all courses.

## Required Courses:

MHL 201 Mac Literacy for Musicians* (3)
MUP 100 Concert Attendance (four semesters) (0)
MUS 100 Fundamentals of Music Notation (3)
MUS 340 Survey of Music History (3)
Total 9

* The online version of this course is required

Music History
Choose two of the following five courses (6):
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):
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)

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, and 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://music.asu.edu/students/current/undergrad/minorinfo.php.

## Nonprofit Administration Minor PPNLMMIN

PUBLIC PROGRAMS, COLLEGE OF<br>School of Community Resources and Development

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 United Sates 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 Requirement: Completion of a Nonprofit Minor in the School of Community Resources \& Development requires the following:

1. NLM 160 , NLM 220 ,
2. 15 hours of graded classroom course work (no internship, no independent study),
3. 9 hours of course work at the upper division level, from the approved list,
4. A minimum grade of C is required for all classes in the minor,
5. No double counting of courses for both a major and the minor.

Standards:

1. A minimum GPA of 2.00 for those pursuing the minor,
2. A major, or pre-major, other than Nonprofit Leadership \& Management, BS,
3. Must be a junior to take 400 level courses.

Course Selection: (approved list)
Required Courses:

NLM 160 Voluntary Action and Community Leadership (3)
NLM 220 Introduction to Nonprofit Organizations (3)
Choose three courses from the list below:

NLM 300 Fund Raising and Resource Development (3)
NLM 301 Sustainable Communities (3) (Pre- or Corequisite: NLM 160 (or 191) with a grade of c or higher.)
NLM 302 Inclusive Community Development C (3) (Pre- or Corequisite: NLM 160 (or 191) with a grade of c or higher.)
NLM 310 Volunteer Management (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, and 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://scrd.asu.edu/portal/programs/undergraduate/nonprofit-leadership-management-nlm.

## Parks and Protected Area Management Minor PPPRMMINT <br> PUBLIC PROGRAMS, COLLEGE OF

School of Community Resources and Development
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 the school's Therapeutic Recreation program.

Program Requirement: Completion of a Parks and Protected Area Management minor in the School of Community Resources and Development requires the following:

1. PRM 120; PRM 370; PRM 380: TDM 480,
2. 15 hours of graded classroom course work (no internship, no independent study),
3. 12 hours of course work at the upper-division level, from the approved list,
4. A minimum grade of C is required for all classes in the minor,
5. No double counting of courses for both a major and the minor.

Standards:

1. A minimum GPA of 2.00 for those pursuing the minor,
2. A major, or pre-major, other than Parks and Recreation Management and Tourism Development and Management,
3. Must be a junior to take 400 -level courses. Course Selection: (approved list)

## Required Courses:

PRM 120

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, and 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. Students pursuing a Bachelor of Science in Parks and Recreation Management or a Bachelor of Science in Tourism Development and Management are not eligible to complete this minor.Please contact the department for more information: http://scrd.asu.edu/portal/programs/undergraduate.

## Philosophy Minor LAPHIMIN

LIBERAL ARTS AND SCIENCES, COLLEGE OF
Department of Philosophy

Program Requirement: A minor in Philosophy consists of 18 semester hours, of which at least 12 must be in the upper division and approved by an advisor in the department. All courses must be passed with a minimum grade of $\mathrm{C}(2.00)$.

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, and 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/philosophy/minor.htm\#minor.

## Philosophy Minor ASPHIMIN

INTERDISCIPLINARY ARTS \& SCIENCES, NEW COLLEGE OF
Division of Humanities, Arts, \& Cultural Studies

Description: The minor is designed to provide students with an understanding of central philosophical issues. The minor provides students with:

1. a knowledge of the most important problems and ideas in the philosophical areas studied,
2. a capacity for critical thinking and analytical reasoning, and
3. the ability to present one's positions effectively through oral and written communication.

Program Requirement: The minor in Philosophy consists of 21 semester hours of philosophy course work, of which 15 must be upper-division hours. Fifteen semester hours of campus resident credit is required. Only courses in which the student earns a grade of C (2.00) or higher will fulfill requirements for the minor. Courses are to be selected from the following list in consultation with a philosophy advisor to create a coherent and complete program of study.

Minor in Philosophy Course List

IAS 411 History and Philosophy of Mathematics HU, H (3) or 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 (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: the college and/or department of the minor officially certifies, through established verification procedures, that all requirements for the minor have been met, and 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://newcollege.asu.edu/programs/integrative_studies/minor_cert/philosophy.shtml.

## Physics Minor LAPHYMIN

LIBERAL ARTS AND SCIENCES, COLLEGE OF
Department of Physics
Program Requirement: The minor in Physics consists of a minimum of 29 semester hours.
Required courses:
Choose between the course combinations below (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) (Both PHY 121 and PHY 122 must be taken to secure SQ credit)

Choose between the course combinations below (4)
PHY 151 Physics II SQ (4)
Or PHY 131 University Physics II: Electricity and Magnetism SQ (3)
PHY 132 University Physics Laboratory 2 SQ (1) (Both PHY 131 and PHY 132 must be taken to secure SQ credit)
PHY 201 Mathematical Methods in Physics I CS (3)
PHY 252 Physics III SQ (4)
PHY 302 Mathematical Methods in Physics II (2)
PHY 310 Classical Particles, Fields, and Matter I (3)
PHY 311 Classical Particles, Fields, and Matter II (3)
PHY 314 Quantum Physics I (3)
Approved electives (to be chosen with approval of the physics advisor from upper-division courses in physics and astronomy) (3)
Total (29)
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, and 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://physics.asu.edu/undergraduate/programs.php.

## Political Science Minor LAPOSMIN

LIBERAL ARTS AND SCIENCES, COLLEGE OF
Department of Political Science
Description: Please contact the department for more information: http://www.asu.edu/clas/polisci/undergraduate/minor.html.
Program Requirement: The minor in Political Science consists of 18 semester 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:

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)

* But not both courses.

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 one $\mathrm{D}(1.00)$ grade in a lower-division course may be counted toward the minor. No more than three hours of POS 484 Internship and three hours of POS 499 Individualized Instruction may be applied to the minor.

## Political Science Minor ASPOSMIN

INTERDISCIPLINARY ARTS \& SCIENCES, NEW COLLEGE OF

Department of Social and Behavioral Sciences
Contact: http://www.asu.edu/aad/catalogs/general/w-ncias-socbhvsci.html
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, as well as to 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, and 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 Requirement: The minor in Political Science consists of 18 semester hours in POL courses, 12 of which must be in upper-division courses.

Minor Requirements
Core Courses (Minimum of Three Upper-Division Hours)

POL 101 Political Ideologies SB (3)
or POL 340 Political Theory SB/HU (3)

POL 110 Government and Politics SB (3)
or POL 310 American National Government: Ideas and Institutions SB, H (3)
POL 160 Global Politics SB, G (3)
or POL 360 World Politics Theory SB, G (3)
Political science electives* (9)

* A maximum of three semester hours of internship and three semester hours of individualized instruction may be used to fulfill requirements.

Enrollment Requirements: Please contact the department for more information:
http://newcollege.asu.edu/programs/polisci/minor/.

## Prelaw Minor HSLAWMIN

## public PROGRAMS, COLLEGE OF

Contact: http://www.asu.edu/aad/catalogs/general/w-chs-prelaw.html\#81788
At the outset of the 2008-09 academic year, this degree/certificate/major was offered by the College of Human Services on ASU's West campus. As a result of the academic reorganization that occurred during the 2008-09 academic year, this degree/certificate/major program was to be moved to a new academic unit. At the time of publication, the reassignment to a new college was not yet determined.

Description: The Prelaw minor is designed to explore the study of law from an interdisciplinary perspective. Students will take a core of classes that will enhance a student's critical thinking and writing skills. In addition, students will select elective courses for the minor with assistance from the college's Human Services Advising Office and from a faculty member on the college's Prelaw Advising Committee. In general, the courses selected as prelaw minor electives are those that:

1. enhance the student's critical thinking and writing skills,
2. develop the student's knowledge of the law, and
3. enhance the student's understanding of the social, cultural, historical, economic and political development of the law in our society and the world.

The minor is designed for students who plan to attend law school or who contemplate careers in fields closely related to the legal profession. Students who exhibit exceptional critical thinking and writing skills are highly successful in their legal studies. It is expected that students in the minor will be able to think both logically and creatively about the law and its philosophical basis. In addition, students will be able to effectively apply legal principles to various factual problems, a rudimentary part of the case book method of legal study.

Program Requirement: The 18 -semester-hour minor in Prelaw consists of nine hours of required courses and nine hours of elective courses to be selected with an advisor. Students may not count classes toward both completion of their major and the Prelaw minor.

## Core Classes

Choose three of the following courses (9)
CMN 422 Argumentation, Critical Reasoning, and Public Communication L (3)
CRJ 360 Substantive Criminal Law (3) LES 306 Business Law (3)
POL 470 Law and the Political Order SB (3)

Electives (9)

Total 18

Enrollment Requirements: Please contact the department for more information: http://chs.asu.edu/program_minors/prelaw.php.

## Psychology Minor LAPGSMIN

LIBERAL ARTS AND SCIENCES, COLLEGE OF
Department of Psychology
Contact: http://www.asu.edu/aad/catalogs/general/t-clas-psycho.html\#37654
Description: The Minor in Psychology focuses on appreciating and valuing the life of the mind 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 fundamental 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 inside and outside of Psychology and engage on a daily basis their increasingly complex, information-rich world.

Program Requirement: The minor in Psychology consists of completing the 22 semester hours of course work in the foundations of psychology and the breadth categories described below

Required Courses
Foundation of Psychology Courses:
PGS 101 Introduction to Psychology
PSY 230 Introduction to Statistics
PSY 290 Research Method

Breadth within Psychology
Take one course each from four of the following five clusters (four courses):
Biological
PSY 325
Personality/Mental Health

PGS 315
PGS 466

Cognitive/Learning
PSY 320
PSY 323
PSY 324

## Developmental

PGS 341

PGS 306
PGS 350/351

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 hours of required psychology coursework. (Internship credit and Teaching Assistant credit may NOT be used to satisfy this requirement.) For more information, please email psych.advisor@asu.edu.

## Psychology Minor ASPGSMIN

INTERDISCIPLINARY ARTS \& SCIENCES, NEW COLLEGE OF
Department of Social and Behavioral Sciences
Contact: http://www.asu.edu/aad/catalogs/general/w-ncias-socbhvsci.html

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 wideranging 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 Requirement: The minor consists of 22 semester 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 SG (4

Social and 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 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)
PGS or PSY upper-division electives (3)

Total 22

* At least one choice must be PSY 323, 324, or 325. A maximum of three semester 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) or higher.

Enrollment Requirements: Please contact the department for more information:
http://newcollege.asu.edu/programs/psychology/minor_cert/.

Public Relations and Strategic Communications Minor HSPRSMIN<br>New College of Interdisciplinary Arts and Sciences<br>Divison of Social and Behavioral Sciences<br>Contact: http://www.asu.edu/aad/catalogs/general/w-chs-commstds.html

At the outset of the 2008-09 academic year, this degree/certificate/major was offered by the College of Human Services on ASU's West campus. As a result of the academic reorganization that occurred during the 2008-09 academic year, this degree/certificate/major program was moved to the New College of Interdisciplinary Arts and Sciences at the West campus.

Description: The Department of Communication Studies prepares professionals with highly effective communication skillsspeaking, writing, cultural sensitivity, critical thinking, problem solving, and conflict management-through a number of academic program options. The department offers BA and BS degrees in Communication Studies, undergraduate minors in Communication Studies and Public Relations and Strategic Communication, the MA degree in Communication Studies, and a postbaccalaureate certificate in Communication and Human Relations.

Please contact the department for more information: http://chs.asu.edu/program_minors/comm_studies.php.
Program Requirement: 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 semester hours upper-division course work, including nine semester hours of required course work and nine semester hours of electives

## Required Core Courses

Choose three of the following courses (9)
CMN 320 Communication and Consumerism SB (3)
CMN 329 Persuasion (3)
CMN 353 Professional Communication (3)
CMN 454 Rhetorical and Critical Approaches to Public Relations (3
Electives (9)

## Recreation Management Minor PPRECMIN

PUBLIC PROGRAMS, COLLEGE OF
School of Community Resources and Development
Contact: http://scrd.asu.edu/rec_minor.html
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 ranagement minor may also be interested in the school's therapeutic recreation program.

Program Requirement: Completion of a recreation management minor in the School of Community Resources and Development requires the following:

1. PRM 120, PRM 424,
2. 15 hours of graded classroom course work (no internship, no independent study),
3. A minimum of nine hours of course work at the upper-division level, from the approved list,
4. A minimum grade of C is required for all classes in the minor,
5. No double counting of courses for both a major and the minor.

Standards:

1. A minimum GPA of 2.00 for those pursuing the minor,
2. A major, or pre-major, other than Nonprofit Leadership and Management, Parks and Recreation Management or Tourism Development \& Management,
3. Must be a junior to take 400 -level courses

Course Selection: (approved list

Required Courses:
PRM 120 Leisure and the Quality of Life (Satisfies General Studies-SB) (3)
PRM 424

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, and 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. Students pursuing a Bachelor of Science in Nonprofit Leadership and Management, Bachelor of Science in Parks \& Recreation Management or a Bachelor of Science in Tourism Development \& Management are not eligible to complete this minor. Please contact the department for more information: http://scrd.asu.edu/portal/programs/undergraduate/parks-recreation-management-prm/minor-in-recreation-management.

## Religious Studies Minor LARELMIN

LIBERAL ARTS AND SCIENCES, COLLEGE OF
Department of Religious Studies
Contact: http://www.asu.edu/clas/religious_studies/
Description: Students may pursue the Minor in Religious Studies with regional, national, hemispheric, global, and a variety of thematic emphases.

Program Requirement: The Minor in Religious Studies consists of 18 semester hours, at least 12 of which must be in the upper division. REL 305 is required. For minor verification, students must consult a department advisor.

Enrollment Requirements: Please contact the department for more information:
http://www.asu.edu/clas/religious_studies/undergraduate/major_minor.html.

## Religious Studies Minor ASRELMIN

INTERDISCIPLINARY ARTS \& SCIENCES, NEW COLLEGE OF
Division of Humanities, Arts, \& Cultural Studies
Contact: http://newcollege.asu.edu/programs/integrative_studies/index.shtml
Description: The minor in Religious Studies consists of 21 semester hours of religious studies course work, of which 18 must be upper-division hours. Fifteen semester hours of campus resident credit is required. 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 the religious studies director to create a coherent and complete program of study for the minor.

Program Requirement: Choose one from the following courses (3)
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)
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)
Religious Studies Electives
Choose three additional religious studies courses** (9)
Program total 21

* Select from the following prefixes: AMS, CMN, 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.
** These courses, or other approved courses, must be chosen in consultation with the director, and may include Internship (484) and/or Individual Instruction (499).

Enrollment Requirements: Please contact the department for more information:
http://newcollege.asu.edu/programs/integrative_studies/minor_cert/religious.shtml.

## Russian Minor LARUSMIN

LIBERAL ARTS AND SCIENCES, COLLEGE OF
School of International Letters and Cultures
Contact: http://www.asu.edu/clas/silc/slav/index.html
Description: Please contact the department for more information: http://www.asu.edu/clas/dll/slav/minorlist.html.

Program Requirement:

## Required

RUS 211 Basic Russian Conversation G (3)
RUS 212 Basic Russian Conversation G (3)
RUS 311 Russian Composition and Conversation G (3)
RUS 312 Russian Composition and Conversation G (3)

Six semester hours of upper-division RUS courses are also required. Course substitutions with other upper-division RUS course are allowed.

Enrollment Requirements: Please contact the department for more information: http://www.asu.edu/clas/dll/slav/minorlist.html.

## Small Business Minor AGSMBMIN

MANAGEMENT AND AGRIBUSINESS, MORRISON SCHOOL OF
Morrison School of Management and Agribusiness
Contact: http://www.poly.asu.edu/msma/bua/smbusminor.html

Description: The minor in small business is available to nonbusiness majors and consists of 18 semester hours, with five required courses and one business-related area course.

## Program Requirement:

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-related area course (3)

Total 18

Enrollment Requirements: Please contact the department for more information: http://poly.asu.edu/msma/bua/smbusminor.html.

## Social and Behavioral Sciences Minor ASSBSMIN <br> INTERDISCIPLINARY ARTS \& SCIENCES, NEW COLLEGE OF <br> Department of Social and Behavioral Sciences <br> Contact: http://newcollege.asu.edu/programs/sbs/

Description: The minor offers students an interdisciplinary focus across several fields of the social and behavioral sciences, including sociocultural anthropology, geography, political science, psychology, and sociology.

Program Requirement: The minor consists of 18 semester hours, at least 12 semester hours of which must be in upper-division courses. All courses must be completed with a minimum grade of C (2.00). 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.

Requirements

SBS 300 Interdisciplinary Approaches to Social and Behavioral Sciences SB (3)
SBS 302 Qualitative Methods (3) or SBS 303 Quantitative Methods (3)
Electives* (12)
*Choose courses from at least two fields of social and behavioral sciences, including SBS and excluding internships or individualized instruction.

Enrollment Requirements: Please contact the department for more information:
http://newcollege.asu.edu/programs/sbs/minor_certs/minor.shtml.

Social Welfare Minor LASSWMIN<br>PUBLIC PROGRAMS, COLLEGE OF<br>School of Social Work<br>Contact: http://ssw.asu.edu/degreeprograms.html

Description: The minor in Social Welfare is designed for students interested in analyzing complex family, individual, and societal problems in the context of societal values, cultural diversity, and other social and economic variables. The Social Welfare minor prepares students to:

1. enter graduate social work or other professional schools, or
2. attain entry-level employment in non-academic settings.

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 Requirement: Completion of a Social Welfare minor in the School of Social Work requires the following:

1. Eighteen hours of graded classroom course work (no internship, no independent study),
2. A minimum of 12 semester hours of course work at the upper-division level from the approved list,
3. A minimum of 12 semester hours must be resident credit at the Tempe or Downtown Phoenix campus,
4. A minimum grade of C is required for all classes in the minor,
5. Complete SWU 171 as the prerequisite for all upper-division SWU courses,
6. Must be a sophomore to take 300 -level courses.

Required Courses:

SWU 171 Introduction to Social Work
SWU 291 Social Service Delivery Systems
SWU 332 Social Policy and Services
SWU 374 Diversity and Oppression in a Social Work Context
Choose two courses from the list below:

SWU 301 Human Behavior in the Social Environment I
SWU 302 Human Biology for Social Workers
SWU 310 Social Work Practice I
SWU 321 Statistics for Social Workers
SWU 340 Human Behavior in the Social Environment II
SWU 498 Pro Seminar

Enrollment Requirements: Please contact the department for more information: http://ssw.asu.edu/portal/academic.

## Sociocultural Anthropology Minor ASASBMIN

INTERDISCIPLINARY ARTS \& SCIENCES, NEW COLLEGE OF
Department of Social and Behavioral Sciences
Contact: http://newcollege.asu.edu/programs/sociocultural_anthropology/
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:

- Critical thinking and analytical reasoning,
- Interpretation of cultural practices, social theory, and social texts,
- Effective oral presentation and written communication,
- Qualitative research methods in anthropology and other social sciences and interpretive humanities, including ethnographic field research and library research,
- Anthropological approaches to and explanatory frameworks for the study of social issues in culture and political economy,
- Awareness of cultural, ethnic, gender, sexual, class, and age differences and commonalties across world social formations,
- Application of theoretical knowledge to understanding sociocultural practices across local and global contexts,
- Development of their own anthropological perspective for use in their everyday lives and future studies or employment.

Program Requirement: The minor requires 18 semester hours, at least 12 of which must be in upper-division courses. Two courses, ASB 311 and SBS 302, are required. The remaining 12 semester hours may be drawn from ASB courses and from several key SBS courses in the interdisciplinary social science degree. All courses must be passed with a minimum grade of C (2.00) or higher. Up to six semester hours of lower-division courses and three semester hours of ASB 499 Individualized Instruction may also be applied toward the minor.

## Upper-Division Required Courses

ASB 311 Principles of Social Anthropology SB, G, H (3)
SBS 302 Qualitative Methods (3)

Choose four from the following* (12)
ASB 102 Introduction to Cultural and Social Anthropology SB, G (3)
ASB 205 Cybercultures SB (3)
ASB 211 Women in Other Cultures HU/SB, G (3)
ASB 311 Principles of Social Anthropology SB, G, H (3)
ASB 319 Indigenous Peoples of North America (3)
ASB 339 Introduction to 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 389 Ethnographic Field Lab (1-6) ASB 394 Special Topics (1-4)
ASB 411 Kinship and Social Organization (3)
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)
ASB Electives
SBS 205 Cybercultures SB (3)
SBS 301 Cultural Diversity L/SB, C (3)
SBS 410 Topics in Identity/Difference (3)
SBS 430 Topics in Power/Knowledge SB (3)
SBS 440 Family Studies SB (3)
SBS 450 Topics in Local/Global SB, G (3)
SBS 460 Urban Studies SB (3)

* Other approved courses may be selected.

Enrollment Requirements: Please contact the department for more information: http://newcollege.asu.edu/programs/sociocultural_anthropology/.

## Sociology Minor LASOCMIN

LIBERAL ARTS AND SCIENCES, COLLEGE OF

Social and Family Dynamics
Contact: http://www.asu.edu/clas/ssfd/undergrad/minor.html\#soc
Description: A minor from the School of Social and Family Dynamics exposes students to the basic coursework and issues in the discipline. A minor from SSFD provides an exceptional balance to studies in psychology, justice studies, communication, education, business, and nursing.

The SSFD minors also make excellent complements with other minors to obtain the BIS (Bachelor of Independent Studies) degree. For example, the Global Family option is a combination of geography and family studies minors. Other students have combined SSFD minors with: psychology, justice studies, and business.

Program Requirement: The minor in Sociology requires 18 hours, of which 12 hours must be upper-division courses, with at least six upper-division hours completed at the Tempe campus.
Required courses:
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)
Total 6

The remaining four courses consist of sociology electives.
Enrollment Requirements: Please contact the department for more information:
http://www.asu.edu/clas/ssfd/undergrad/minor.html.

## Sociology Minor ASSOCMIN

INTERDISCIPLINARY ARTS \& SCIENCES, NEW COLLEGE OF
Department of Social and Behavioral Sciences
Contact: http://newcollege.asu.edu/programs/sociology/
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 Requirement: The minor in Sociology requires 21 semester hours in sociology, nine of which must be upper division.

SBS 303 Quantitative Methods (3)
SBS 304 Social Statistics I CS (3) or SOC 486 Contemporary Theory SB (3)
SOC 101 Introductory Sociology SB (3) or SOC 301 Principles of Sociology SB (3)
Sociology Electives* (12)

* These courses must be chosen in consultation with the student's advisor.

Enrollment Requirements: Please contact the department.

## Spanish Minor LASPAMIN

LIBERAL ARTS AND SCIENCES, COLLEGE OF
School of International Letters and Cultures
Contact: http://www.asu.edu/clas/silc/academics/
Description: Please contact the department for more information: http://www.asu.edu/clas/dll/spa/gradpage/minorsub.htm.

Program Requirement: Each minor in Asian Languages (Chinese/Japanese), German, Italian, and Russian consists of 18 semester hours, of which 12 semester hours must be in the upper division. The Spanish and French minors require 18 upper-division semester 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.

The minor in Spanish requires a minimum of 18 upper-division semester hours.
Required

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)

Electives

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

## Spanish Minor ASSPAMIN

INTERDISCIPLINARY ARTS \& SCIENCES, NEW COLLEGE OF
Division of Humanities, Arts, \& Cultural Studies
Contact: http://newcollege.asu.edu/programs/spanish/minor_certs/minor.shtml
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. Spanish classes are taught through an intensive language approach using the most recent electronic technologies, including videos, CD-ROMs, electronic chat groups, and news groups devoted to Hispanic literature and culture

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 Requirement: The minor in Spanish consists of 20 semester hours of Spanish course work, of which 12 semester hours must be in the upper division. All Spanish course work must be completed with a minimum grade of $\mathrm{C}(2.00)$ or higher.

Choose one of the following combinations (8)

SPA 201 Intermediate Spanish G (4)
SPA 202 Intermediate Spanish G (4)
Electives* (12)
Total 20

* These SPA elective courses must be at the 300 or 400 level and chosen in consultation with a department program 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 and sign the minor check sheet and adjust their Declaration of Graduation to have the minor added to their official record. 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. 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: http://newcollege.asu.edu/programs/spanish/minor_certs/minor.shtml.

## Special Events Management Minor HSEVNMIN

Public Programs, College of
School of Community Resources and Development
Contact: http://chs.asu.edu/programs/rec_tour_mgmt/minor/prog_reqs_sem.shtml

At the outset of the 2008-09 academic year, this degree/certificate/major was offered by the College of Human Services on ASU's West campus. As a result of the academic reorganization that occurred during the 2008-09 academic year, this degree/certificate/major program was moved to the New College of Interdisciplinary Arts and Sciences at the West campus.

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 courses, which provide basic and advanced instruction, as well as experiential learning opportunities through event production, each student will be able to select electives to meet his or her specific interests.

Program Requirement: The minor consists of six semester hours of required courses and 12 semester hours of electives selected in consultation with a faculty advisor. To earn the minor, students must complete all course work in the minor with a minimum grade of C (2.00) or higher.

Recreation and Tourism Management majors are not eligible to earn the minor in Special Events Management.

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Required Core Courses
    RTM 486 Special Events Management (3)
    RTM 487 Special Events Management, Advanced (3)
Electives
Choose four courses from the following* (12)
RTM }301\mathrm{ Leadership in Recreation and Tourism (3)
RTM }303\mathrm{ Programming Recreation and Tourism Services (3)
RTM 304 Recreation and Tourism Areas and Facilities Management L (3)
RTM }373\mathrm{ Leisure Travel and Tourism SB (3)
RTM }394\mathrm{ Meeting and Convention Planning (3)
OR D TDM }345\mathrm{ Meeting and Convention Planning (3)
RTM }403\mathrm{ Professional Development Seminar (3)
RTM }404\mathrm{ Marketing Recreation and Tourism (3)
RTM 451 Grant Writing for Human Service Professionals (3)
RTM 453 Volunteer Management in Human Service Organizations (3)
RTM }458\mathrm{ International Tourism G (3)
RTM 475 Entrepreneurial Recreation and Tourism (3)
RTM 484 Senior Internship (3)
* Select from these or other approved courses in consultation with the minor advisor.
Enrollment Requirements: Please contact the department for more information:
http://chs.asu.edu/program_minors/rec_tour_mgmt/prog_reqs_sem.php.
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## Speech and Hearing Science Minor LASHSMIN

LIBERAL ARTS AND SCIENCES, COLLEGE OF
Department of Speech and Hearing Science
Contact: http://www.asu.edu/clas/shs/ug-minor.html

Description: The Department of Speech and Hearing Science at Arizona State University offers an undergraduate minor in Speech and Hearing Science through the College of Liberal Arts and Sciences. This is an academic program with emphasis on normal aspects of speech, language, and hearing. For your information, the required courses (as of 2005) are listed below, but students are strongly encouraged to visit an advisor from the Department of Speech and Hearing Science at ASU.

Program Requirement: The minor in Speech and Hearing Science consists of 24 semester 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 courses below

SHS 367 Language Science SB (3)
SHS 375 Speech Science (3)
SHS 376 Psychoacoustics (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: Please contact the department for more information: http://shs.asu.edu/ug-minor.php.

## Statistics Minor LASTAMIN

LIBERAL ARTS AND SCIENCES, COLLEGE OF

Department of Mathematics and Statistics
Contact: http://math.asu.edu/undergrd/index.html
Description: Please contact the department for more information: http://math.asu.edu/undergrd/degree_opt.html.
Program Requirement: The minor in Mathematics consists of a minimum of 18 semester hours.

Required courses:
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)

Total: 18-20

## Theatre Minor FATHEMIN

ARTS, HERBERGER COLLEGE OF THE
School of Theatre and Film
Contact: http://theatre.asu.edu/index.php
Description: As a student pursuing this minor, you will study the literatures, histories and basic production practices of theatre while having opportunities to concentrate in an area such as theatre and performance studies, directing and performance, design and production, new work development, theatre for youth, and film and media production.

Program Requirement: The school offers a minor in Theatre consisting of 22 semester hours of course work.

The following courses are required:
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)
Concentration area** (9)

* 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.
** Also required are three upper-division three-hour courses within the same curricular area. 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 majors' needs have been met. All prerequisites for the minor courses must be met (see course listings). Transfer students may transfer up to nine semester hours toward their minor. A grade of C (2.00) or higher is required for all courses in the minor.

Enrollment Requirements: Contact the Herberger College of the Arts advising office for information: http://theatre.asu.edu/students/current/undergrad-minors.php.

# Tourism Development \& Management Minor PPTDMMIN 

PUBLIC PROGRAMS, COLLEGE OF
School of Community Resources and Development
Contact: http://scrd.asu.edu/minor_tourism.html
Description: The minor in Tourism Development \& Management program provides students with the planning and development skills needed to enter the largest industry in the world. Exposure to the businesses of nature-based 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 (WTO) and the World Travel Tourism Council (WTTC), 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 such 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 \& Management, a student may also complete a certificate in Convention Sales and Meeting Planning. For more information, access the school's Web site at http://scrd.asu.edu/portal/ia/certificate-programs-1/.

Students may also choose to complete a study abroad program. For more information, access the school's Web site at http://scrd.asu.edu/portal/ia/study-abroad-programs/.

Program Requirement: Completion of a Tourism Minor in the School of Community Resources and Development requires following:

1. TDM 205, TDM 325, TDM 415,
2. 15 hours of graded classroom course work (no internship, no independent study),
3. 9 hours of course work at the upper division level, from the approved list,
4. C minimum grade required for all classes in the minor,
5. No double counting of courses for both a major and the minor.

Standards:

1. A minimum GPA of 2.00 for those pursuing the minor,
2. A major, or pre-major, other than Tourism Development and Management,
3. Must be a junior to take 400 -level courses.

Course Selection: (approved list)

Required courses:
TDM 205 Introduction to Travel and Tourism G (3)
TDM 325 Tourism Accommodations (Prerequisites: must have completed REC305 or TDM205 with a grade of C or higher or be currently enrolled) (3)
TDM 415 Tourism Transportation Systems (Prerequisites: Must have earned grade of C or higher in REC 305 or TDM 205 or be currently enrolled.) (3)

Choose two courses from the list below:
PRM 120 Leisure and the Quality of Life SB (3)
TDM 345 Meeting and Convention Planning (Prerequisites: must have completed REC 305 or TDM 205 with a grade of $C$ or higher or be currently enrolled) (3)
TDM 350 Tourism Marketing (Prerequisites: TDM 205 (or REC 305) with a grade of C or higher or be currently
enrolled; must have completed at least 45 hours) (3)
TDM 386 Convention and Sales Management (3)
TDM 448 Heritage and Cultural Tourism (Prerequisites: Must have completed PRM 120 or REC 120 with a grade of C or higher or be currently enrolled) (3)
TDM 458 International Tourism (3)
TDM 480 Nature Based Tourism (Prerequisite: PRM 120 or TDM 205) (3)
TDM 494 Special Topics*
PRM 475 Entrepreneurial Recreation and Tourism (Prerequisites: Must have earned grade of C or higher in PRM 120 or REC 120 or be currently enrolled) (3)
PRM 380 Wilderness and Parks in America SB, H (3)
PRM 486 Special Event Management (3)

* This course requires CRD advisor approval. Contact the school's advisor at scrd@asu.edu or call 602/496-0550

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, and 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.Students pursuing a Bachelor of Science in Tourism Development and Management are not eligible to complete this minor.

## Tourism Management Minor HSTOUMIN

Public Programs, College of
School of Community Resources and Development
Contact: http://chs.asu.edu/programs/rec_tour_mgmt/minor/prog_reqs_tour.shtml

At the outset of the 2008-09 academic year, this degree/certificate/major was offered by the College of Human Services on ASU's West campus. As a result of the academic reorganization that occurred during the 2008-09 academic year, this degree/certificate/major program was moved to the New College of Interdisciplinary Arts and Sciences at the West campus.

Description: The minor in Tourism Management is designed to provide students with fundamental knowledge in travel and tourism management. The minor may be useful to students pursuing degrees in Communication Studies, Criminal Justice and Criminology, Global Business, Interdisciplinary Arts and Performance, and Spanish.

## Program Requirement:

The minor consists of 18 semester hours, of which 15 semester hours must be at the upper-division level. To earn the minor, students must complete all courses with a minimum grade of C (2.00). Recreation and Tourism Management majors are not eligible to earn the minor in Tourism Management.

## Required Core Courses

Choose two from the following (6)
RTM 373 Leisure Travel and Tourism SB (3)
RTM 458 International Tourism G (3)
RTM 475 Entrepreneurial Recreation and Tourism (3)

Electives
Choose four courses from the following* (12)

RTM 303 Programming Recreation and Tourism Services (3)
RTM 304 Recreation and Tourism Areas and Facilities Management L (3)
RTM 360 Policy, Planning, Development of Recreation and Tourism Resources (3)
RTM 401 Administration of Recreation and Tourism Services (3)
RTM 404 Marketing Recreation and Tourism (3)
RTM 458 International Tourism G** (3)
RTM 475 Entrepreneurial Recreation and Tourism** (3)
RTM 486 Special Events Management (3)
RTM 494 Sustainable Tourism Management (3)

Program total 18

* Select courses in consultation with the minor advisor (an other approved course may be lower-division).
** Course may be taken as an elective if not selected to fulfill core requirement.

Enrollment Requirements: Please contact the department for more information:
http://chs.asu.edu/program_minors/rec_tour_mgmt/prog_reqs_tour.php.

## Transborder Chicana/o and Latina/o Studies Minor LACCSMIN

LIBERAL ARTS AND SCIENCES, COLLEGE OF
Department of Transborder Chicana/o and Latina/o Studies
Contact: http://www.asu.edu/clas/chicana/
Description: The Department of 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. 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.

The TCLS minor requires 18 semester hours of TCLS 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)

Total 6

It is recommended that students taking TCL 201 take TCL 332 and those taking TCL 202 take TCL 331. Students must take the remaining 12 semester hours in upper-division TCLS courses in concentrations of their choice.

Enrollment Requirements: Please contact the department for more information: http://www.asu.edu/clas/transborder/majors.htm.

## Urban and Metropolitan Studies Minor ARPUPMIN

PUBLIC PROGRAMS, COLLEGE OF
School of Public Affairs
Contact: http://spa.asu.edu/urban/minor.htm

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 Requirement: Fifteen hours of course work with a C or better in each course. Nine hours of upper-division coursework from the approved list and 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 100 Introduction to Urban and Metropolitan Studies -or- URB 300 Urban and Metropolitan Studies (3)
URB 105 Introduction to Urban Governance -or- URB 305 Urban Governance (3)

Total: 6

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 Research II (3)
URB 410 Urban Leadership and Collaborative Skills (3)

Total: 6

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: Leadership and Change; Leadership and Communication; Policy Analysis and Evaluation; Urban Economics; Political Economy; Computer Applications; Community Building and Development; Regionalism; Poverty and Social Welfare Policy; Comparative Urbanism. In addition, students can choose related courses offered by the School of Public Affairs or other departments.

Total Minor Courses: 18

Enrollment Requirements: Please contact the department for more information: http://spa.asu.edu/urban/minor.htm.

## Urban Planning Minor ARPPUPMIN

DESIGN, COLLEGE OF
School of Planning
Contact: http://design.asu.edu/planning

Description: The BSP degree prepares students for careers in urban planning. Students can select courses that include comprehensive planning, socioeconomic and environmental analysis, computer and analytical methods, planning law, site planning, urban design, and public-policy formulation and administration. 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 Requirement: A minimum of 18 semester hours are required for the minor, 12 semester hours must be from 300- or 400- level courses.

Required Course:

PUP 301 Introduction to Urban Plannin

Select remaining 15 semester hours (nine semester hours must be from 300- or 400- level courses) from the following courses:

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PUP}100\mathrm{ Introduction to Environmental Design HU, G, H (3)
PUP }190\mathrm{ Sustainable Cities HU/SB, G (3)
PUP 200 The Planned Environment HU, H (3)
PUP }363\mathrm{ History of Planning (3)
PUP}412\mathrm{ History of the City (3)
PUP }425\mathrm{ Urban Housing Analysis (3)
PUP }430\mathrm{ Transportation Planning and the Environment (3)
PUP}432\mathrm{ Planning and Development Control Law (3)
PUP442 Environmental Planning (3)
PUP }444\mathrm{ Preservation Planning (3)
PUP445 Women and Environments C (3)
PUP }475\mathrm{ Environmental Impact Assessment (3)
PUP}485\mathrm{ International Field Studies in Planning G (3)
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The minor is open to students of all majors. Students must, however, 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: the college and/or
department of the minor officially certifies, through established verification procedures, that all requirements for the minor have been met, and 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://design.asu.edu/sala/salaminors.shtml.

## Wellness Foundations Minor ECWFNDMIN

MANAGEMENT AND AGRIBUSINESS, MORRISON SCHOOL OF
Department of Exercise and Wellness
Contact: http://www.poly.asu.edu/saas/wellness/degree/undergraduate/minor/
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 Requirement: The minor in Wellness Foundations consists of 18 semester hours. The minor requires that students complete the following courses with a grade of C (2.00) or higher:

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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 semester hours must be selected from the approved list of electives available in the Department of Exercise and Wellness.
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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, and 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.poly.asu.edu/ecollege/wellness/degree/undergraduate/minor/.

## Women and Gender Studies Minor LAWSTMIN

LIBERAL ARTS AND SCIENCES, COLLEGE OF
Women and Gender Studies Program
Contact: http://wgs.asu.edu/index.html

Description: 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 Requirement: The Women and Gender Studies minor consists of 18 semester hours, 12 of which must be in the upper division.

The following courses are required:
WST 100 Women and Society SB, C (3) or WST 300 Women in Contemporary Society SB, C (3)
WST 377 History of American Feminist Thought C (3) or WST 378 Global Feminist Theory L, C (3)
Total 6

Twelve additional 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 academic advisor early in their course of studies.

Enrollment Requirements: Please contact the department for more information: http://wgs.asu.edu/index.html.

## Women's Studies Minor ASWSTMIN

## INTERDISCIPLINARY ARTS \& SCIENCES, NEW COLLEGE OF

Division of Humanities, Arts, \& Cultural Studies
Contact: http://newcollege.asu.edu/programs/womens_studies/minor_cert/

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 Requirement: The Women's Studies minor consists of 18 semester hours of course work. Students are required to choose three courses (nine semester hours) from the following core: WST 100 or WST 300; WST 350, WST 376, WST 457, or WST 498. Additionally, students are required to select one course in three of the following four areas: global studies, representation and culture studies, gender studies and applied women's studies.

Core Requirements (nine hours)
WST 100 Women and Society SB, C (3) or WST 300 Women in Contemporary Society SB, C (3)
WST 350 Race, Class, and Gender SB, C (3)
WST 376 Feminist Theory L, C (3)
WST 457 Women, Cultures and Societies SB, G (3)
WST 498 PS: Theory and Method in Women's Studies L (3)
Additional Requirements (nine hours)
Select a total of nine semester hours from any of the courses listed below:

Global Studies Courses:
WST 330 Women on the Borderlands (3)
WST 390 Women and World Religions L/SB, G (3)
WST 475 Women of the Diaspora Across Cultures HU, G (3)
WST 483 Women writers Across Cultures HU, G (3)
WST 487 Gender and International Development SB, G (3)

Representation and Culture Studies Courses:
WST 320 Women in Popular Culture HU, C (3)

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WST 370 Chronicling Women's Lives HU, C (3)
WST 431 Women and Film L, G (3)
WST 467 Ethnic Women Writers (L/HU, C)
WST 473 Latina/Chicana Representation (SB, C)
Gender Studies Courses:
WST 276 Feminist foundations: Going to the Sources H (3)
WST }333\mathrm{ Critical Perspectives on Sexuality SB, C (3)
WST 444 Women and Health SB (3)
Applied Women's Studies Courses:
WST 482 Gender Issues in Education (3)
WST }484\mathrm{ Internship (3)
WST }485\mathrm{ Women, Gender, and Leadership SB, C (3)
WST 499 Individualized Instruction (3)
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Enrollment Requirements: Please contact the department for more information:
http://newcollege.asu.edu/programs/womens_studies/minor_cert/.

# Youth Services Leadership Minor HSYSLMIN 

Public Programs, College of

School of Community Resources and Development
Contact: http://chs.asu.edu/depts_schools/recreation/

At the outset of the 2008-09 academic year, this degree/certificate/major was offered by the College of Human Services on ASU's West campus. As a result of the academic reorganization that occurred during the 2008-09 academic year, this degree/certificate/major program was moved to the New College of Interdisciplinary Arts and Sciences at the West campus.

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.

Program Requirement: The minor consists of 12 semester hours of core courses and six hours of electives. To earn the minor, students must complete all course work in the minor with a minimum cumulative GPA of 2.00 or higher and all courses with a minimum grade of $\mathrm{C}(2.00)$ or higher.

## Required Core Courses

RTM 301 Leadership in Recreation and Tourism (3)
RTM 303 Programming Recreation and Tourism Services (3)
RTM 394 ST: Recreation and Leisure Services for Youth Development (3)
RTM 454 Human Services for At-Risk Youth (3)
Electives
Choose two courses from the following, in consultation with an RTM faculty advisor* (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)
PGS 341 Developmental Psychology (3)

PGS 443 Abnormal Psychology (3)
RTM 302 Recreation and Tourism for Diverse Populations C (3)
RTM 345 Team Building Strategies (3)
RTM 451 Grant Writing for Human Service Professionals (3)
RTM 484 Senior Internship (3)
RTM 494 ST: Leadership and Professional Development in Youth Services (3)
SOC 340 Sociology of Deviant Behavior SB (3)
SPE 222 Orientation to Education in Exceptional Children SB (3)
SPE 322 Behavior Management and Consultation** (3)

Program total 18

* Courses may have prerequisites. See catalog course description.
** This course requires instructor approval.

Enrollment Requirements: Please contact the department for more information: http://chs.asu.edu/program_minors/rec_tour_mgmt/prog_reqs_youth.php.

# Undergraduate Certificates (Program Descriptions and Requirements) 

African and African American Studies Certificate LAAFRCERT<br>college of liberal arts and sciences<br>African and African American Studies Program

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 Requirement: The certificate requires 24 semester hours. Fifteen core hours must be taken from the following courses:
AFH 353 African American Literature: Beginnings Through the Harlem Renaissance L/HU, C (3) or
AFH 354 African American Literature: Harlem Renaissance to the Present L/HU, C (3)
AFR 210 Introduction to African American Studies C (3)
AFR 429 African American Studies Theory and Methods (3)
AFS 363 African American History to 1865 SB, C, H (3)
AFS 364 African American History Since 1865 SB, C, H (3)
In addition, one course from each of the three concentrations (i.e., social and behavioral sciences, humanities/arts, politics and society) must be taken. These courses are in addition to the required core courses. Courses should be selected in consultation with the major advisor.

Enrollment Requirements: Please contact the department for more information: http://www.asu.edu/clas/aframstu/.

## Arabic Studies Certificate LAARBCERT

COLLEGE OF LIBERAL ARTS AND SCIENCES
School of International Cultures and Letters

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: speaking, listening, reading and writing. Simultaneously, students gain a broad knowledge and understanding of the culture, literature, and traditions of the vast Arabic-speaking 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 Requirement: 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 to earn the Arabic Studies Certificate. These hours can be chosen in consultation with the Certificate coordinator. A minimum grade of C 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, and the name of their major academic advisor. Please contact the department for more information: http://www.asu.edu/clas/silc/arb/.

Asian Pacific American Studies Certificate LAAPACERT<br>COLLEGE OF LIBERAL ARTS AND SCIENCES<br>Asian Pacific American Studies Program

Description: Asian Pacific American Studies is an interdisciplinary undergraduate program 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 program is designed to help students of all ethnicities:

1. to think critically, develop clear written arguments, and present their perspectives effectively,
2. to learn about Asian American and Pacific Islander experiences and communities in Arizona, nationally, and within a larger global context, and
3. to prepare students to participate in an increasingly diverse and global U.S. society.

The certificate program provides students with opportunities to think critically about interethnic cooperation and conflict in the formation of social institutions and communities. The program also encourages students to learn about local Asian American and Pacific Islander communities and organizations through research, courses, and community internships.

## Program Requirement:

Course Requirements
The certificate program requires 18 semester hours. Twelve core hours must be fulfilled by the following courses:
APA 200 Introduction to Asian Pacific American Studies HU/SB, C (3)
APA 360 Asian Pacific American Experience HU/SB, C (3)
APA 450 Asian Pacific American Contemporary Issues SB, C (3)
APA 484 Internship (3)
or APA 494 ST: Asian Pacific American Communities (3)
The remaining six semester hours must be filled by courses from an approved list, including any additional courses with an APA prefix, as well as COM 263 and MCO 460. Students must apply for the certificate program through the Asian Pacific American Studies Program office.

Enrollment Requirements: Please contact the department for more information:
http://www.asu.edu/clas/asian/certificate_undergrad.html.

## Asian Studies Certificate LAASNCERT <br> COLLEGE OF LIBERAL ARTS AND SCIENCES <br> Center for Asian Research

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 Requirement: The certificate curriculum includes 24 semester hours of course work:

1. 15 semester 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), and
2. nine additional semester 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, and Vietnamese. Students pursuing an Asian Studies Certificate may apply courses in East, South and/or Southeast Asia to meet the certificate requirements.

Enrollment Requirements: There are no specific admission requirements other than a student's desire to learn about Asia. A minimum grade of C 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_undergrad.html.

## Automotive Entrepreneurs and Leaders Certificate BADMGCERT W. P. CAREY SCHOOL OF BUSINESS

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 hiring and managing personnel; coordinating teams; understanding consumers and human behavior; managing financing and cash flow; handling vehicle inventory; managing customer service operations; and managing automobile marketing efforts.

Program Requirement: Students must complete a bachelor's degree from the W. P. Carey School of Business and complete a minimum of 15 semester hours of approved course work, including the following six hours:

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MGT 494 ST: Dealership Management (3)
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WPC 494 Special Topics (3)
To complete the certificate, students select at least nine additional hours of business courses, including a three-semester-hour internship. Courses must be approved in advance by the faculty director for the certificate program. The student must complete the 15 semester hours of course work with grades of C (2.00) or higher.

Enrollment Requirements: To assure students a quality experience, 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:
http://wpcarey.asu.edu/up/current-students/academics/certificates/cael/index.cfm.

## Child Nutrition Certificate ECNTRCERC

SCHOOL OF APPLIED ARTS AND SCIENCES

## Nutrition

Contact: http://www.poly.asu.edu/saas/nutrition/ | nutrition@asu.edu | Health Science Center 1386 | 480-727-1728

## Description:

This certificate program is directed toward current degree-seeking students, postbaccalaureate students, and nondegree-seeking students who are seeking eligibility for the SNS credential. 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 at ASU. The Curriculum Committee of the Department of Nutrition at ASU will approve applications to the certificate program.

Program Requirement: The certificate requires that students take the following courses:

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)
Total semester credits: 31

## Enrollment Requirements:

This certificate is directed toward students who are seeking eligibility for certification as a school nutrition specialist (SNS), a recognized credential offered by the School Nutrition Association (SNA). The certificate will provide students with documentation that they have completed a limited curriculum and achieved a standardized level of competence in course work related to child nutrition programs. Upon completion of the certificate in child nutrition, students are eligible to sit for the national SNS examination.

## Civic Education Certificate LACVECERT

## COLLEGE OF LIBERAL ARTS AND SCIENCES

Department of Political Science
Description: The Civic Education Certificate is designed to contribute to the preparation of undergraduate students for:

1. careers in primary and secondary education (where the teaching of government and civics may be involved),
2. careers or voluntary participation in politics, public service, and civic and social movements, and
3. 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 Requirement: 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 semester 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 (3):
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 (3):
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)

Total: 15

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: Please contact the department for more information:
http://www.asu.edu/clas/polisci/undergraduate/civic-certificate.html.

## Classical Studies Certificate LACLGCERT

COLLEGE OF LIBERAL ARTS AND SCIENCES
School of International Cultures and Letters

Description: The Classical Studies program at ASU 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 Requirement: 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:

1. five semesters of ancient Greek ( 17 semester hours; GRK 301 and 302 may be repeated for credit) or Latin (19 semester hours) language and literature instruction,
2. two semesters (six semester hours), in courses related to classical studies (to be approved by coordinators of the certificate); a thesis (three semester hours), a Barrett, the Honors College thesis (six semester hours) or two additional courses at or above the 300 level (six semester hours), and
3. a minimum grade of $C(2.00)$ in each course leading to the certificate.

Enrollment Requirements: Students interested in the Classical Studies certificate program need to submit an application before being accepted into the program. Please contact the department for more information:
http://www.asu.edu/clas/silc/classics/undergraduate/certificates/.

## Computer Gaming Certificate ESSCIGERT

IRA A. FULTON SCHOOL OF ENGINEERING
Contact: http://sci.asu.edu | sci.advising@asu.edu | BYENG 553 | 480-965-3190
Description: The computer gaming certificate is designed to provide a comprehensive game development skill set that the student can apply to their major. The goal is not to teach the student to create recreational video games, but to apply gaming technology to domain-specific problems.

The gaming certificate teaches skills that not only make the student attractive to the rapidly-growing video game industry, but also to a variety of other enterprises, including:

- Business
- Medicine
- Geography
- Education
- Biotechnology

Program Requirement: Students completing the computer gaming certificate will take a total of 18 credit hours including:

1. Six credit hours of core courses.
2. Nine credit hours in one of three specialty tracks.
3. A three-credit-hour capstone project.

The tracks include game programming, game art and gaming in education.
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. Interested students should make an appointment with the School of Computing and Informatics advising office to determine initial eligibility. After approval from that advisor, the student must get permission from their home department. Once obtained, the School of Computing and Informatics advisor will officially admit the student by attaching the certificate designation to their record.

## Convention Sales and Meeting Planning Certificate PPTDMCERT <br> COLLEGE OF PUBLIC PROGRAMS

School of Community Resources and Development
Description: The U.S. meetings, conventions and exhibitions industry generates over $\$ 120$ billion a year, supporting nearly two million jobs. Come 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. Come learn in this vibrant urban environment. 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 Requirement:

1. A student must successfully pass all courses within the certificate by attaining at least a grade of C or Y in all courses within the certificate;
2. All five of the required courses must be taken at ASU;
3. Students will earn the certificate once the academic advisors have confirmed the completion of the required courses with satisfactory grades. This will be verified by the School of Community Resources \& Development.

## Required Course Work (15 credit hours):

TDM 205 Introduction to Travel and Tourism G (3)
TDM 345 Meeting and Convention Planning (Prerequisites: must have completed REC 305 or TDM 205 with a grade of $C$ or higher or be currently enrolled) (3)
TDM 350 Tourism Marketing (Prerequisites: must have completed REC 305 or TDM 205 with a grade of C or higher or be currently enrolled; must have completed 45 hours) (3)
TDM 386 Convention Management and Sales (3)
PRM 486 Special Event Management (3)
Enrollment Requirements: Applications are accepted throughout the year. Please contact the department for more information: http://scrd.asu.edu/portal/ia/certificate-programs-1/convention-sales-meeting-planning-certificate/.

To apply, please contact the School's Academic Advisor for an application form:

Academic Advisor
School of Community Resources \& Development
University Center (mail code: 4020)
411 N. Central Ave., Suite 550
Phoenix, AZ 85004-0690
Phone: 602.496.0550
Fax: 602.496.0953
Email: scrd@asu.edu

## Creative City Certificate PPURBCERC

COLLEGE OF PUBLIC PROGRAMS
School of Public Affairs
Contact: http://spa.asu.edu/new/undergrad/creative_city.htm | spa@asu.edu | UCENT 400 | 602-496-0450
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 urban governance, land-use law, public art, planning, parks \& recreation, community development, philanthropy and others. Flexible class times and locations make the certificate a viable option for those unable to attend classes during the day.

Program Requirement: 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 hours):
URB 494 Urbanism: Placemaking and Community Building (3 hours)
URB 494 Public Administration and Community Development (3 hours)

Sample certificate electives (9 hours):
URB 410 Urban Leadership and Collaborative Skills (3 hours)
GRA 401 Creating Environments (3 hours) [This course develops individual creativity to apply in collaborative settings to urban and environmental issues.]
URB 494 Internship (3 hours)

Total certificate: 15 hours

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) [CRD 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. Non-degree students are required to apply to ASU (as a non-degree 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. For more information, please visit http://spa.asu.edu/new/undergrad/creative_city.htm.

## Dietetics Certificate ECNTRCERD

SCHOOL OF APPLIED ARTS AND SCIENCES

## Nutrition

Contact: http://www.poly.asu.edu/saas/nutrition/ | nutrition@asu.edu | Health Science Center 1386 | 480-727-1728
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 in Dietetics will enable students to receive a verification statement from the Commission on Accreditation for Dietetics Education's (CADE) Didactic Program in Dietetics (DPD).

Program Requirement: Required Course work
BCH 361 and 367 or equivalent - Biochemistry with lab
BIO 201 or equivalent - Human Anatomy / Physiology I with lab
BIO 202 or equivalent - Human Anatomy / Physiology II with lab
CHM 113 or equivalent - General Chemistry I with lab
CHM 116 or equivalent - General Chemistry II with lab
CHM 231 and 235 or equivalent - Organic Chemistry with lab
MIC 205 and 206 or equivalent - Microbiology with lab
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 or equivalent - Intro Psychology
SOC 101 or equivalent - Intro Sociology
Statistics
Technical or Professional Writing (ENG 301 or equivalent)
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 at ASU. The applicant must have already completed a bachelor's degree not specific to dietetics. The Curriculum Committee of the Department of Nutrition at ASU will approve applications to the certification program. The DPD 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.

## East Asian Studies Certificate LAEASC

COLLEGE OF LIBERAL ARTS AND SCIENCES
Center for Asian Research

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, MBA programs, or PhD programs. An earned certificate will appear on student transcripts as an East Asian Studies emphasis.

Program Requirement: The certificate curriculum includes 24 semester hours of course work:

1. 15 semester 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); and
2. nine additional semester 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, and Vietnamese. Students pursuing an East Asian 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.

Enrollment Requirements: There are no specific admission requirements other than a student's desire to learn about East Asia. A minimum grade of C 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_undergrad.html.

## Entertainment and Technology LAFMSUERE

COLLEGE OF LIBERAL ARTS AND SCIENCES
Film and Media Studies
Contact: http://film.asu.edu | fmsinfo@asu.edu | LL 641 | 480/965-6747
Description: The Entertainment and Technology Certificate is a declaration from ASU that a student has completed a course of study that includes 18 credit hours of entertainment and technology history, theory and convergence studies. It certifies that the student has had the training to analyze industry changes over time, to identify current industry trends and to develop likely entertainment and technology models and scenarios for the future.

Program Requirement: ASU students admitted to a degree program in any field of study are eligible for the Entertainment and Technology Certificate Program. 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 threecourse sequence and are taken upon completion of three lower-division Film and Media Studies courses. A minimum grade of C or better is required in each course.

Required certificate core courses (18 credit hours):

FMS 100 Introduction to Film
FMS 110 New Media, New Worlds
FMS 200 Film History
FMS 481 Entertainment Technologies
FMS 482 Entertainment Industries
FMS 483 Techno-Entertainment Convergences
Enrollment Requirements: Please contact the department for more information: http://film.asu.edu/entertech.

## Ethics Certificate LAETHCERT

COLLEGE OF LIBERAL ARTS AND SCIENCES
Department of Philosophy
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, 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 Requirement: The Certificate in Ethics consists of 18 semester hours approved by the undergraduate advisor in the Department of Philosophy. The student must take PHI 305 or 335 . At least 15 hours must be chosen from PHI 105, 304, 305, $306,307,309,310,320,335$, and (when its topic is within ethics) PHI 420 . One course outside this list, and perhaps outside the department, 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: Please contact the department for more information:
http://www.asu.edu/clas/philosophy/ethics_certificate.htm\#ethics.

## Ethnic Studies Certificate ASETHCERT

## NEW COLLEGE OF INTERDISCIPLINARY ARTS AND SCIENCES

Division of Humanities, Arts, \& Cultural Studies
Description: The minor and certificate programs in Ethnic Studies explore the study of race and ethnicity in local and transnational contexts. 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 that 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. Courses in the Ethnic Studies minor and certificate are designed to:

1. address theoretical, analytical, and practical issues relevant to understanding race, culture, and ethnicity in American society from a comparative and interdisciplinary perspective,
2. enhance the student's critical thinking and writing skills through the study of ethnicity in the U.S.,
3. develop more effective skills for working in diverse communities through integration of service-learning experiences in course content, and
4. create collaborations among faculty, students, and community members to address concrete issues facing racial and ethnic groups in the United States.

This minor and certificate are 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 minor and certificate programs will be able to think both analytically and creatively about ethnicity in the United States. The minor or certificate is strongly recommended for students who plan to enter a wide variety of jobs in business, the 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 Requirement: A certificate in Ethnic Studies is awarded for successful completion of 21 semester hours, including ETH 300 and 18 semester hours of elective courses from the approved course list. The certificate program is recommended for graduate students, nondegree students and students majoring in professional programs.

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 C or higher.

Enrollment Requirements: Please contact the department for more information: http://newcollege.asu.edu/programs/erfns/minor_cert/certificate.shtml.

## Film and Video Studies Certificate ASVIDCERT

## NEW COLLEGE OF INTERDISCIPLINARY ARTS AND SCIENCES

Department of Interdisciplinary Arts and Performance

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, as well as degrees in production, film studies, media studies, performance studies, and communication studies. Courses in the Certificate in Film and Video Studies are designed to:

1. develop astute and discriminating critics and analysts of film and media arts,
2. strengthen critical thinking through an awareness of the philosophical, aesthetic, political, and technological debates in film, media, and video studies,
3. develop knowledge of the history of film, television, and the video arts as dynamic forces of social, cultural, and political expression, and
4. develop practical skills that enable students to be competitive in film, video, television, and media-related production industries.

Program Requirement: A certificate of concentration in Film and Video Studies is awarded for the successful completion of the 21 semester hours required for the minor.

Enrollment Requirements: Please contact the department for more information: http://newcollege.asu.edu/depts_schools/iap/.

## Fire Service Management Certificate TSIMCFCERT

COLLEGE OF TECHNOLOGY AND INNOVATION

Department of Technology Management

Description: The Fire Service Management Online Certificate program prepares students for leadership and management positions in fire departments, fire brigades in private industrial firms, and fire safety divisions in private and nonprofit sectors. Students learn about the concepts and principles of fire service management and fire prevention. Emphasis is placed on the application of these concepts and principles to complex problems, encountered in contemporary organizations, which commonly face fire chiefs, and fire safety managers. Students learn the roles required to design, implement, and evaluate effective fire
service management and prevention programs. Students also learn how to lead, change, and manage fiscal responsibilities in a way that maximizes resources to provide the most effective and efficient services possible.

Program Requirement: The Fire Service Management Online Certificate program is a logical first academic step toward an Associate or Bachelor's Degree. Students earn 18 semester hours of upper division academic credit that can be transferred to an Associate or a Bachelor's degree program. Students who complete the certificate program can apply it towards the Bachelor of Applied Science Degree in Fire Service Management at ASU or used to satisfy either required or elective course requirements in other degree programs. These credits can also be transferred to other degree programs at other institutions. This is especially attractive to working firefighters in other parts of the nation or who live in other countries. Ultimately, students will be able to apply their experience to a Master of Science in Technology in Fire Service Administration.

Enrollment Requirements: Please contact the department for more information:
http://poly.asu.edu/technology/imt/fire/certificate/.

## Geographic Information Science Certificate LAGISCERT <br> COLLEGE OF LIBERAL ARTS AND SCIENCES <br> School of Geographical Sciences

Description: The Geographical Information Science (GIS) Certificate Program is a structured interdisciplinary program offered through the Graduate College. 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 Requirement: The certificate is awarded to students completing the following 19 semester hours with a grade of C (2.00) or higher.

Required Courses

CSE 100 Principles of Programming with C++ 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)

Elective (choose from the courses below) (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: Please contact the department for more information:
http://geography.asu.edu/education/degrees/ug_gis_cert.php.

## Hazardous Materials and Waste Management Certificate TSETMCERT

COLLEGE OF TECHNOLOGY AND INNOVATION

Department of Technology Management
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 ASU 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 certificate program for nondegree students, a BS degree in Environmental Technology Management with a Certificate in Hazardous Materials and Waste Management, and a Master of Science in Technology degree with a Certificate in Hazardous Materials and Waste Management.

Program Requirement: 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, the remainder of the courses may be taken in any sequence.

Enrollment Requirements: Please contact the department for more information: http://etmonline.asu.edu/.

## History and Culture ECHTYCERT

## SCHOOL OF APPLIED ARTS AND SCIENCES

Humanities and Arts
Contact: http://www.poly.asu.edu/saas/humanitiesarts/historyculture.html | 233 Santa Catalina Hall | 480-727-1526
Description: History and Culture at Arizona State University encourages students to develop their historical awareness, and their ability to use historical knowledge to make informed decisions. The program stresses cultural and information literacy. It encourages the study of historical events in their cultural context, and stresses the role of media and technology in historical study.

The philosophy of the program in History and Culture is that students should be offered an experience that integrates formal course work, independent and varied research, internships, and service opportunities. The program goal is preparing independent and effective scholars and professionals who can transition seamlessly into careers in teaching, public policy, archival work and related fields, and who are well prepared for graduate or further professional study.

Program Requirement:
Certificate (15-18 hours)

- nine semester hours of focus-area courses in their chosen track,
- six to nine semester hours of electives.

Enrollment Requirements: See advisors in the School of Applied Arts and Sciences for admission to the certificate program.

## History and Philosophy of Science Certificate LAHPSCERT <br> COLLEGE OF LIBERAL ARTS AND SCIENCES <br> School of Life Sciences

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 Requirement: The certificate requires 18 semester hours bearing a PHI or HPS prefix of which 12 semester hours must be upper-division. Within the 18 semester 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: Please contact the department for more information: http://sols.asu.edu/cbs/programs.php.

## Honors Business Modeling and Analysis BAECNCERT

## W. P. CAREY SCHOOL OF BUSINESS

Contact: http://wpcarey.asu.edu/up/current-students/academics/certificates/honors-certificate.cfm | wpcareyug@asu.edu | BA 109 | 480-965-4227

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 critical thinking and problem solving, business judgment and conceptualization of strategic solutions.

Program Requirement: The program consists of at least 24 hours of course work distributed between economics and related fields as shown below. Only courses in which a student receives a grade of " C " (2.00) or higher may be used to meet the certificate requirements. Students must meet all pre-requisites and course requirements as listed in the catalog. At least 15 hours must be ASU credit.
A. Statistics (3 hrs)

ECN 231 Honors Business Statistics
ECN 221 Business Statistics with a grade of A- or higher
STP 226 Elements of Statistics with a grade of A- or higher
B. Economic Theory (3 hrs)

ECN 214 Honors Microeconomics
ECN 212 Microeconomics Principles with a grade of A- or higher
ECN 314 Intermediate Microeconomics
C. Accounting (3 hrs)

ACC 261 (ACC 303) Honors Fundamentals of Financial Accounting
ACC 231 (ACC 230) Uses of Accounting Information I with a grade of A- or higher
ACC 315 Financial Accounting and Reporting
D. Honors Business Core (6 hrs)

Completion of at least 6 semester hours of Approved 300-level Honors Business courses for which all prerequisites have
been met. Approved courses include:
ECN 303 Honors Managerial Economics
FIN 303 Honors Finance
MKT 303 Honors Marketing Theory and Practice
MGT 303 Honors Organizational Strategies, Leadership and Behavior
SCM 303 Honors Global Supply Operations
E. Business Modeling and Analysis (3 hrs)

SCM 415 (SCM 494) Business Decision Models
F. Honors Directed Study and Creative Project (6 hrs)

WPC 492 Honors Directed Study for Business Modeling
WPC 493 Honors Creative Project for Business Modeling
Enrollment Requirements: The Certificate in Honors Business Modeling and Analysis is limited to honors students in the W. P. Carey School of Business and honors students majoring in Economics in the College of Liberal Arts and Sciences. Students must submit an application for admission.

Please contact the department for more information: http://wpcarey.asu.edu/up/current-students/academics/certificates/honorscertificate.cfm

## Informatics ESCIPCERT

IRA A. FULTON SCHOOL OF ENGINEERING
Computing and Informatics
Contact: http://sci.asu.edu/undergraduate/informatics_cert.php | sci.advising@asu.edu | 480-965-3199
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 is available to students in noncomputing majors and will provide them with an understanding of the capabilities and technologies of Informatics as it applies to domain specific problems in their field of study. 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. The applied and user-oriented focus of the degree will make these graduates attractive to such employers.

Program Requirement: This program requires 21 total hours of course work. Students will take 15 hours of required courses and will choose six hours of elective course work.

Enrollment Requirements: Must be an ASU student in good standing.

## International Business Certificate BAIBSCERT

## W. P. CAREY SCHOOL OF BUSINESS

Description: Students can expand their horizons and opportunities by learning about the global economy. The certificate is designed to provide an understanding of international business environments, principles, and operations; to provide an awareness of global social processes; to develop sensitivity to foreign cultures; and to develop competence in a foreign language. Students seeking the certificate are strongly encouraged to obtain some international experience through study in a foreign country. The W. P. Carey School has partnerships with universities in Europe, Asia and Latin America so you experience new cultures, visit new places and build intercultural and language skills. Overseas internships also are offered in conjunction with the international programs office at ASU.

Program Requirement: At least nine semester hours of approved courses in international business are required. The upper division courses specified for the certificate will be restricted to students with 56 earned credit hours, a minimum 2.5 ASU cumulative GPA and course prerequisite requirements met. Students must take either MGT 302 Principles of International Business or ECN 306 Survey of International Economics. Other international business courses from which the remaining hours are selected include:

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ECN 306 Survey of International Economics* SB, G (3)
ECN 331 Alternative Economics Systems* SB, G (3)
ECN 360 Economic Development* SB, G (3)
ECN 365 Economics of Russia and Eastern Europe* SB, G (3)
ECN 436 International Trade Theory* SB, G (3)
ECN 438 International Monetary Economics* SB, G (3)
FIN 456 International Financial Management* G (3)
MGT }302\mathrm{ Principles of International Business* G (3)
MGT 400 Cultural Factors in International Business* C, G (3)
MGT 459 International Management* G (3)
MKT }360\mathrm{ Seminar in International Business (3)
MKT }394\mathrm{ ST: Global Markets (3)
MKT }425\mathrm{ International Marketing (3)
SCM 463 Global Supply Chain Management (3)
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*W. P. Carey School of Business students may not use this course to fulfill the 60 semester hours in school general education degree requirements.

Enrollment Requirements: Please contact the department for more information: http://wpcarey.asu.edu/up/currentstudents/academics/certificates/international.cfm.

## International Studies Certificate LAINSCERT

## COLLEGE OF LIBERAL ARTS AND SCIENCES

Department of Political Science

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 Requirement: 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 semester 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 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)

POS 468 Comparative Asian Foreign Policies SB, G (3)

## Total 15 semester hours

Enrollment Requirements: Please contact the department for more information:
http://www.asu.edu/clas/polisci/undergraduate/intl-certificate.html.

## Islamic Studies Certificate LAISLCERT <br> COLLEGE OF LIBERAL ARTS AND SCIENCES <br> Department of Religious Studies

Description: Students admitted to undergraduate degree programs in any field are eligible for the Islamic Studies Certificate program. Students who complete all the requirements of their 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 societies.

Program Requirement: Students must complete a minimum total of 26 semester hours, chosen in consultation with the Islamic Studies program coordinator. A minimum grade of C (2.00) is required in each course. To earn the certificate, students must complete these requirements:

1. eight semester 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,
2. nine semester hours from REL 260 Introduction to Islam, REL 365 Islamic Civilization, and REL 366 Islam in the Modern World,
3. three semester hours taken from REL 394 (topics may vary) or REL 460 Studies in Islamic Religion (topics may vary), and
4. six semester hours drawn from an approved list of courses in Arabic, anthropology, French, geography, history, religious studies, Spanish or from other courses approved by the program coordinator.

Enrollment Requirements: Please contact the department for more information:
http://www.asu.edu/clas/religious_studies/isc.html.

## Jewish Studies Certificate LAJUDCERT

COLLEGE OF LIBERAL ARTS AND SCIENCES
Department of Religious Studies
Description: The Jewish studies program is designed with the following goals in mind:

1. to examine the history and culture of the Jews,
2. to provide a model for interdisciplinary teaching and research,
3. to generate and facilitate research on Judaica,
4. to provide the community with programs, courses, and research furthering the understanding of Judaica, and
5. to stand as an example of the university's commitment to a program of meaningful ethnic studies on a firm academic base.

Program Requirement: To complete the Certificate in Jewish Studies, a student must successfully complete seven approved courses in Jewish Studies with a grade no lower than a C in any course. Students should declare themselves as Jewish Studies candidates as early as possible in their program of study, and accomplish the following prior to graduation:

1. Formal declaration of intent through the submission of the Certificate in Jewish Studies Application,
2. 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: Religious Studies, History, Humanities, Social Studies, or Literature; and two courses of the student's choice in any Jewish Studies related subject,
3. Petition for receipt of the Certificate by notifying the Jewish Studies Office upon completion of courses.

Enrollment Requirements: Please contact the department for more information:
http://www.asu.edu/clas/jewishstudies/certificateinfo.htm.

## Latin American Studies Certificate LALASCERT

COLLEGE OF LIBERAL ARTS AND SCIENCES
School of International Letters and Cultures

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 Schools of Human Evolution and Social Change and International Letters and Cultures (Spanish and Portuguese); and Transborder Chicana/o and Latina/o Studies offer courses that combine to make up the interdisciplinary certificate.

Program Requirement: Students must complete 30 semester hours of upper-division courses from the above departments/colleges with a concentration in Latin America-15 semester hours in the major subject and 15 semester 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.

Enrollment Requirements: For more information, contact Cynthia Tompkins at the School of International Letters and Cultures via e-mail at cynthia.tompkins@asu.edu or by phone at 480/965-6446. Please see the school's Web page for more information: http://www.asu.edu/clas/latin/undergradcertificate.htm.

## Leadership and Ethics Certificate PPLDECERT

COLLEGE OF PUBLIC PROGRAMS
School of Public Affairs

Description: The School of Public Affairs, in conjunction with the Lincoln Center for Applied Ethics, offers a 15-semester-hour Leadership and Ethics Certificate program. The certificate prepares students for positions of leadership and responsibility in the university, in their communities, and throughout their careers in business, government, and society. Students 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. The program provides students with an understanding of change processes as they affect individuals, groups, and organizations throughout society, so that students might better learn to cope with and direct change in positive and beneficial ways.

## Program Requirement:

D PAF 494 ST: Building Leadership Skills (3)
D PAF 494 ST: Leadership and Change (3)
D PAF 494 ST: Leadership Capstone (3)
D PHI 394 ST: Ethics and Justice (3)
Elective (3)

Total 15

Enrollment Requirements: Students interested in earning the certificate must make formal application to the School of Public Affairs office. This certificate is available to all admitted undergraduate, regular or nondegree students who have completed 45 semester hours of credit and who have a cumulative GPA of 2.67 or higher. Students may begin taking courses before they formally register for the certificate; however, they should apply for admission as soon as possible.

Please contact the department for more information: http://spa.asu.edu/programs/Leadership\&Ethics.htm.

## Lesbian, Gay, Bisexual, and Transgender Certificate PPLGBTCERT <br> COLLEGE OF PUBLIC PROGRAMS

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.

Lesbians, gay men, bisexuals, and transgendered (LGBT) people play important roles as colleagues, clients, parents, children, siblings, neighbors, employees and 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; 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; and practical experience in utilizing course work knowledge in the community through an internship or community service project.

Program Requirement: The certificate requires 15 semester hours; a minimum of 12 must be upper division. The two required courses are Introduction to Lesbian, Gay, Bisexual, and Transgender Studies and the capstone experience. The remaining nine hours are electives from an approved list.

Enrollment Requirements: Please contact the department for more information: http://www.asu.edu/copp/bis/.

## Literature, Writing, and Film ECLWFCERT

SCHOOL OF APPLIED ARTS AND SCIENCES
Humanities and Arts
Contact: http://www.poly.asu.edu/saas/humanitiesarts/litfilm.html | 233 Santa Catalina Hall | 480-727-1526
Description: Literature, Writing, and Film at Arizona State University offers students the opportunity to develop their skills in professional, academic and imaginative writing, as well as their interpretation of literary and non-literary texts and critical thinking. The focus of the program is on effective writing, critical thinking, and sophisticated reading of literary and non-literary texts. The program stresses cultural and information literacy. It encourages the study of texts in their cultural context, and stresses the role of media and technology in the reading process.

The philosophy of the program in Literature, Writing, and Film is that students should be offered an experience that integrates formal course work, independent and varied research, internships, and service opportunities. The program goal is to prepare independent and effective scholars and professionals who can transition seamlessly into careers in writing and teaching, and who are well prepared for graduate or further professional study.

## Program Requirement:

Certificate (15-18 hours)

- nine semester hours of focus-area courses in their chosen track,
- six to nine semester hours of electives.

Enrollment Requirements: See advisors in the School of Applied Arts and Sciences for admission to the certificate program.

# Medieval and Renaissance Studies Certificate LAMRSCERT <br> COLLEGE OF LIBERAL ARTS AND SCIENCES 

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, 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 Requirement: 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 to eight semester hours of classical Latin and six to eight semester 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),
2. six to eight semester hours of course work in medieval and renaissance studies outside the major discipline,
3. three semester hours of thesis on a topic concerning the Middle Ages or Renaissance. The thesis may be used to fulfill the honors college thesis requirement for students enrolled in the Barrett, the Honors College, and
4. a minimum of a C (2.00) average in all course work leading to the certificate.

Enrollment Requirements: Please contact the department for more information:
http://www.asu.edu/clas/acmrs/web_pages/academic_programs/ac_pro_certificates.html.

## Multimedia Writing and Technical Communication ECTWCCERT <br> SCHOOL OF APPLIED ARTS AND SCIENCES

Description: Through the Multimedia Writing and Technical Communication Program, students learn how to produce, design, and manage information, using both traditional and developing technologies.

Program Requirement:

TWC 501 Principles of Technical Communication (3)

Two of the following courses (6)
TWC 511 Principles of Visual Communication (3)
TWC 521 Principles of Writing with Technology (3)
TWC 531 Principles of Technical Editing (3)

Three 500-level TWC courses at least two of which must be genre courses, such as TWC 543 Proposal Writing or TWC 547
Business Reports (9)

Total 18
Enrollment Requirements: Please contact the department for more information: http://techcomm.asu.edu/degrees.shtml.

## Nonprofit Leadership and Management: American Humanities Certificate PPNPYCERT

COLLEGE OF PUBLIC PROGRAMS
School of Community Resources and Development
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 \& Girls Clubs, Boy Scouts of America, Camp Adventure, Camp Fire USA, Corporation for National and Community Service, Girls Inc., Girl Scouts of the USA, 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, and YMCA of the USA.

Program Requirement: 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 baccalaureate degree.

## Required Courses:

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)
NLM 420 American Humanics Institute (2)
NLM 430 Managing Nonprofit Organizations (3)
NLM 463 Senior internship (12)

Minimum total 30

* NLM 320 is taken four semesters, for one semester hour each term.

Enrollment Requirements: Applications are accepted throughout the year. Please see the department Web page for more information: http://www.asu.edu/copp/nonprofit/edu/ah.htm.

To apply, contact:

Senior Program Coordinator
American Humanics
School of Community Resources \& Development
University Center (mail code: 4020)
411 N. Central Ave., Suite 550
Phoenix AZ 85004-0690
Phone: 602/496-0550
Fax: 602/496-0953
E-Mail: scrd@asu.edu

## Philosophy, Politics, and Law Certificate HOPPLCERT

 BARRETT, THE HONORS COLLEGEDescription: Students enrolled in Barrett may pursue the Certificate in Philosophy, Politics, and Law (PPL). 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 Requirement: The concentration comprises six courses (18 semester 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 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 PPL 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 (PPL) faculty and approval by the PPL Council. Please contact the department for more information: http://honors.asu.edu/w-Philosophy__Politics_and_Law_Certificate_Program-179.aspx.

# Public Administration and Public Management Certificate PPPAFCERT 

COLLEGE OF PUBLIC PROGRAMS
School of Public Affairs

Description: The School of Public Affairs offers a 15-semester-hour Public Administration and Public Management Certificate program. The certificate prepares students for leadership positions and careers in governmental agencies and nonprofit associations.

Program Requirement:

D PAF 300 Public Management and Administration (3)
D PAF 340 Public Management and Policy (3)
D PAF 420 Public Leadership (3)
D PAF 460 Public Service Ethics (3)
Elective (3)

Total 15

Enrollment Requirements: Students interested in earning the certificate must make formal application to the School of Public Affairs office. Students may begin taking courses before they formally register for the certificate; however, they should apply for admission as soon as possible. Applications can be downloaded at spa.asu.edu/pdffiles/undergradcertificate.pdf.

Please contact the department for more information: http://spa.asu.edu/programs/undergrad_certificate.htm.

## Religion and Conflict Certificate LARELCERT

COLLEGE OF LIBERAL ARTS AND SCIENCES

Description: The certificate is open to students in any major, and 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), 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 credits): courses in this category provide students specific regional knowledge of how religion has been implicated in human conflict. Required coursework in at least 2 different regions fosters a comparative understanding of the dynamics of religion and conflict in historical and global contexts
- Political component (3 credits): 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 credits): 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 credits): any approved/qualifying course may be used as an elective to fulfill remaining requirements toward the total number of credit hours and to meet the interdisciplinary requirement.


## Religion and Conflict Course Offerings

The following regularized courses may be taken to complete certificate requirements. Not all courses are offered each semester. However, each semester some special topics courses (usually designated 394, 494 or 498) may be taken to fulfill certificate requirements as approved by the certificate director.

Regional Component (6 credit hours representing two different regions
Religion and Europe:
HST 350 Later Middle Ages
HST 352 Europe’s Reformation
HST 355 Total War and the Crisis of Modernity
HST 361/REL 374 Witchcraft and Heresy in Europe
REL 377 Religion in Russia
REL 471 Reformation and Modern Christianity
Religion and the Middle East:
ARB 331 Arabic and Islamic Culture/Literature
ARB 341/REL 368 Quran Text and Women
GCU 328 Geography: Middle East/North Africa
HST 372 Modern Middle East

Religion and the United States:
HST 315 American Politics
REL 321 Religion in America
REL 327 American Jews in U.S. Politics
SOC 394/REL 386 America and the Holocaust*

Religion in Africa:
GCU 328 Geography: Middle East/North Africa
POS 359 Faith \& Politics in Africa*

Religion in Asia:
HST 352 Chinese Cultural History
REL 357 Theravada Buddhism in South and S.E. Asia
REL 377 Religion in Russia
Political Component (3 credit hours)

HST 315 American Politics
HST 355 Total War and the Crisis of Modernity
HST 372 Modern Middle East
POS 359 Faith and Politics in Africa*
POS 364 National Security/International Terrorism*
REL 327 American Jews in U.S. Politics
REL 364 Islam and World Affairs REL 379 Religion, Nationalism and Ethnic Conflict
REL 364 Islam and World Affairs
REL 379 Religion, Nationalism and Ethnic Conflict
REL 380 Theology of Terror: Bin Laden and others
REL 388 Religion, Ethics and International Politics
SGS 324/REL 480 Religion and Global Politics*
Cultural Component (3 credit hours)
ARB 331 Arabic \& Islamic Culture/Literature
ARB 341/REL 368 Quran Text and Women

FMS 474/REL 313 Anti-Semitism in Modern Times
HST 352 Europe's Reformations
HST 361/REL 374 Witchcraft and Heresy in Europe
HST 452 Chinese Cultural History
POR 497 Afro-Brazilian Maroon Poetry
REL 201 Religion and the Modern World
REL 321 Religion in America
REL 352 Modern Buddhism
REL 357 Theravada Buddhism: South/S.E. Asia
REL 366 Islam in the Modern World
REL 377 Religion in Russia
REL 381 Religion and Moral Issues
REL 392 Religious Encounters in Post-colonial and Globalized Space
REL 461 Different Voices within Contemporary Islamic Discourse
REL 471 Reformation and Modern Christianity
REL 481 Religion and Bioethics
REL 482 Religion, Violence and Conflict resolution
REL 483 Religion and Science
SOC 394/REL 386 America and the Holocaust*
WST 377 Women and Violence*

## Electives (6 hours)

Remaining credit hours may be filled by taking courses listed above or other courses, including special topic courses, as approved by the certificate director.

Examples of special topics courses taught in the last few years include:
POS 394/HEB 394 War and Peace in the Middle East*
REL 394 Religion and the American Presidency
SGS 394 Violence, Conflict, and Human Rights*
WST 498 Women, Religion, and Global Violence*

## Interdisciplinary Requirements

Of the 18 total credits taken to fulfill the certificate, at least three credits from the social sciences (SOC, POS, SGS or WST, noted with an "*") and six credits from the humanities (ARB, HST, POR or REL). The interdisciplinary requirement can be met through any course listed above, except GCU 328.

* Denotes social science course.

Enrollment Requirements: Any ASU student may pursue the Religion and Conflict certificate. A minimum grade of "C" (2.00) is required for a course to fulfill a certificate requirement. Please complete the registration form, and e-mail it to the certificate director. Please direct questions about the program to the certificate director.

## Russian and East European Studies Certificate LAREECERT <br> colLEge of Liberal arts and sciences

Description: Undergraduate students may complete an interdisciplinary certificate program in Russian and East European studies while pursuing a bachelor's degree in their chosen field.

Program Requirement: The requirements for the Russian and East European Studies Certificate comprise (1) three years (22 semester hours) of Russian or another Eurasian or East European language and (2) 30 upper-division semester 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 semester hours must be outside the School of International Letters and Cultures (i.e., non-RUS and non-FLA courses). Fulfillment of these requirements is certified by the Russian and East European Studies Center and is recognized on the transcript by a bachelor's degree with Major in [Discipline], and 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 or East European language and area studies. A student with a major in any department may pursue this certificate.

Enrollment Requirements: Please contact the department for more information:
http://www.asu.edu/ipo/reesc/certificate/certificate.html.

## Small Business and Entrepreneurship Certificate BASMBCERT <br> W. P. CAREY SCHOOL OF BUSINESS

Description: Students learn how to launch their own business or work with small or start-up operations. Courses include small business and entrepreneurship and business plan development. Classroom work is complemented by frequent interaction with successful founders and leaders of entrepreneurial ventures.

Program Requirement: This certificate in Small Business and Entrepreneurship is available only to business majors at ASU. The certificate requires 15 semester hours of classes, including the following six semester hours:

MGT 440 Small Business and Entrepreneurship (3)
MGT 445 Business Plan Development (3)
The remaining nine semester 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) or higher.

Enrollment Requirements: Please contact the department for more information: http://wpcarey.asu.edu/up/currentstudents/academics/certificates/small_business.cfm.

## Southeast Asian Studies Certificate LASALCERT

COLLEGE OF LIBERAL ARTS AND SCIENCES

Center for Asian Research
Description: The Certificate in Southeast Asian Studies can supplement a bachelor's degree, demonstrating knowledge of a Southeast Asian Language as well as 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 for professional programs in international law or business. Recent graduates have gone on to enter medical school, MBA programs and PhD programs. An earned certificate will appear on student transcripts as a Southeast Asian Studies Emphasis.

Program Requirement: A Certificate in Southeast Asian Studies is available to any undergraduate student. The certificate program requires a corequisite two-year sequence in a Southeast Asian language (Indonesian, Thai, or Vietnamese) and 18 semester hours, including the courses listed below.

The ASU curriculum includes:

ASB/GCU/HST/POS/REL 240 Introduction to Southeast Asia
ASB 325 Peoples of Southeast Asia
HST 391 Modern Southeast Asia
two electives (selected from an approved course list)

Enrollment Requirements: There are no specific admission requirements other than a student's desire to learn about Southeast Asia. A minimum grade of C 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.

## Spa Management Certificate ECEXWCERT

SCHOOL OF APPLIED ARTS AND SCIENCES
Department of Exercise and Wellness
Description: The Certifcate in Spa Management program was designed and implemented in response to a rapidly growing spa industry, which has identified a real need for more directors, assistant directors, and supervisors, and for management candidates with formal education and training in spa administration.

Program Requirement: The Spa Management Certificate program is a nondegree, 34 -semester-hour program designed to prepare students for careers in spa administration. he required courses meet a comprehensive list of core competencies identified by the spa industry and an advisory committee of spa directors. This certificate is recognized by the International Spa Association, and it significantly enhances a graduate's opportunity for placement and advancement within the industry.

Admission to the certificate program is based on a rubric that includes higher education credits, GPA, work experience, résumé, references, and a letter of intent.

## Required Courses:

BUA 381 Small Business Accounting and Finance (3)
BUA 382 Small Business Sales and Market Development (3)
BUA 383 Small Business Working Relationships (3)
EXW 325 Fitness for Life (3)
EXW 400 Stress Management for Wellness (3)
EXW 484 Exercise and Wellness Internship (6)
EXW 498 Pro Seminar: Spa Management I (2)
HHS 300 Overview of Complementary Health Systems (3)
NTR 345 Development of Healthy Cuisines (3)
OMT 494 Organizational Leadership (3)
WED 165 Overview of Massage Therapy* (2)

Total 34

* This course is offered through Chandler-Gilbert Community College.

Students must receive a grade of C (2.00) or higher in every course to earn the certificate. Any course in which a student fails to earn a C (2.00) or higher must be repeated.

Enrollment Requirements: Admission to the Spa Management Certification Program is limited. Each applicant is evaluated based on a rubric that includes:

1. Years of higher education completed and cumulative GPA,
2. Experience in the spa industry or a wellness-related field,
3. Résumé,
4. Three references,
5. Letter of intent

Please contact the department for more information: http://www.poly.asu.edu/saas/wellness/spa/.

# Special Events Management HSRTMCERT 

COLLEGE OF PUBLIC PROGRAMS

School of Community Resources and Development
Contact: http://chs.asu.edu/programs/rec_tour_mgmt/sem/ | COHS@asu.edu | 602/543-6600

At the outset of the 2008-09 academic year, this degree/certificate/major was offered by the College of Human Services on ASU's West campus. As a result of the academic reorganization that occurred during the 2008-09 academic year, this degree/certificate/major program was moved to the New College of Interdisciplinary Arts and Sciences at the West campus.

Description: The Special Events Management Certificate is a career enhancement program offered to non-degree seeking students or those who already have a degree from an accredited university (any major) or students currently pursuing a bachelor's degree (any major).

Program Requirement: The certificate requires a total of 21 semester hours, 15 semester hours of required core courses and six 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 (2.00) or higher. An application to the program is required.

Required Core Courses (15 credit hours)
RTM 486 Special Event Management* (3)
RTM 303 Programming Recreation and Tourism Services (3)
OR: RTM 320 Talent and Entertainment Concepts (1)
RTM 321 Event Protocol, Ethics and Etiquette (1)
RTM 322 Special Event Programming (1)
RTM 323 Special Event On-Site Operations (1)
RTM 324 Festival Site Design (1)
RTM 325 Working with Subcontractors and Vendors (1)
RTM 326 Sponsorship (1)
RTM 327 Creative Event Revenue Production (1)
RTM 328 Accounting for Special Events(1)
RTM 388 Business Practices for Special Events Management (3)

Electives (Select six credit hours)
RTM 373 Leisure, Travel and Tourism (3)
RTM 345 Meeting and Convention Planning (3)
RTM 404 Marketing Recreation and Tourism (3)
RTM 451 Grant Writing for Human Service Professionals (3)
RTM 453 Volunteer Management in Human Service Organizations (3)
RTM 475 Entrepreneurial Recreation and Tourism (3)
RTM 487 Special Events Advanced (3)
*RTM 486 must be taken prior to any other RTM core courses except 303.
Enrollment Requirements: Please contact the department for more information:
http://chs.asu.edu/rec_tour_mgmt/certificate/sem.php.

Symbolic Systems Certificate LAPHICERT<br>COLLEGE OF LIBERAL ARTS AND SCIENCES<br>Department of Philosophy

Description: The Department of Philosophy offers 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 Requirement: The Certificate in Symbolic Systems consists of 28 semester hours approved by an advisor in the Department of Philosophy and divided evenly between computer science and engineering, psychology, and philosophy as follows:

CSE 200, 210, and 240,
PSY 230 and 290 and either PSY 323, 324, or 437, and
one of either PHI 319, or 333, either PHI 315 or 317, and either PHI 312 or 314.

Students must satisfy the prerequisites for the listed courses. With written approval from the director of undergraduates studies in the Department of Philosophy, one substitution course from outside this list may be allowed. All courses must be passed with a minimum grade of $\mathrm{C}(2.00)$.

Enrollment Requirements: Please contact the department for more information:
http://www.asu.edu/clas/philosophy/symb_sys_certificate.htm\#symbolic_sys.

## Technology Entrepreneurship ESTNECERT

## IRA A. FULTON SCHOOL OF ENGINEERING

Entrepreneurial Programs Office
Contact: http://www.fulton.asu.edu/entrepreneurship/ | info.entrepreneur@asu.edu | BYENG | 480/965-2825

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 on engineering, and who has little or no prior business education.

Program Requirement: This ASU 15-credit-hour certificate program is limited to students in the Ira A. Fulton School 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 and only prior to the fall semester of each academic year.

FSE301: Entrepreneurship for Engineers (Prerequisite: Junior standing IN A BACHELOR'S PROGRAM IN the Ira A. Fulton School of Engineering)

Once admitted to the cohort program, students must complete the certificate according to the following schedule:

Fall:

FSE400: Creating and Launching a Technology Venture (Prerequisite: FSE301 and admission to certificate program)
FSE401: Intellectual Property for a Technology Venture (Prerequisite: FSE301 and admission to certificate program)
Spring:
FSE402: Operating a Technology Venture (Prerequisite: FSE301 and admission to certificate program)
FSE403: Entrepreneurship Practicum (Prerequisite: FSE301 and admission to certificate program)

Enrollment Requirements: The qualifications for admission to the Certificate Program in Technology Entrepreneurship are junior standing in a bachelor's program in the Ira A. Fulton School of Engineering (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,
2. a live interview with the selection committee, which consists of at least one faculty, one EP Advisor 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: http://www.fulton.asu.edu/fulton/school/entrepreneurship/epobusiness.php.

## Translation Certificate LASPACERT

COLLEGE OF LIBERAL ARTS AND SCIENCES
School of International Cultures and Letters

Description: The Translation Certificate program is designed to provide the advanced training required for professional translation in both public and private sectors, preparation for the rigorous examinations required by national and international agencies, and training as an ancillary skill for professional fields, such as international business, public health and medicine, and law, in accordance with guidelines recommended by the American Translators' Association.

## Program Requirement:

Certificate Requirements
The certificate program consists of the following requirements:
Prerequisites
FLA 400 Linguistics SB (3) or SPA 400 Introduction to Spanish Linguistics (3) or equivalent SPA 412 Advanced Conversation and Composition G (3)

Required
FLA 401 Translation Theory and Practice (3)
In-Service Practicum

FLA 484 Internship (2)
Also required are nine hours of applied translation electives in specialized areas chosen from the following courses:

FLA 481 Technical and Scientific Translation (3)
FLA 482 Business and Financial Translation (3)
FLA 483 Medical and Legal Translation (3)
FLA 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. an academic year at a university in both a Spanish-speaking country and an English-speaking country, extensive work experience using Spanish and English, or demonstrated bilingual writing competence in English and Spanish.

Please contact the department for more information: http://www.asu.edu/clas/silc/spa/certrans.htm.

## Women and Gender Studies Certificate LAWSTCERT <br> COLLEGE OF LIBERAL ARTS AND SCIENCES <br> Women and Gender Studies Program

Description: 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. The certificate program is equivalent to an interdisciplinary minor.

Program Requirement: The certificate program consists of 18 semester 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 300) and WST 377 or 378 and an additional 12 semester hours from the list of approved Women and Gender Studies courses.

Enrollment Requirements: Please contact the department for more information: http://wgs.asu.edu/students/index.html.

Women's Studies Certificate ASWSTCERT<br>NEW COLLEGE OF INTERDISCIPLINARY ARTS \& SCIENCES<br>Division of Humanities, Arts, \& Cultural Studies

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. The Women's Studies Certificate program is recommended for graduate students, nondegree students, and students majoring in professional programs.

Program Requirement: The Women's Studies certificate consists of 18 semester hours of course work. Students are required to choose three courses (nine semester hours) from the following core: WST 100 or WST 300; WST 350, WST 376, WST 457, or WST 498. Additionally, students are required to select a total of nine semester hours from courses in the following areas: global studies, representation and culture studies, gender studies and applied women's studies.

Core Requirements (nine hours)
WST 100 Women and Society SB, C (3) OR WST 300 Women in Contemporary Society SB, C (3)
WST 350 Race, Class, and Gender SB, C (3)
WST 376 Feminist Theory L, C (3)
WST 457 Women, Cultures and Societies SB, G (3)
WST 498 PS: Theory and Method in Women's Studies L (3)

Additional Requirements (nine hours)
Select nine semester hours from three of the four following areas.
Global Studies Courses:
WST 330 Women on the Borderlands (3)
WST 390 Women and World Religions L/SB, G (3)
WST 475 Women of the Diaspora Across Cultures HU, G (3)
WST 483 Women writers Across Cultures HU, G (3)
WST 487 Gender and International Development SB, G (3)

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Representation and Cultural Studies Courses:
    WST 320 Women in Popular Culture HU, C (3)
    WST 370 Chronicling Women's Lives HU, C (3)
    WST 431 Women and Film L, G (3)
    WST 467 Ethnic Women Writers (L/HU, C)
    WST 473 Latina/Chicana Representation (SB, C)
Gender Studies Courses:
    WST 276 Feminist foundations: Going to the Sources H (3)
    WST 333 Critical Perspectives on Sexuality SB, C (3)
    WST 444 Women and Health SB (3)
Applied Women's Studies Courses:
    WST 482 Gender Issues in Education (3)
    WST }484\mathrm{ Internship (3)
    WST }485\mathrm{ Women, Gender, and Leadership SB, C (3)
    WST 499 Individualized Instruction (3)
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Enrollment Requirements: Please contact the department for more information:
http://newcollege.asu.edu/programs/womens_studies/minor_cert/certificate.shtml.

## Writing Certificate (Liberal Arts \& Sciences) LAENGCERT <br> COLLEGE OF LIBERAL ARTS AND SCIENCES <br> Department of English

Description: The Writing Certificate is a declaration from ASU that a student has completed a course of study including 19 semester hours of advanced writing instruction. It certifies that the student has had the training to be a successful writer in his or her chosen profession.

Program Requirement: The Writing Certificate consists of 19 semester hours. 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 GPA of 3.00 .

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)

Total 16

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: Please contact the department for more information: http://www.asu.edu/clas/english/writingcertificate/.

# Writing Certificate (New College) ASWRTCERT 

NEW COLLEGE OF INTERDISCIPLINARY ARTS \& SCIENCES

Division of Humanities, Arts, \& Cultural Studies

Description: The Department of Language, Cultures, and History offers a program for students enrolled in any unit of any college at ASU leading to a certificate in nonfiction and disciplinary writing. 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.

Program Requirement: Comprised of a minimum of 19 semester hours, the Writing Certificate program combines intensive course work, of which at least 12 semester hours must be upper division, a possible internship, or a capstone project in the student's major, and an exit portfolio. Several special aspects make it possible to combine these credits with general studies or major requirements.

Capstone Project: A capstone writing project in the student's major (or AMS 498) or an approved course from the student's major.
Writing Certificate Exit Portfolio: Students will assemble a portfolio of writing that demonstrates their grasp of the skills presented during their course of studies, for which they will earn another semester hour.

Enrollment Requirements: To gain admission to the Writing Certificate Program, students must demonstrate fundamental writing skills through the completion of English Composition 101/102, or 107/108, or 105 (with grades of B 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.

Please contact the department for more information: http://newcollege.asu.edu/programs/english/minor_certs/writing.shtml.

# Undergraduate Degrees (Program Descriptions) 

## APPLIED ARTS AND SCIENCES, SCHOOL OF

Applied Biological Sciences (Applied Biological Sciences) (BS) TSABSABS<br>SCHOOL OF APPLIED ARTS AND SCIENCES, POLY<br>Contact: http://www.poly.asu.edu/saas/appliedbiologicalsciences/ | appliedbiologicalsciences@asu.edu | WANER 340 | 480/7271444<br>Program Description: The Department of Applied Biological Sciences offers rigorous and practical programs in applications of the biological sciences, including the applied biological sciences concentration. Consistent with a polytechnic vision, programs involve extensive student interaction with faculty through experience-based learning activities, including laboratories, field trips, internships, and faculty-guided research and service-learning projects. 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, the surrounding ecosystems and the landscape of the greater Phoenix area.

## Language Requirement: N | Program Fee: N

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 also prepares graduates to succeed in graduate and professional schools in disciplines such as animal health, environmental biotechnology, medicine, dentistry, physical therapy, ecology, horticulture, and wildlife biology.

## Applied Biological Sciences (Secondary Education in Biology) (BS) TSABSSBS

 SCHOOL OF APPLIED ARTS AND SCIENCES, POLYContact: http://www.poly.asu.edu/saas/appliedbiologicalsciences/ | appliedbiologicalsciences@asu.edu | WANER Third Floor | 480/727-1444

Program Description: The applied biological sciences/secondary education concentration, under the BS in Applied Biological Sciences degree, qualifies students for State of Arizona Certification in Secondary Biology Education. Students in this program will have advisors in both the Department of Applied Biological Sciences and the School of Educational Innovation and Teacher Preparation.

## Language Requirement: N | Program Fee: N

Career Opportunities: Graduates can pursue numerous entry-level careers in biology. Specific careers include teach secondary education, wildlife and restoration ecology, and urban horticulture. Numerous employment opportunities exist in both the 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, environmental biotechnology, medicine, dentistry, physical therapy, ecology, horticulture, and wildlife biology.

## Applied Biological Sciences (Urban Horticulture) (BS) TSABSUBS

SCHOOL OF APPLIED ARTS AND SCIENCES, POLY
Contact: http://www.poly.asu.edu/saas/appliedbiologicalsciences/ | appliedbiologicalsciences@asu.edu | WANER Third Floor | 480/727-1444

Program Description: The urban horticulture concentration, under the BS in Applied Biological Sciences degree, emphasizes the relationship of plants and people in city environments. Set in a unique southwestern desert location, the program teaches urban horticulture students how to practice principles and develop skills that help to create aesthetically pleasing urban environments. This approach is coupled with an appreciation of environmental conservation and stewardship.

Career Opportunities: Graduates can pursue numerous entry-level careers in biology. Specific careers include wildlife and restoration ecology, urban horticulture, and secondary education. Numerous employment opportunities exist in both the 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, environmental biotechnology, medicine, dentistry, physical therapy, ecology, horticulture, and wildlife biology.

# Applied Biological Sciences (Wildlife and Restoration Ecology) (BS) TSABSRBS 

SCHOOL OF APPLIED ARTS AND SCIENCES, POLY
Contact: http://www.poly.asu.edu/saas/appliedbiologicalsciences/ | appliedbiologicalsciences@asu.edu | WANER Third Floor | 480/727-1444

Program Description: The wildlife and restoration ecology concentration, under the BS 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. The reconstruction of degraded ecosystems to improve ecological structure and function, and to meet societal needs for sustainable and functional ecosystems is also emphasized.

Language Requirement: $\mathrm{N} \mid$ Program Fee: N
Career Opportunities: Graduates can pursue numerous entry-level careers in biology. Specific careers include wildlife and restoration ecology, urban horticulture, and secondary education. Numerous employment opportunities exist in both the 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, environmental biotechnology, medicine, dentistry, physical therapy, ecology, horticulture, and wildlife biology.

## Applied Psychology (BS) ECPSYBS

SCHOOL OF APPLIED ARTS AND SCIENCES, POLY
Contact: http://www.poly.asu.edu/saas/appliedpsych/ | SUTON, Second Floor | 4807271177
Program Description: This major offers a traditional psychology core leading to graduate school preparation and/or to applications in human factors with emphasis on human-computer interaction, aviation, or manufacturing. The rigor of the major also provides strong preparation for further graduate study in psychology. The program serves students in other Polytechnic campus programs such as manufacturing engineering technology, aeronautical management technology, industrial technology and business administration.

Language Requirement: N | Program Fee: N
Career Opportunities: Most careers in psychology require completing a master's or a PhD degree, but there are some opportunities for employment in applied areas with good training at the bachelor's degree level. Such positions may involve working as a research assistant or working in some aspect of human factors. For example, there is a pressing need for people who can help evaluate and improve the usability of products and software. Have you had difficulty using a web site? These sites can be improved by considering the way people think. The Applied Psychology program aims to provide the background and skills necessary to assist in such work.

## Exercise and Wellness (Exercise and Wellness) (BS) ECEXWBS

SCHOOL OF APPLIED ARTS AND SCIENCES, POLY
Program Description: A degree in Exercise and Wellness provides students with the knowledge, skills, and professional expertise to assist individuals across the life span in adopting physically active and healthy behaviors. Such behaviors lead to increased fitness, wellness, and optimal health. Students are exposed to the latest research and practices designed to enhance physical activity and wellness, including both laboratory and field experiences. One of the most unique aspects of the Exercise
and Wellness program is an outstanding internship program that provides preprofessional experience in all segments of the fitness, wellness, and health industry throughout the metropolitan Phoenix area.

## Language Requirement: N | Program Fee: N

Career Opportunities: Opportunities range broadly across the several sectors of the industry related to fitness, wellness, and the health promotion professions. Those settings include work site (corporate), health promotion/fitness, clinical/medical rehabilitation programs, community agencies and programs, and private health/fitness clubs and spas. The degree is also ideal preparation for advanced study in such health professions as cardiopulmonary rehabilitation, athletic training, and physical therapy, as well as graduate study in exercise and wellness or physical activity nutrition and wellness.

## Exercise and Wellness (Health Promotion) (BS) ECEXWHBS

SCHOOL OF APPLIED ARTS AND SCIENCES, POLY
Contact: mattingl@asu.edu | 480/727-1945
Program Description: The Bachelor of Science degree in Exercise and Wellness with a concentration in health promotion provides students with the knowledge, skills, and professional expertise to assist individuals across their life span in adopting healthy lifestyles. Students are exposed to the latest research and practices designed to encourage behavioral changes that foster health and wellness. A unique aspect of the program is the outstanding internship opportunities which offer preprofessional experience in all segments of the health, health promotion, and health education and wellness professions throughout the metropolitan Phoenix area.

## Language Requirement: N | Program Fee: N

Career Opportunities: Career opportunities range broadly across the several sectors of the wellness industry and health promotion professions. Some examples include: Work site (corporate) health promotion, clinical and medical health promotion and educational programs, and community and governmental health agencies and programs. This degree also provides preparation for advanced study in such health professions as governmental health agencies, public health, and graduate study in health promotion.

## History and Culture (BA) ECHSTCULBA

SCHOOL OF APPLIED ARTS AND SCIENCES, POLY
Contact: www.poly.asu.edu/saas/humanitiesarts | BELL J1 | 480/727-1526
Program Description: The Bachelors of Arts (BA) degree in History and Culture focuses on public policy, archival work, Southwest history, and related fields. Six degree tracks are available: 1) archival preservation and digital media, 2) environmental history and culture, 3) history and culture of the American southwest, 4) history and philosophy of science and technology, 5) history and public policy, and 6) history for secondary teachers.

Language Requirement: $\mathrm{N} \mid$ Program Fee: N
Career Opportunities: The BA in History and Culture prepares scholars and teachers for graduate or professional study, and for 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, presenting clear and logical arguments. With these skills graduates of the 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.

## Literature, Writing and Film (BA) ECLWFBA

SCHOOL OF APPLIED ARTS AND SCIENCES, POLY
Contact: http://www.poly.asu.edu/saas/humanitiesarts/ | BELL J1 | 480/727-1526
Program Description: The Bachelor of Arts (BA) in Literature, Writing, and Film degree program focuses on effective writing, critical thinking, and sophisticated reading of literary and nonliterary texts. Six degree tracks are available: 1) English for
secondary teachers; 2) imaginative writing, literature, and digital publishing; 3) literature and film; 4) prelaw; 5) writing and recording family history; and 6) writing for special purposes.

## Language Requirement: N | Program Fee: N

Career Opportunities: The BA program in Literature, Writing, and Film 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, marketing, lobbying, program management, editing, reporting, public relations, health care, social work, government, nonprofit organizations, and financial services.

## Multimedia Writing and Technical Communication (BS) ECTWCBS

SCHOOL OF APPLIED ARTS AND SCIENCES, POLY
Contact: http://techcomm.asu.edu/
Program Description: The Bachelor of Arts in Multimedia Writing and Technical Communication is the only undergraduate technical communication degree program available in the state of Arizona. Multimedia writing is writing that incorporates graphics, sound, design, and media. Technical communication is applied workplace communication that makes technical information understandable and available to many audiences. In the multimedia writing and technical communication program, students learn how to produce, design, and manage information using both traditional and developing technologies.

## Language Requirement: N | Program Fee: N

Career Opportunities: The Bureau of Labor Statistics estimates that the need for writers and editors will increase by 25 percent over the next five years. Software and electronics companies, media corporations, financial institutions, government agencies, nonprofits and other industries are areas that will see an increased demand for writers. Students in the program will prepare for careers as technical writers, technical editors, Web page and intranet page designers, multimedia designers, desktop publishers, publications managers and information designers.

## Nutrition (Dietetics) (BS) ECNTRDBS

## SCHOOL OF APPLIED ARTS AND SCIENCES, POLY

Contact: http://www.poly.asu.edu/saas/nutrition/ | nutrition@asu.edu | HSC 1386|480/727-1728
Program Description: The dietetics concentration, under the BS in Nutrition degree, provides all of the academic course work a student needs to qualify to become a registered dietitian (RD). 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 RD. The dietetics program is currently granted accreditation by the Commission on Accreditation for Dietetics Education of the American Dietetic Association.

Language Requirement: N | Program Fee: N
Career Opportunities: The nutrition/dietetics field provides employment opportunities in education, hospitals and other healthcare facilities, public health agencies, school food service, food/nutrition marketing and sales, nutrition/health promotion, and consulting.

## Nutrition (Food and Nutrition Management) (BS) ECNTRMBS

SCHOOL OF APPLIED ARTS AND SCIENCES, POLY
Contact: http://www.poly.asu.edu/saas/

Program Description: The Food and Nutrition Management concentration in the Bachelor of Science 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, along with the ability to develop a food or menu that meets a specific nutrition guideline. This degree prepares students to become food service directors at schools, healthcare facilities and corporate food service operations.

## Language Requirement: $\mathrm{N} \mid$ Program Fee: N

Career Opportunities: This degree prepares students to become food service directors at schools, healthcare facilities and corporate food service operations. Our graduates aspire to own restaurants or nutrition-related businesses, work in food, supplement or pharmaceutical sales, or work in food marketing and distribution. Graduates can also pursue the credentials to be certified dietary managers and school food service and nutrition specialists.

## Nutrition (Human Nutrition) (BS) ECNTRHBS

SCHOOL OF APPLIED ARTS AND SCIENCES, POLY<br>Contact: http://www.poly.asu.edu/saas/ | nutrition@asu.edu | HSC 1386 | 480/727-1728

Program Description: The human nutrition concentration, under the BS in Nutrition degree, 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, osteopathic medicine, pharmacy, naturopathic medicine, optometry, podiatry, and to serve as 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 healthcare professionals sometimes lack. The area of research is also a good fit for nutrition majors. Several outstanding scientists received their bachelor's degree from this program; add a master's or a PhD degree and the opportunities within the research field are unlimited.

Language Requirement: $\mathrm{N} \mid$ Program Fee: N
Career Opportunities: The nutrition field provides employment opportunities in healthcare, public health, education, foodservice, 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 MS degree programs.

## Nutrition (Nutrition Communication) (BS) ECNTRCBS

SCHOOL OF APPLIED ARTS AND SCIENCES, POLY

Contact: http://www.poly.asu.edu/saas/ | nutrition@asu.edu | HSC 1386 | 480/727-1728
Program Description: The nutrition communication concentration, under the BS in Nutrition degree, 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 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 while not sacrificing reality in getting a better story.

## Language Requirement: $\mathrm{N} \mid$ Program Fee: N

Career Opportunities: The nutrition communication field offers employment opportunities with newspapers, magazines, Webbased 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, as public relations representatives for food and beverage companies, or as consultants in program or product development.

## Science, Technology and Society (BS) ECSTSBS

SCHOOL OF APPLIED ARTS AND SCIENCES, POLY
Contact: sbscpoly@asu.edu | Bell Hall, G Section | 480/727-1987

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 STS program stresses the need to step outside both the 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:
Science, Technology, and Governance
Global Technology and Development
General STS
Language Requirement: $\mathrm{N} \mid$ Program Fee: N
Career Opportunities: The B.S. program in Science, Technology, and Society (STS) prepares professionals and scholars for careers in a twenty-first century world focusing primarily, but not exclusively, on the interaction of science and technology with human systems. Its graduates are prepared for professional careers in government, non-profit organizations, business, education, law, and for graduate or professional study. The focus of the program is on the technical skills required to audit the social, political, and policy impact of technological advancement and, at the same time, to develop the competence required to navigate questions surrounding the future trajectory of science and technology.

## ARTS, KATHERINE K. HERBERGER COLLEGE OF THE

## Art (Art Education) (BFA) FAARTEBFA

KATHERINE K. HERBERGER COLLEGE OF THE ARTS, TEMPE
Contact: ART 102 | 480/965-3468
Program Description: Art education involves the study of art, policy making in art, how people learn about art, and how instructors or administrators can best facilitate teaching art. The BFA in Art with a concentration in art education focuses on public and private K-12 instruction, art in higher education, and educational programs in art museums.

## Language Requirement: N | Program Fee: N

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 and/or community service groups that offer art instruction.

Additional Admissions Requirements: Students are admitted to the School of Art ASU as art exploratory majors. They must complete a series of requirements, including successfully passing a portfolio review in order to be eligible for upper-division course work in the major.

Freshmen students applying to the Herberger College School of Art enter ASU as pre-art 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.

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 Katherine K. Herberger College of 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.

## Art (Art History) (BA) FAARTHBA

KATHERINE K. HERBERGER COLLEGE OF THE ARTS, TEMPE
Contact: ART 102 | 480/965-3468
Program Description: Art history students study the history of the visual arts, and the theoretical and critical literature associated with the art of different cultures. The discipline of art history requires the development of critical writing skills, and use of such fields as history, philosophy, religious studies, literature, and anthropology. The BA in Art with a concentration in art history at ASU is one of the most rigorous undergraduate art degree programs in the U.S. Students must take courses in all major historical periods and also work in non-Western art traditions. Majors are encouraged to take some course work outside of art history, such as courses in museum studies, gallery exhibitions, and studio work.

## Language Requirement: $\mathrm{Y} \mid$ Program Fee: N

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 PhD is a necessity for employment as a university or college teacher, and for responsible administrative posts in the museum and publishing world.

Additional Admissions Requirements: Students meeting the university requirements for admission may matriculate in the Katherine K. Herberger College of 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 College 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 Katherine K. Herberger College of 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.

## Art (Art Studies) (BA) FAARTSTDBA

KATHERINE K. HERBERGER COLLEGE OF THE ARTS, TEMPE
Contact: ART 102 | 480/965-3468
Program Description: The art studies curriculum offers students a broad educational foundation in the arts and general studies. The BA 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 from 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.

## Language Requirement: N | Program Fee: N

Career Opportunities: Graduates work in arts-related fields such as arts administration, service-related art fields, and galleries. Career opportunities are also available with employers who seek graduates with a well-rounded humanities education.

Additional Admissions Requirements: Students meeting the university requirements for admission may matriculate in the Katherine K. Herberger College of 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 Katherine K. Herberger College of 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.

## Art (Ceramics) (BFA) FAARTCBFA

KATHERINE K. HERBERGER COLLEGE OF THE ARTS, TEMPE<br>Contact: ART 102 | 480/965-3468

Program Description: Students in the ceramics program learn the widest possible range of technical skills and aesthetic concerns within the field. They are encouraged to express themselves in any direction their concepts dictate, through the medium of ceramics. The BFA degree program in Art with a concentration in ceramics has an extensive guest speaker program of nationally recognized ceramic artists. The University Art Museum contributes further to the student experience through its significant collection of contemporary ceramic art, a large collection of early American pottery, and Southwestern Native American ceramics. Both undergraduate and graduate students exhibit work in local, regional, and national juried and invitational exhibitions.

## Language Requirement: $\mathrm{N} \mid$ Program Fee: N

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.

Additional Admissions Requirements: Students will be admitted to ASU as art exploratory majors. They must complete a series of requirements including successfully passing a portfolio review in order to be eligible for upper division coursework in the major.

Freshmen students applying to the Herberger College School of Art enter ASU as pre-art 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.

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 Katherine K. Herberger College of 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.

## Art (Drawing) (BFA) FAARTDBFA

## KATHERINE K. HERBERGER COLLEGE OF THE ARTS, TEMPE

## Contact: ART 102 | 480/965-3468

Program Description: The majors within painting and drawing embrace a wide range of media, including acrylics, charcoal, graphite, oil and watercolor. The diverse faculty allow students to discover and explore a multitude of aesthetic and conceptual approaches in their artistic endeavors.

## Language Requirement: $\mathrm{N} \mid$ Program Fee: N

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 a Master of Fine Arts (MFA) 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.

Additional Admissions Requirements: Students are admitted to ASU as art exploratory majors. They must complete a series of requirements including successfully passing a portfolio review in order to be eligible for upper-division course work in the major.

Freshmen students applying to the Herberger College School of Art enter ASU as pre-art 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.

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 Katherine K. Herberger College of 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.

## Art (Fibers) (BFA) FAARTFBFA

KATHERINE K. HERBERGER COLLEGE OF THE ARTS, TEMPE
Contact: ART 102 | 480/965-3468

Program Description: Students in the fiber arts curriculum explore nearly every process used for the construction and decoration of fabric. Part of the program covers processes from very basic carding, spinning, dyeing, and felting of wool, to the use of the loom and the study of complex weave structures. The BFA in Art with a concentration in fibers degree program focuses on the history of fabric, clothing, shelter, and on contemporary fiber artists and designers. Part of the uniqueness of this program is the location. The Southwest has a long history of textiles, beautiful museums, and many cultures still practicing their traditional textile methods, as well as contemporary galleries and art centers that combine to make this area a fertile ground for developing artists.

## Language Requirement: $\mathrm{N} \mid$ Program Fee: N

Career Opportunities: Graduates with a BFA degree 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 setup their own studios and design wearable or fabrics for interior use, while others make their living by doing commissioned work for interior spaces.

Additional Admissions Requirements: Students are admitted to ASU as art exploratory majors. They must complete a series of requirements including successfully passing a portfolio review in order to be eligible for upper-division course work in the major.

Freshmen students applying to the Herberger College School of Art enter ASU as pre-art 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.

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 Katherine K. Herberger College of 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.

## Art (Intermedia) (BFA) FAARTIBFA

KATHERINE K. HERBERGER COLLEGE OF THE ARTS, TEMPE
Contact: ART 102 | 480/965-3468
Program Description: Only about 10 schools in the U.S. offer intermedia programs. The BFA in Art with a concentration in intermedia program stresses an alternative definition of the arts based on a synthesis of different media, technology and personal imagery. This program emphasizes the following media/formats: 2-D or 3-D computer graphics and animation for design and fine art applications; video technology to produce art that synthesizes visual and aural imagery; performance art, which synthesizes theatre, music, dance and literary elements; installation, which produces images through alteration of a total gallery or site-specific space; audio art, which stands on its own and/or is combined with video, performance and installation; and mixed two- and three-dimensional media, which combines the use of traditional and nontraditional media and materials.

Language Requirement: $\mathrm{N} \mid$ Program Fee: N

Career Opportunities: Career opportunities depend on the emphasis selected. Possibilities include independent artist, media consultant, videography, computer graphics and animation, museum or gallery installationist, teacher, set designer and positions in the music/entertainment industry.

Additional Admissions Requirements: Freshmen students applying to the Herberger College 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.

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 Katherine K. Herberger College of 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.

## Art (Metals) (BFA) FAARTMBFA

KATHERINE K. HERBERGER COLLEGE OF THE ARTS, TEMPE
Contact: ART 102 | 480/965-3468
Program Description: The metals and jewelry program prepares students for a professional career in jewelry arts and related areas. The program emphasizes craft skills, attention to detail, critical thinking and creativity. The program boasts an extraordinarily well-equipped studio with a huge variety of metal-smithing tools. Students explore the close relationship with the school's sculpture and foundry programs, learn important entrepreneurial skills, and receive a strong foundation in technical vocabulary and skills of working with metal while being encouraged to experiment with alternative materials and techniques.

## Language Requirement: $\mathrm{N} \mid$ Program Fee: N

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 master's of fine arts degree.

Additional Admissions Requirements: Students are admitted to ASU as art exploratory majors. They must complete a series of requirements including successfully passing a portfolio review in order to be eligible for upper-division course work in the major.

Freshmen students applying to the Herberger College School of Art enter ASU as pre-art 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.

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 Katherine K. Herberger College of 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.

## Art (Museum Studies) (BA) FAARTMSBA

KATHERINE K. HERBERGER COLLEGE OF THE ARTS, TEMPE
Contact: ART 102 | 480/965-3468
Program Description: Museum studies students explore art history, art museums, art galleries, and visual arts organizations. The BA 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, and 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, small business, research, galleries and museums. Students must also demonstrate an ability to read at least one foreign language.

## Language Requirement: Y | Program Fee: N

Career Opportunities: Museum studies graduates find employment possibilities in art galleries, art-based organizations, and entry-level positions with art publications and museums. A graduate degree is necessary for professional positions. A Master of Art (MA) degree prepares individuals to teach at community colleges and to gain entry into museums, auction houses and publishing companies. The PhD degree is necessary for employment as a faculty member at a university or for administrative posts in museums and higher education.

Additional Admissions Requirements: Students meeting the university requirements for admission may matriculate in the Katherine K. Herberger College of 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 College 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 Katherine K. Herberger College of 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.

## Art (Painting) (BFA) FAARTPABFA

KATHERINE K. HERBERGER COLLEGE OF THE ARTS, TEMPE
Contact: ART 102 | 480/965-3468

Program Description: The majors within painting and drawing embrace a wide range of media, including acrylics, charcoal, graphite, oil and watercolor. The diverse faculty allow students to discover and explore a multitude of aesthetic and conceptual approaches in their artistic endeavors.

Language Requirement: $\mathrm{N} \mid$ Program Fee: N

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 a Master of Fine Arts (MFA) 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.

Additional Admissions Requirements: Students are admitted to ASU as pre-art majors. They must complete a series of requirements including successfully passing a portfolio review in order to be eligible for upper-division course work in the major.

Freshmen students applying to the Herberger College 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.

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 Katherine K. Herberger College of 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.

## Art (Photography) (BFA) FAARTPHBFA

## KATHERINE K. HERBERGER COLLEGE OF THE ARTS, TEMPE

Contact: ART 102 | 480/965-3468
Program Description: The photography program at ASU has earned an international reputation for the quality of its instruction and the broad range of classes offered, including courses in electronic media. Faculty in the School of Art offer the BFA degree in Art with a concentration in photography. Photography students study the practice of photography as a means for creative expression. This involves the development of technical skills, the development of a sound theoretical base, and an understanding of photography's history. In photography courses, students are involved in critiques of creative work, beginning and advanced criticism and theory, practice in all aspects of gallery management and history surveys, and seminars in 19th- and 20th-Century photography. In addition to a wide range of special topics, students study 19th-century printing processes, color and large format techniques, and portraiture.

## Language Requirement: N | Program Fee: N

Career Opportunities: A degree in the arts offers students a pathway to a rich and varied choice of careers. The BFA is essential for advanced study leading to the terminal MFA degree. This advanced degree offers opportunities in university teaching in history as well as studio areas; curatorial work in galleries, museums, and historical collections; and nonprofit arts organization management.

Additional Admissions Requirements: Students will be admitted to ASU as art exploratory majors. They must complete a series of requirements including successfully passing a portfolio review in order to be eligible for upper-division course work in the major.

Freshmen students applying to the Herberger College School of Art enter ASU as pre-art 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.

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 Katherine K. Herberger College of 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.

## Art (Printmaking) (BFA) FAARTPMBFA

## KATHERINE K. HERBERGER COLLEGE OF THE ARTS, TEMPE

Contact: ART 102 | 480/965-3468
Program Description: Printmaking uses various graphic techniques to create visual art in printed, multiple form. The BFA in Art with a concentration in printmaking degree program is recognized nationally for excellence in its offerings. Many former graduates are working, teaching, and producing actively in print studios and collegiate printmaking programs across the country. Processes include intaglio (etching, engraving, dry point, aquatint, etc.), lithography, relief (woodcut, linoleum cut, letterpress, etc.), screen-printing, photomechanical techniques, monoprint, papermaking, and book arts media. Printmaking art is usually, but not always, two-dimensional and is often called the democratic art, since with multiple original copies, the artists visual ideas are available to a wider public. The university's research and publication program, the Pyracantha Press, a book arts press, has been highly regarded for years.

## Language Requirement: $\mathrm{N} \mid$ Program Fee: N

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 do graphic design, illustration, 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.

Additional Admissions Requirements: Students are admitted to ASU as art exploratory majors. They must complete a series of requirements including successfully passing a portfolio review in order to be eligible for upper-division course work in the major.

Freshmen students applying to the Herberger College School of Art enter ASU as pre-art 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.

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 Katherine K. Herberger College of 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.

## Art (Sculpture) (BFA) FAARTSBFA

## KATHERINE K. HERBERGER COLLEGE OF THE ARTS, TEMPE

## Contact: ART 102 | 480/965-3468

Program Description: The BFA in Art with a concentration in sculpture degree program explores nearly all methods of threedimensional expression, including modeling, metal casting, welding, woodworking, plastics, neon fabrication, carving and kinetic sculpture. ASU's sculpture program is one of the few in the country to include neon fabrication from start to finish.

## Language Requirement: $\mathrm{N} \mid$ Program Fee: N

Career Opportunities: Graduates are prepared to embark on a lifetime exploration of the many aspects of three-dimensional art. Positions are available in teaching, the fabrication and design of exhibitions, set design, the motion picture industry, welding, and three-dimensional design. Academic posts and positions with museums generally require advanced degrees. Many students also prefer to establish their own studios after graduation.

Additional Admissions Requirements: Students are admitted to ASU as art exploratory majors. They must complete a series of requirements including successfully passing a portfolio review in order to be eligible for upper-division course work in the major.

Freshmen students applying to the Herberger College School of Art enter ASU as pre-art 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.

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 Katherine K. Herberger College of 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.

## Dance (BFA) FADANBFA

KATHERINE K. HERBERGER COLLEGE OF THE ARTS, TEMPE
Contact: PEBE 107A | 480/965-1891

Program Description: The Department of Dance provides a dynamic and culturally diverse learning environment where students develop as creative artists, scholars, and educators. The BFA in Dance degree 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 emphasizing movement and creative practices, artistic process, leadership and pedagogy. 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.

## Language Requirement: N | Program Fee: N

Career Opportunities: A comprehensive academic foundation prepares dance professionals for the 21st century by developing the expertise and experience to enable them to initiate artistic projects, perform and choreograph. Other graduates teach and design curriculum; produce dance media for performance or instruction; direct or manage a performing arts company, studio, or dance-related organization; facilitate community partnerships; conduct research and write scholarly publications; or work in technical theatre and dance production.

Additional Admissions Requirements: Students are admitted as dance interview majors and must successfully complete an interview before enrolling in major courses. More information on the interview process can be found at http://dance.asu.edu/undergraduate/interviews.htm.

Prospective students may attend the Prospective Interview Day in February or the Enrolled Student Interview held at the beginning of each semester.

Direct transfer of courses from other accredited institutions to the Katherine K. Herberger College of 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.

## Dance (Dance Education) (BFA) FADANEBFA

## KATHERINE K. HERBERGER COLLEGE OF THE ARTS, TEMPE

Contact: PEBE 107A | 480/965-1891
Program Description: The Bachelor of Fine Arts degree in dance with a concentration in dance education prepares students to teach dance in elementary and secondary schools and in private studio settings. 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. 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. A comprehensive academic foundation prepares students to teach and design curriculum. Students complete the initial teacher certification (ITC) program in the Mary Lou Fulton College of Education to fulfill the degree requirements in the BFA (Dance Education) and become certified to teach dance (K-12) in Arizona public schools.

## Language Requirement: N | Program Fee: N

Career Opportunities: The concentration in dance education lays the foundation for a career in teaching in public and private settings. Students earn 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.

Additional Admissions Requirements: Students are admitted as dance interview majors and must successfully complete an interview before enrolling in major courses. More information on the interview process can be found at http://dance.asu.edu/undergraduate/interviews.htm.

Prospective students may attend the Prospective Interview Day in February or the Enrolled Student Interview held at the beginning of each semester.

Direct transfer of courses from other accredited institutions to the Katherine K. Herberger College of 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.

## Film (Film and Media Production) (BA) FAFLMBA

## KATHERINE K. HERBERGER COLLEGE OF THE ARTS, TEMPE

Contact: http://theatrefilm.asu.edu | theatre@asu.edu | GHALL 232 | 480/965-5337
Program Description: The School of Theatre and Film offers a Bachelor of Arts (BA) degree 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. Students in the film and media production concentration have access to digital cameras, lighting, and sound equipment in a new teaching studio. Post-production facilities include multiple computer editing stations. The curriculum's course work in ethics in entertainment and dramatic analysis are two other unique components.

## Language Requirement: N | Program Fee: N

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 screenwriters, directors, cinematographers, editors or producers. The BA degree 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.

Additional Admissions Requirements: Students will be admitted to ASU as film (FMP) exploratory majors. They must complete a series of course requirements including successfully passing a portfolio review and interview to be accepted into the concentration and be eligible for upper division coursework in film and media production. Interviews are conducted in fall and spring semesters.

Direct transfer of courses from other accredited institutions to the Katherine K. Herberger College of 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.

## Music (BA) FAMUSBA

KATHERINE K. HERBERGER COLLEGE OF THE ARTS, TEMPE
Contact: http://music.asu.edu | MUSIC E167 | 480/965-3371
Program Description: The Bachelor of Arts in Music is a broad cultural degree program with an emphasis on the concepts of music history and theory. These concepts are concerned with the intellectual study of music, its stylistic evolution, and its place in the world of its time. This degree may be used as a first step toward a master's or doctorate degree in music history or combined with other degree programs.

## Language Requirement: Y | Program Fee: N

Career Opportunities: Music research, criticism, publishing, and concert management are among the career opportunities. Many graduates pursue a master's or a doctorate in music or in another professional field.

Additional Admissions Requirements: Students are admitted as music audition majors and must successfully complete an audition before enrolling in major courses.

Students wishing to pursue a major in the School of Music must successfully complete an audition before enrolling in major course work. Audition information can be found on the School of Music Web site at:
http://music.asu.edu/students/prospective/undergrad/apply.php. The Web site details the enrollment and audition process.
Direct transfer of courses from other accredited institutions to the Katherine K. Herberger College of 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.

## Music Education (Choral-General) (BMUS) FAMUSCBMUS

KATHERINE K. HERBERGER COLLEGE OF THE ARTS, TEMPE<br>Contact: http://music.asu.edu | MUSIC E167 | 480/965-3371

Program Description: The Bachelor of Music in music education (choral-general) degree program is designed for students interested in pursuing careers as teachers of general or choral music in elementary and secondary schools. This program also provides an opportunity for K-12 teaching certification.

## Language Requirement: N | Program Fee: N

Career Opportunities: Graduates teach in public school music programs that offer general music, choir, band, orchestra, or some combination of musical activities. Graduates also teach privately, perform in community and professional ensembles, and work in music-related industries.

Additional Admissions Requirements: Students are admitted as music audition majors and must successfully complete an audition before enrolling in major courses.

Students wishing to pursue a major in the School of Music must successfully complete an audition before enrolling in major course work. Audition information can be found on the School of Music Web site at:
http://music.asu.edu/students/prospective/undergrad/apply.php. The Web site details the enrollment and audition process.
Direct transfer of courses from other accredited institutions to the Katherine K. Herberger College of 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.

## Music Education (Instrumental) (BMUS) FAMUSIIBM

KATHERINE K. HERBERGER COLLEGE OF THE ARTS, TEMPE
Contact: http://music.asu.edu | MUSIC E167 | 480/965-3371
Program Description: The Bachelor of Music in music education (instrumental) degree program is designed for students interested in pursuing careers as teachers of instrumental music (band, winds) in the public schools. The degree program provides an opportunity for K-12 teaching certification.

## Language Requirement: N | Program Fee: N

Career Opportunities: Graduates teach in public school music programs that offer general music, choir, band, orchestra, or some combination of musical activities. Graduates also teach privately, perform in community and professional ensembles, and work in music-related industries.

Additional Admissions Requirements: Students are admitted as music audition majors and must successfully complete an audition before enrolling in major courses.

Students wishing to pursue a major in the School of Music must successfully complete an audition before enrolling in major course work. Audition information can be found on the School of Music Web site at:
http://music.asu.edu/students/prospective/undergrad/apply.php. The Web site details the enrollment and audition process.
Direct transfer of courses from other accredited institutions to the Katherine K. Herberger College of 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.

## Music Education (String) (BMUS) FAMUSISBM

KATHERINE K. HERBERGER COLLEGE OF THE ARTS, TEMPE
Contact: http://music.asu.edu | MUSIC E167 | 480/965-3371
Program Description: The Bachelor of Music in music education (string) degree program is designed for students interested in pursuing careers as teachers of string and orchestra music in the public schools. The degree program provides an opportunity for K -12 teaching certification.

Language Requirement: $\mathrm{N} \mid$ Program Fee: N
Career Opportunities: Graduates teach in public school music programs that offer general music, choir, band, orchestra, or some combination of musical activities. Graduates also teach privately, perform in community and professional ensembles, and work in music-related industries.

Additional Admissions Requirements: Students are admitted as music audition majors and must successfully complete an audition before enrolling in major courses.

Students wishing to pursue a major in the School of Music must successfully complete an audition before enrolling in major course work. Audition information can be found on the School of Music Web site at http://music.asu.edu/students/prospective/undergrad/apply.php. The Web site details the enrollment and audition process.

Direct transfer of courses from other accredited institutions to the Katherine K. Herberger College of 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.

## Music Therapy (BMUS) FAMUSTHBM

## KATHERINE K. HERBERGER COLLEGE OF THE ARTS, TEMPE

Contact: http://music.asu.edu
Program Description: The Bachelor of Music in Music Therapy degree program instructs students in the mental-health/specialeducation profession that uses 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 skill 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, songwriting, world music and popular music styles.

## Language Requirement: $\mathrm{N} \mid$ Program Fee: N

Career Opportunities: Graduates are eligible to register as professional music therapists and can sit for the music therapy certification exam given by the Certification Board for Music Therapy. Jobs are available nationally in hospitals, schools, rehabilitation centers, nursing homes, and other healthcare facilities offering therapists an opportunity to work with a wide variety of clients. Career opportunities also include work in mental health, special education, physical rehabilitation, and geriatric care. A music therapy career may also provide an opportunity for private practice with flexible hours.

Additional Admissions Requirements: Students are admitted as music audition majors and must successfully complete an audition before enrolling in major courses.

Students wishing to pursue a major in the School of Music must successfully complete an audition before enrolling in major course work. Audition information can be found on the School of Music Web site at: http://music.asu.edu/students/prospective/undergrad/apply.php. The Web site details the enrollment and audition process.

Direct transfer of courses from other accredited institutions to the Katherine K. Herberger College of 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.

## Performance (Collaborative Piano) (BMUS) FAMUSPPBM

## KATHERINE K. HERBERGER COLLEGE OF THE ARTS, TEMPE

Contact: http://music.asu.edu
Program Description: The Bachelor of Music degree in performance with a concentration in collaborative piano focuses on core repertoire: the English, German, and French song literature and selected works from the instrumental, operatic, and oratorio repertoire. The program offers private instruction, supervised ensemble work, and ample opportunity for extensive performance experience. Collaboration within the School of Music involves working with all performance areas, including duo recitals with instrumental and voice colleagues, performances of great chamber music literature, work as rehearsal and pit pianists for the Lyric Opera Theater, and concerts with large ensembles and choirs. Few college music schools or departments offer a degree with a concentration in collaborative piano.

## Language Requirement: N | Program Fee: N

Career Opportunities: A degree in the arts offers students a pathway to a rich and varied choice of careers. Career opportunities include professional performer, collaborative pianist, or private studio or college teacher of piano and/or collaborative piano. College-level teaching does require a graduate degree, however.

Additional Admissions Requirements: Students are admitted as music audition majors and must successfully complete an audition before enrolling in major courses.

Students wishing to pursue a major in the School of Music must successfully complete an audition before enrolling in major course work. Audition information can be found on the School of Music Web site at:
http://music.asu.edu/students/prospective/undergrad/apply.php. The Web site details the enrollment and audition process.
Direct transfer of courses from other accredited institutions to the Katherine K. Herberger College of 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.

## Performance (Guitar) (BMUS) FAMUSPGBM

KATHERINE K. HERBERGER COLLEGE OF THE ARTS, TEMPE
Contact: http://music.asu.edu | MUSIC E167 | 480/965-3371
Program Description: The Bachelor of Music degree 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. Students complete course work that is required of all music majors.

## Language Requirement: $\mathrm{N} \mid$ Program Fee: N

Career Opportunities: Career opportunities for graduates with a BMUS degree in Performance with a concentration in guitar include, performing as a concert soloist or in chamber music ensembles; artist-in-residence interaction as part of school programs or state or community arts councils; performing for social functions; providing music for restaurants, clubs, resorts, churches, and art galleries; recording and studio work; and teaching privately or as part of a college or university program.

Additional Admissions Requirements: Students are admitted as music audition majors and must successfully complete an audition before enrolling in major courses.

Students wishing to pursue a major in the School of Music must successfully complete an audition before enrolling in major course work. Audition information can be found on the School of Music Web site at:
http://music.asu.edu/students/prospective/undergrad/apply.php. The Web site details the enrollment and audition process.
Direct transfer of courses from other accredited institutions to the Katherine K. Herberger College of 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.

## Performance (Jazz) (BMUS) FAMUSPJBM

KATHERINE K. HERBERGER COLLEGE OF THE ARTS, TEMPE
Contact: http://music.asu.edu | MUSIC E167 | 480/965-3371
Program Description: The jazz concentration, under the Bachelor of Music (BMUS) in Performance degree, places an emphasis on the improvisational aspects of jazz. Jazz studies at ASU combines jazz performance, composition and pedagogy in a program that allows the student to express themselves 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 recording studios, film scoring, writing and arranging, contemporary composition, jazz pedagogy and other related fields in the music industry.

## Language Requirement: $\mathrm{N} \mid$ Program Fee: N

Career Opportunities: Graduates are prepared to work in various professional capacities, including studio musician, jazz composer/arranger, freelance musician, accompanist, film scorer, professional recording artist, and teacher.

Additional Admissions Requirements: Students are admitted as music audition majors and must successfully complete an audition before enrolling in major courses.

Students wishing to pursue a major in the School of Music must successfully complete an audition before enrolling in major course work. Audition information can be found on the School of Music Web site at:
http://music.asu.edu/students/prospective/undergrad/apply.php. The Web site details the enrollment and audition process.
Direct transfer of courses from other accredited institutions to the Katherine K. Herberger College of 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.

## Performance (Keyboard) (BMUS) FAMUSPKBM

KATHERINE K. HERBERGER COLLEGE OF THE ARTS, TEMPE
Contact: http://music.asu.edu | MUSIC E167 | 480/965-3371
Program Description: The Bachelor of Music degree in Performance with a concentration in keyboard stresses the study of literature and techniques of the piano, organ, or harpsichord. Students also study music theory and take other courses required of all music majors. The course of study includes extensive performance experience.

## Language Requirement: $\mathrm{N} \mid$ Program Fee: N

Career Opportunities: A degree in the arts offers students a pathway to a rich and varied choice of careers. This particular degree program is intended for individuals planning a career as a professional performer and/or private studio or college teacher of piano, harpsichord, and/or organ. College-level teaching does require a graduate degree, however.

Additional Admissions Requirements: Students are admitted as music audition majors and must successfully complete an audition before enrolling in major courses.

Students wishing to pursue a major in the School of Music must successfully complete an audition before enrolling in major course work. Audition information can be found on the School of Music Web site at:
http://music.asu.edu/students/prospective/undergrad/apply.php. The Web site details the enrollment and audition process.
Direct transfer of courses from other accredited institutions to the Katherine K. Herberger College of 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.

## Performance (Music Theatre) (BMUS) FAMUSPMBM

KATHERINE K. HERBERGER COLLEGE OF THE ARTS, TEMPE<br>Contact: http://music.asu.edu | MUSIC E167 | 480/965-3371

Program Description: The curriculum within the Bachelor of Music degree in Performance with a concentration in music theatre features workshops in music theatre performance techniques, as well as performances in various kinds of musical theatre. Students perform in five full productions every year, including every kind of music theatre. The program includes classes in techniques and skills specifically appropriate for music theatre, so that students are not dependent upon classes in music and theatre as separate entities. The general education requirements include courses in dance and acting.

## Language Requirement: Y | Program Fee: N

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. Others perform on Broadway, in national touring companies, in major opera houses, or at universities, colleges and schools.

Additional Admissions Requirements: Students are admitted as music audition majors and must successfully complete an audition before enrolling in major courses.

Students wishing to pursue a major in the School of Music must successfully complete an audition before enrolling in major course work. Audition information can be found on the School of Music Web site at:
http://music.asu.edu/students/prospective/undergrad/apply.php. The Web site details the enrollment and audition process.
Direct transfer of courses from other accredited institutions to the Katherine K. Herberger College of 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.

## Performance (Orchestral Instrument) (BMUS) FAMUSPOBM

KATHERINE K. HERBERGER COLLEGE OF THE ARTS, TEMPE<br>Contact: http://music.asu.edu

Program Description: The Bachelor of Music degree 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. Students complete course work that is required of all music majors

## Language Requirement: N | Program Fee: N

Career Opportunities: A degree in the arts offers students a pathway to a rich and varied choice of careers. Specific opportunities available to graduates of this degree program include: Performance in professional ensembles or as a concert soloist, and teaching privately and/or at the college level. College-level teaching does require a graduate degree, however.

Additional Admissions Requirements: Students are admitted as music audition majors and must successfully complete an audition before enrolling in major courses.

Students wishing to pursue a major in the School of Music must successfully complete an audition before enrolling in major course work. Audition information can be found on the School of Music Web site at: http://music.asu.edu/students/prospective/undergrad/apply.php. The Web site details the enrollment and audition process.

Direct transfer of courses from other accredited institutions to the Katherine K. Herberger College of 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.

## Performance (Voice) (BMUS) FAMUSPVBM

KATHERINE K. HERBERGER COLLEGE OF THE ARTS, TEMPE
Contact: http://music.asu.edu | MUSIC E167 | 480/965-3371
Program Description: The Bachelor of Music degree in performance with a concentration in voice 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. Students complete course work that is required of all music majors

Language Requirement: $\mathrm{Y} \mid$ Program Fee: N

Career Opportunities: A degree in the arts offers students a pathway to a rich and varied choice of careers. Career opportunities for BMUS in Performance degree graduates include professional performance in opera, oratorio, art song recitals, and various chamber ensembles, including early music groups; and/or teaching studio voice and related courses.

Additional Admissions Requirements: Students are admitted as music audition majors and must successfully complete an audition before enrolling in major courses.

Students wishing to pursue a major in the School of Music must successfully complete an audition before enrolling in major course work. Audition information can be found on the School of Music Web site at http://music.asu.edu/students/prospective/undergrad/apply.php. The Web site details the enrollment and audition process.

Direct transfer of courses from other accredited institutions to the Katherine K. Herberger College of 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.

## Theatre (BA) FATHEBA

KATHERINE K. HERBERGER COLLEGE OF THE ARTS, TEMPE
Contact: http://theatrefilm.asu.edu/
Program Description: The Bachelor of Arts (BA) in Theatre involves comprehensive academic and hands-on theatre study. Student artists and scholars gain a general appreciation of the principal fields of human knowledge while acquiring training in such areas as theatre and performance studies, performance and directing, design and production, new work development, theatre for youth and film. Concentrations in acting or design and production are available for students who qualify for admission into these programs. ASU offers well-equipped theatre facilities including the Galvin Playhouse, the Lyceum Theatre, the Prism Theatre for student-produced works, extensive shops, and uniquely equipped rehearsal and instructional spaces.

## Language Requirement: $\mathrm{N} \mid$ Program Fee: N

Career Opportunities: The BA in Theatre degree 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, in themed entertainment, or in arts entrepreneurship.

Additional Admissions 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 Katherine K. Herberger College of 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.

## Theatre (Acting) (BA) FATHEABA

KATHERINE K. HERBERGER COLLEGE OF THE ARTS, TEMPE
Contact: http://theatrefilm.asu.edu/ | theatre@asu.edu | GHALL 232 | 480/965-5337

Program Description: The Bachelor of Arts (BA) in Theatre with a concentration in acting involves intensive academic and hands-on theatre study. Student artists and scholars gain a general appreciation of the principal fields of human knowledge while acquiring training in such areas as theatre and performance studies, performance and directing, design and production, new work development, theatre for youth and film. ASU offers well-equipped theatre facilities including the Galvin Playhouse, the Lyceum Theatre, the Prism Theatre for student-produced work, extensive shops, and uniquely equipped rehearsal and instructional spaces.

## Language Requirement: $\mathrm{N} \mid$ Program Fee: N

Career Opportunities: The BA in Theatre degree 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 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.

Additional Admissions 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. After students are admitted to the BA 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 Katherine K. Herberger College of 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.

## Theatre (Design and Production) (BA) FADSNPRBA

## KATHERINE K. HERBERGER COLLEGE OF THE ARTS, TEMPE

Contact: http://theatrefilm.asu.edu/ | theatre@asu.edu | GHALL 232 | 480/965-5337
Program Description: The Bachelor of Arts (BA) in Theatre with a concentration in design and production involves intensive academic and hands-on theatre study. Student artists and scholars gain a general appreciation of the principal fields of human knowledge while acquiring training in such areas as theatre and performance studies, performance and directing, design and production, new work development, theatre for youth, and film. ASU offers well-equipped theatrical facilities including the Galvin Playhouse, the Lyceum Theatre, the Prism Theatre for student-produced work, extensive and professionally staffed production shops, and uniquely equipped rehearsal and instructional spaces.

## Language Requirement: $\mathrm{N} \mid$ Program Fee: N

Career Opportunities: The BA in Theatre degree 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 careers in the performing arts and the entertainment industry as designers or technologists.

Additional Admissions 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 BA Theatre design and production concentration are conducted each semester and require a portfolio.

Direct transfer of courses from other accredited institutions to the Katherine K. Herberger College of 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.

## Theory and Composition (Composition) (BMUS) FAMUSTCBM

KATHERINE K. HERBERGER COLLEGE OF THE ARTS, TEMPE
Contact: http://music.asu.edu | MUSIC E167 | 480/965-3371
Program Description: The Bachelor of Music in Theory and Composition (with a concentration in composition) degree 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 doctorate degree in music theory and composition. The School of Music's prestigious theory and composition faculty offer students the opportunity to study with composers who have established national and international reputations.

## Language Requirement: N | Program Fee: N

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, however.

Additional Admissions Requirements: Students are admitted to the school as music audition majors. Admission into the Music Theory and Composition degree program is subject to a successful audition in the major performing medium. An n interview with composition faculty member(s) and an evaluation of original compositions is also required.

Students wishing to pursue a major in the School of Music must successfully complete an audition before enrolling in major course work. Audition information can be found on the School of Music Web site at:
http://music.asu.edu/students/prospective/undergrad/apply.php. The Web site details the enrollment and audition process.
Direct transfer of courses from other accredited institutions to the Katherine K. Herberger College of 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.

## Theory and Composition (Theory) (BMUS) FAMUSTTBM

KATHERINE K. HERBERGER COLLEGE OF THE ARTS, TEMPE
Contact: http://music.asu.edu
Program Description: The Bachelor of Music in Theory and Composition (with a concentration in theory) degree program focuses on the theoretical study of music. This program may be used as the first step toward a master's or doctorate degree in music theory and composition. The School of Music's prestigious theory and composition faculty offer students the opportunity to study with composers who have established national and international reputations.

## Language Requirement: $\mathrm{N} \mid$ Program Fee: N

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, however.

Additional Admissions Requirements: Students meeting the university requirements for admission may matriculate in the Katherine K. Herberger College of the Arts. Separate admission procedures and approvals are required for some programs within the college. Students must contact specific departments or schools for details.

Students wishing to pursue a major in the School of Music must successfully complete an audition before enrolling in major course work. Audition information can be found on the School of Music Web site at http://music.asu.edu/students/prospective/undergrad/apply.php. The Web site details the enrollment and audition process.

Direct transfer of courses from other accredited institutions to the Katherine K. Herberger College of 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.

## BUSINESS, W. P. CAREY SCHOOL OF

## Accountancy (BS) BAACCBS

W. P. CAREY SCHOOL OF BUSINESS, TEMPE<br>Contact: http://wpcarey.asu.edu/acc | wpcareyacc@asu.edu | BA 223 | 480/965-3631

Program Description: The accounting profession offers W. P. Carey students a dynamic environment and diverse career opportunities in public accounting, the private sector and in government agencies worldwide. The job market for accounting graduates has never been better, and the U.S. Bureau of Labor Statistics projects that the employment of accountants will continue to grow by 10-20 percent annually. The School of Accountancy's state-of-the-art curriculum provides students with technical expertise in the field and develops critical thinking, teaming, communication and information technology skills that are crucial for a successful career. The faculty includes thought leaders who excel in the classroom, and our Professional Advisory Board provides regular guidance on continuous improvement and strategic planning. The School of Accountancy is accredited by AACSB International and is consistently ranked among the top programs in the nation in bachelor's, master's, and Ph.D. programs.

## Language Requirement: $\mathrm{N} \mid$ Program Fee: Y

Career Opportunities: The major in accountancy includes the essential academic preparation for students who are pursuing professional careers in public, corporate and governmental accounting; seeking positions in personal financial planning and portfolio analysis; seeking positions in consulting; planning to operate their own businesses; or planning to pursue a graduate degree or attend law school.

Additional Admissions 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.

## Business (Communication) (BA) BABUSCBA

W. P. CAREY SCHOOL OF BUSINESS, TEMPE

Contact: http://wpcarey.asu.edu | wpcareyug@asu.edu | BA 109 | 480/965-4227
Program Description: The Bachelor of Arts in Business with a communication concentration is an innovative, interdisciplinary program intended to prepare students for positions in a variety of professions where business and communication play an important role in ensuring success.

Language Requirement: $\mathrm{N} \mid$ Program Fee: N
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 better qualified to enter these positions with knowledge that will be immediately useful to potential employers while advancing their careers.

Additional Admissions 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.

## Business (Sustainability) (BA) BABUSSBA

W. P. CAREY SCHOOL OF BUSINESS, TEMPE

Contact: http://wpcarey.asu.edu | wpcareyug@asu.edu | BA 109 | 480/965-4227
Program Description: The Bachelor of Arts in Business with a sustainability concentration is an innovative, interdisciplinary program intended to prepare students for positions in a variety of professions where business and sustainability play an important role in ensuring success.

## Language Requirement: N | Program Fee: N

Career Opportunities: Interest in sustainability issues is growing and, most likely, will be increasingly important to business in the next few years. Businesses all over 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.

Additional Admissions 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.

## Business (Tourism) (BA) BABUSTBA

W. P. CAREY SCHOOL OF BUSINESS, TEMPE

Contact: http://wpcarey.asu.edu | wpcareyug@asu.edu | BA 109 | 480/965-4227
Program Description: The Bachelor of Arts in Business with a tourism concentration is an innovative, interdisciplinary program intended to prepare students for positions in a variety of professions where business and tourism play an important role in ensuring success.

## Language Requirement: N | Program Fee: N

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.

Additional Admissions 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.

## Business (Urban Policy) (BA) BABUSUBA

W. P. CAREY SCHOOL OF BUSINESS, TEMPE<br>Contact: http://wpcarey.asu.edu | wpcareyug@asu.edu | BA 109 | 480/965-4227

Program Description: The Bachelor of Arts in Business with an urban policy concentration is an innovative, inter-disciplinary program intended to prepare students for positions in a variety of professions where business and urban policy play an important role in ensuring success.

## Language Requirement: $\mathrm{N} \mid$ Program Fee: N

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 BA in Business with an Urban Policy concentration will be well equipped to deal with the wide range of economic and business development issues.

Additional Admissions 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.

## Computer Information Systems (BS) BACISBS

W. P. CAREY SCHOOL OF BUSINESS, TEMPE<br>Contact: http://wpcarey.asu.edu/is | wpcareyis@asu.edu | BA 301P | 480/965-3252

Program Description: In today's world, it is hard to find a business that is not totally dependent on computers. Investing in a degree that teaches you about the exciting and innovative ways that information technology is used to help organizations succeed will assure you a high starting salary at graduation. Currently there is an acute 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 process analysis, project management, evidenced-based decision-making, the information value-chain, databases and data modeling, application program development, network deployment and systems integration. This is your opportunity to join a team of motivated students - become part of one of the nation's highest ranked Computer Information Systems departments.

## Language Requirement: N | Program Fee: Y

Career Opportunities: A Computer Information Systems degree offers job opportunities in a variety of industries, including entertainment, national defense, transportation, education, health care and finance. 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 database administrator, systems analyst, network administrator, project manager, systems administrator and consultant. Long-term career aspirations for a student with a CIS degree include chief information officer (CIO), chief technology officer (CTO), chief knowledge officer (CKO), chief security officer (CSO) and chief executive officer (CEO).

Additional Admissions 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.

## Economics (BS) BAECNBS

W. P. CAREY SCHOOL OF BUSINESS, TEMPE

Contact: http://wpcarey.asu.edu/ecn | wpcareyecn@asu.edu | BAC 659 | 480/965-3531
Program Description: The Economics Department is committed to providing students a first-class educational experience. Graduates have taken positions as corporate economists who collect data and make forecasts relevant to the firm's business; as consultants who serve as advisers to state and federal governments as well as private corporations; and in banking and financial services firms. Each year many graduates pursue studies at some of the best graduate schools in the country. Faculty have received numerous teaching awards and their teaching evaluations from students are consistently high. The economics faculty is also actively engaged in scholarly research leading to publication in the major economics journals.

Language Requirement: $\mathrm{N} \mid$ Program Fee: Y
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.

Additional Admissions 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.

## Finance (BS) BAFINBS

W. P. CAREY SCHOOL OF BUSINESS, TEMPE<br>Contact: http://wpcarey.asu.edu | wpcareyfin@asu.edu | BAC 519 | 480/965-3131

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.

## Language Requirement: N | Program Fee: Y

Career Opportunities: Students majoring in finance are prepared for careers in corporate financial management, investment banking, consulting, depository institutions, portfolio analysis, investment management and financial services.

Additional Admissions 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.

## Management (BS) BAMGTBS

W. P. CAREY SCHOOL OF BUSINESS, TEMPE<br>Contact: http://wpcarey.asu.edu/mgt | wpcareymgt@asu.edu | BA 323|480/965-3431

Program Description: Today's ethical and responsible leaders have to be effective team builders. The leaders of companies that are succeeding in the new global marketplace possess excellent written and oral communication skills and extensive experience in guiding collaborative teams. The management major is at the leading edge with its strong emphasis on collaboration, leadership, communication, team building, business ethics and corporate social responsibility, and community engagement. Students in the major engage with community-based group projects in not-for-profit and for-profit business settings. The curriculum begins with immersion in the fundamentals of the global economy, the world of e-business and collaborative teams. Throughout the program, understanding of theory 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 in the classroom and in the community.

## Language Requirement: $\mathrm{N} \mid$ Program Fee: Y

Career Opportunities: The management major prepares men and women for managerial leadership in a world characterized by the fast pace of e-business; demands for continuous process improvements to enhance the value chain; growing technological sophistication; racial, cultural and gender diversity in the workforce; ethical decision making; corporate accountability, crossfunctional management; and the need for skills in communicating and working with people, directing projects, and managing change. Graduates with these skills are likely to be recruited by management consulting firms, high-tech firms, service and manufacturing firms, for-profit and not-for-profit organizations, and large and small organizations.

Additional Admissions 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.

## Management (Entrepreneurship) (BS) BAMGTEBS

W. P. CAREY SCHOOL OF BUSINESS, TEMPE

Contact: http://wpcarey.asu.edu/mgt | wpcareymgt@asu.edu | BA 323 | 480/965-3431
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 College of Design 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.

## Language Requirement: $\mathrm{N} \mid$ Program Fee: Y

Career Opportunities: The entrepreneurship concentration within the Management major prepares men and women 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.

Additional Admissions 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.

## Marketing (BS) BAMKTBS

W. P. CAREY SCHOOL OF BUSINESS, TEMPE<br>Contact: http://wpcarey.asu.edu/mkt | wpcareymkt@asu.edu | BAC 460 | 480/965-3621

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 of the Center for Services Leadership, the premier international center for the study of services marketing, and offers distinctive coursework in professional sales, relationship management and sports business.

## Language Requirement: N | Program Fee: Y

Career Opportunities: Through the proper selection of coursework and other educational experiences, a marketing student may prepare for a variety of careers in areas such as professional sales and relationship management, business development, sales management, marketing communications, services marketing, business-to-business marketing, international marketing, market research and information management, customer relationship management or retail management. The degree program provides fundamentals, flexibility and specialization opportunities.

Additional Admissions 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.

## Supply Chain Management (BS) BASCMBS

W. P. CAREY SCHOOL OF BUSINESS, TEMPE<br>Contact: http://wpcarey.asu.edu/scm | wpcarey.scm@asu.edu | BA 446 | 480/965-6044

Program Description: Supply chain management brings us an abundance of affordable, high quality goods. Supply chain managers manage, coordinate, manufacture, and transport products from raw materials to the 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.

## Language Requirement: N | Program Fee: Y

Career Opportunities: Our program prepares graduates to become excellent supply chain managers by focusing on planning, procurement, negotiations, logistics, execution systems and 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.

Career track progression can lead to the vice president level in supply-chain-related areas. Firms recruit ASU SCM 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, and we have excellent placements. Following are some positions that our graduates have been hired into: planner or analyst; buyer/planner; production scheduler; quality control specialist; internet marketing analyst; supply management analyst; inventory specialist; operations planner/analyst; materials manager; commodity manager; logistics planner; production coordinator; distribution manager; production line manager; product forecaster.

Additional Admissions 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.

## DESIGN, COLLEGE OF

## Architectural Studies (BSD) ARSTDBSD

COLLEGE OF DESIGN, TEMPE
Contact: http://design.asu.edu/sala | design.advising@asu.edu | CDN 162 | 480/965-3536 |
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 School of Architecture and Landscape Architecture offer the Bachelor of Science in Design (B.S.D.) degree with a major 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 college and across the university. These electives may be selected to devise a minor, to further professional study, or in some other fashion to 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.

## Language Requirement: N | Program Fee: N

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, or for industries, corporations or governmental agencies.

Additional Admissions 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.

## Design Studies (BA) ARDSNBA

COLLEGE OF DESIGN, TEMPE
Contact: http://design.asu.edu/ba | design.advising@asu.edu | CDN 162 | 480/965-7007
Program Description: The B.A. in Design Studies is a highly flexible program of study with three specific directions. Much like a liberal arts degree, there is a general path where students select design and design-related courses offered in the college and throughout the university. Two concentrations are more specific: design history, with a strong focus of the historical aspects of design as they pertain to the disciplines in the college, and design management, which offers a selection of courses in management and human communication that complement design. Irrespective of the direction selected, students are also expected to acquire a breadth of design knowledge via courses taken from three categories: general design, design history and communication for design.

## Language Requirement: N | Program Fee: N

Career Opportunities: Although a specific career path is not the principal intention of the Bachelor of Arts 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.

## Design Studies (Design History) (BA) ARDSNHBA

## COLLEGE OF DESIGN, TEMPE

Contact: design.advising@asu.edu | CDN 162|480/965-7007
Program Description: The BA in Design Studies with a concentration in design history is a highly flexible program of study. Much like a liberal arts degree, there is a general path where students select design and design-related courses offered in the college and throughout the university. This concentration program places a strong focus of the historical aspects of design as they pertain to the disciplines in the college. Students acquire a breadth of design knowledge via courses taken from three categories: general design, design history and communication for design.

## Language Requirement: N | Program Fee: N

Career Opportunities: Although a specific career path is not the principal intention of the Bachelor of Arts 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.

## Design Studies (Design Management) (BA) ARDSNMBA

COLLEGE OF DESIGN, TEMPE
Contact: design.advising@asu.edu | CDN 162 | 480/965-7007
Program Description: The BA in Design Studies with a concentration in design management is a highly flexible program. Much like a liberal arts degree, there is a general path where students select design and design-related courses offered in the college and throughout the university. This concentration program offers a selection of courses in management and human communication that complement design. Students are also expected to acquire a breadth of design knowledge via courses taken from three categories: general design, design history and communication for design.

Language Requirement: N | Program Fee: N
Career Opportunities: Although a specific career path is not the principal intention of the Bachelor of Arts 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.

## Graphic Design (BSD) ARGRABSD

COLLEGE OF DESIGN, TEMPE
Contact: http://design.asu.edu/viscom/index.shtml | design.advising@asu.edu | CDN 162 | 480/965-8947
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 Design Innovation offers the Bachelor of Science in Design degree with a major in Graphic Design. Graphic designers are concerned with how communication is transferred and received, choosing the appropriate mechanism for distinctness, clarity of information and appearance. 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 coursework (or its approved equivalent) at any point of entry.

## Language Requirement: N | Program Fee: N

Career Opportunities: Based on a very diversified portfolio upon graduation, students opting for the graphic design profession gain employment in brand and corporate identity, interaction and interface design, broadcast (TV graphics), museum/exhibitions, publication and advertising. Specific examples of graphic designers work include: environmental graphics, annual reports, publications, books, Web pages, and multimedia presentations. Students may also pursue graduate studies leading to careers in design education and other fields of professional endeavor in design.

Additional Admissions 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.

## Housing and Community Development (BSD) ARHCDBSD

COLLEGE OF DESIGN, TEMPE
Contact: http://design.asu.edu/hud | design.advising@asu.edu | 777 S. College Ave., Ste. 205 | 480/965-7007
Program Description: The Bachelor of Science in Design with a major in Housing and Community Development provides a professional-level education in residential and community development. Students enrolled in the program receive instruction in the development of a broad range of housing types and community environments. Cross-disciplinary instruction in design, real estate development and construction management is also emphasized. The program places a high value on affordability, neighborhood creation and sustainable development.

## Language Requirement: $\mathrm{N} \mid$ Program Fee: N

Career Opportunities: The majority of recent graduates have positions in the private, residential and land development industries. Others have chosen career paths with public and nonprofit housing and neighborhood redevelopment agencies.

Additional Admissions 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.

## Industrial Design (BSD) ARINDBSD

COLLEGE OF DESIGN, TEMPE
Contact: http://design.asu.edu/industrial | design.advising@asu.edu | CDN 162 | 480/965-1767
Program Description: Industrial designers are responsible for the design of products and systems that people use in their work, play and daily lives. The School of Design Innovation offers the Bachelor of Science in Design (BSD) degree with a major in Industrial Design. 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:

1. meet user needs in unexpected ways;
2. create value in the marketplace; and
3. improve society and the environment.

This is an eight-semester program requiring sequential completion of studio coursework (or its approved equivalent) at any point of entry.

## Language Requirement: N | Program Fee: N

Career Opportunities: Graduates work for large corporations that have their own industrial design departments, such as automobile companies, computer hardware and/or software companies, consumer product companies, and medical equipment companies. Opportunities also exist with consulting firms that design for a variety of different clients.

Additional Admissions 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.

## Interior Design (BSD) ARINTBSD

COLLEGE OF DESIGN, TEMPE
Contact: http://design.asu.edu/interior/index.shtml | design.advising@asu.edu | CDN 162 | 480/965-3571
Program Description: Course work in the Bachelor of Science in Design with a major 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 to have useful, rich and rewarding contexts 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 coursework (or its approved equivalent) at any point of entry.

## Language Requirement: $\mathrm{N} \mid$ Program Fee: N

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.

Additional Admissions 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.

## Landscape Architecture (BSLA) ARPLABSLA

college of design, tempe
Contact: design.advising@asu.edu | CDN 162 | 480/965-3536
Program Description: Landscape architects are involved in the design, planning, and management of the land. Landscape architects develop expertise in both the art of design and the environmental sciences. Landscape architecture includes site planning, urban design, computer methods, landscape construction, bioengineering, and planning and zoning law.

Language Requirement: $\mathrm{N} \mid$ Program Fee: N
Career Opportunities: Graduates in Landscape Architecture are able to pursue career opportunities in private landscape architecture companies as well as government environmental planning and management agencies. Some landscape architects elect to pursue graduate degrees to develop specialty skills and to enhance their opportunities for career advancement.

Additional Admissions 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.

## Urban Planning (BSP) ARPUPBSP

COLLEGE OF DESIGN, TEMPE
Contact: http://design.asu.edu/planning | design.advising@asu.edu | CDN 162 | 480/965-7167
Program Description: Urban planners guide communities in making wise decisions about their use of land and resources. The Bachelor of Science in Planning (B.S.P.) degree 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, site planning, urban design, and public-policy formulation and administration. Planning includes landscape architecture and urban design, computer and research methods, urban and development economics, housing, environmental impact assessment, planning and zoning law, transportation, utilities, geographic information systems, and public policy formulation and administration.

## Language Requirement: N | Program Fee: N

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.

Additional Admissions 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.

## EDUCATION, MARY LOU FULTON COLLEGE OF

## Early Childhood Education (BAE) EDECDBAE

MARY LOU FULTON COLLEGE OF EDUCATION, TEMPE
Program Description: The early childhood education program prepares preservice teachers to teach children in kindergarten through third grade, as well as in preschool or infant/toddler programs. This includes children from birth through age eight. The program emphasizes inter-professional and community-based preparation of educators who wish to create unique academic and social environments for children in diverse settings. Teaching in early childhood settings requires a specialized depth of knowledge of how children develop and an expertise in curricular content as well as an array of culturally relevant approaches for working effectively with children.

## Language Requirement: $\mathrm{N} \mid$ Program Fee: N

Career Opportunities: Students completing a Bachelor of Arts in Education (BAE) degree in early childhood education are recommended for Early Childhood Education, Birth--Age 8 certificate and may also be eligible for a provisional English as a Second Language endorsement and an additional certificate to teach in elementary grades.

## Elementary Education (BAE) EDEEDBAE

MARY LOU FULTON COLLEGE OF EDUCATION, TEMPE

Program Description: Elementary education prepares preservice teachers for classrooms in elementary and middle schools. Preservice teachers are required to have a broad knowledge of how children develop as well as a broad knowledge of the subjects taught. Internships in school settings prepare preservice teachers with effective teaching strategies and experience working in schools. A school internship is required each semester, and student teaching is required in the final semester of the program.

## Language Requirement: N | Program Fee: N

Career Opportunities: The Bachelor of Arts in Education (BAE) leads to a recommendation for elementary teacher certification and students may also be eligible for a provisional English as a Second Language endorsement. Graduates are prepared for entrylevel teaching positions in elementary, middle and junior high schools.

Elementary Education (Indigenous Teacher Preparation) (BAE) EDIEDBAE MARY LOU FULTON COLLEGE OF EDUCATION, TEMPE

Program Description: The Indigenous Teacher Preparation Program (ITP) emphasizes Indian education, cultural knowledge, and sensitivity to the unique sociocultural issues relevant to indigenous children and families. ITP prepares preservice teachers for elementary certification with an enriched and specialized curriculum to underscore teaching techniques and strategies that will enhance student achievement for all indigenous learners. A school internship is required each semester of the program, and student teaching is completed in a setting with children from indigenous cultures.

## Language Requirement: $\mathrm{N} \mid$ Program Fee: N

Career Opportunities: The Bachelor of Arts in Education (BAE) with a concentration in indigenous teacher preparation leads to a recommendation to teach in elementary, middle and junior high schools and students may also be eligible for a provisional English as a Second Language endorsement. Graduates are prepared for teaching and leadership positions in indigenous communities.

## Elementary Education (Multilingual/Multicultural) (BAE) EDMLMCBAE MARY LOU FULTON COLLEGE OF EDUCATION, TEMPE

Program Description: The elementary education program in multilingual/multicultural education prepares pre-service teachers to teach children in our increasingly diverse classrooms in elementary and middle schools. The program has focused field requirements in classrooms with English-language learners and includes the course work required for the bilingual or English as a Second Language endorsement.

Language Requirement: $\mathrm{N} \mid$ Program Fee: N
Career Opportunities: The Bachelor of Arts in Education (BAE) with a multilingual/multicultural concentration leads to a recommendation to teach in elementary, middle and junior high schools and a bilingual endorsement or English as a Second Language endorsement.

## Secondary Education (Biological Sciences) (BAE) EDBIOBAE MARY LOU FULTON COLLEGE OF EDUCATION, TEMPE

Program Description: The BAE in Secondary Education program in the Mary Lou Fulton College of Education 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 College of Education maintains connections with academic departments across the university. Each program semester requires an internship in the schools, and some courses are taught in the field.

Language Requirement: $\mathrm{N} \mid$ Program Fee: N
Career Opportunities: Graduates are eligible for secondary certification in grades seven to 12 in one of 19 subject specializations: Art, Biological Sciences, Business, Chemistry, Dance, Economics, English, French, Geography, German, History, Japanese, Mathematics, Music-Choral, Music-Instrumental, Physics, Political Science, Social Studies, Spanish and Space and Earth Science. Students in art, music and dance complete a K-12 endorsement in their field. Art and dance education majors are offered through corresponding Bachelor of Fine Arts degree programs. Those seeking certification in music may focus on either the choral-general music or instrumental music concentrations offered through the Bachelor of Music degree program.

## Secondary Education (Business) (BAE) EDBUSBAE <br> MARY LOU FULTON COLLEGE OF EDUCATION, TEMPE

Program Description: The BAE in Secondary Education program in the Mary Lou Fulton College of Education 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 College of Education maintains connections with academic departments across the university. Each program semester requires an internship in the schools, and some courses are taught in the field.

Language Requirement: $\mathrm{N} \mid$ Program Fee: N

Career Opportunities: Graduates are eligible for secondary certification in grades seven to 12 in one of 19 subject specializations: Art, Biological Sciences, Business, Chemistry, Dance, Economics, English, French, Geography, German, History, Japanese, Mathematics, Music-Choral, Music-Instrumental, Physics, Political Science, Social Studies, Spanish and Space and Earth Science. Students in art, music and dance complete a K-12 endorsement in their field. Art and dance education majors are offered through corresponding Bachelor of Fine Arts degree programs. Those seeking certification in music may focus on either the choral-general music or instrumental music concentrations offered through the Bachelor of Music degree program.

## Secondary Education (Chemistry) (BAE) EDCHMBAE <br> MARY LOU FULTON COLLEGE OF EDUCATION, TEMPE

Program Description: The BAE in Secondary Education program in the Mary Lou Fulton College of Education 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 College of Education maintains connections with academic departments across the university. Each program semester requires an internship in the schools, and some courses are taught in the field.

## Language Requirement: N | Program Fee: N

Career Opportunities: Graduates are eligible for secondary certification in grades seven to 12 in one of 19 subject specializations: Art, Biological Sciences, Business, Chemistry, Dance, Economics, English, French, Geography, German, History, Japanese, Mathematics, Music-Choral, Music-Instrumental, Physics, Political Science, Social Studies, Spanish and Space and Earth Science. Students in art, music and dance complete a K-12 endorsement in their field. Art and dance education majors are offered through corresponding Bachelor of Fine Arts degree programs. Those seeking certification in music may focus on either the choral-general music or instrumental music concentrations offered through the Bachelor of Music degree program.

## Secondary Education (Earth and Space Sciences) (BAE) EDESSBAE MARY LOU FULTON COLLEGE OF EDUCATION, TEMPE

Program Description: The BAE in Secondary Education program in the Mary Lou Fulton College of Education 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 College of Education maintains connections with academic departments across the university. Each program semester requires an internship in the schools, and some courses are taught in the field.

## Language Requirement: $\mathrm{N} \mid$ Program Fee: N

Career Opportunities: Graduates are eligible for secondary certification in grades seven to 12 in one of 19 subject specializations: Art, Biological Sciences, Business, Chemistry, Dance, Economics, English, French, Geography, German, History, Japanese, Mathematics, Music-Choral, Music-Instrumental, Physics, Political Science, Social Studies, Spanish and Space and Earth Science. Students in art, music and dance complete a K-12 endorsement in their field. Art and dance education majors are offered through corresponding Bachelor of Fine Arts degree programs. Those seeking certification in music may focus on either the choral-general music or instrumental music concentrations offered through the Bachelor of Music degree program.

## Secondary Education (Economics) (BAE) EDECNBAE <br> MARY LOU FULTON COLLEGE OF EDUCATION, TEMPE

Program Description: The BAE in Secondary Education program in the Mary Lou Fulton College of Education 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 College of Education maintains connections with academic departments across the university. Each program semester requires an internship in the schools, and some courses are taught in the field.

## Language Requirement: $\mathrm{N} \mid$ Program Fee: N

Career Opportunities: Graduates are eligible for secondary certification in grades seven to 12 in one of 19 subject specializations: Art, Biological Sciences, Business, Chemistry, Dance, Economics, English, French, Geography, German, History, Japanese, Mathematics, Music-Choral, Music-Instrumental, Physics, Political Science, Social Studies, Spanish and Space and Earth Science. Students in art, music and dance complete a K-12 endorsement in their field. Art and dance education majors are offered through corresponding Bachelor of Fine Arts degree programs. Those seeking certification in music may focus on either the choral-general music or instrumental music concentrations offered through the Bachelor of Music degree program.

## Secondary Education (English) (BAE) EDENGBAE

MARY LOU FULTON COLLEGE OF EDUCATION, TEMPE
Program Description: The BAE in Secondary Education program in the Mary Lou Fulton College of Education prepares preservice teachers who wish to teach adolescents in seventh through 12th grade. In order to integrate teacher education preparation with the secondary education requirement for an academic specialization, the College of Education maintains connections with academic departments across the university. Each program semester requires an internship in the schools, and some courses are taught in the field.

## Language Requirement: N | Program Fee: N

Career Opportunities: Graduates are eligible for secondary certification in grades seven to 12 in many subject specializations: Art, Biological Sciences, Business, Chemistry, Dance, Economics, English, French, Geography, German, History, Japanese, Mathematics, Music-Choral, Music-Instrumental, Music-Strings, Physics, Political Science, Social Studies, Spanish and Space and Earth Science. Students in art, music and dance complete a K-12 endorsement in their field. Art and dance education majors are offered through corresponding Bachelor of Fine Arts degree programs. Those seeking certification in music may focus on either the choral-general music or instrumental music concentrations offered through the Bachelor of Music degree program.

## Secondary Education (French) (BAE) EDFREBAE <br> MARY LOU FULTON COLLEGE OF EDUCATION, TEMPE

Program Description: The BAE in Secondary Education program in the Mary Lou Fulton College of Education 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 College of Education maintains connections with academic departments across the university. Each program semester requires an internship in the schools, and some courses are taught in the field.

## Language Requirement: $\mathrm{N} \mid$ Program Fee: N

Career Opportunities: Graduates are eligible for secondary certification in grades seven to 12 in one of 19 subject specializations: Art, Biological Sciences, Business, Chemistry, Dance, Economics, English, French, Geography, German, History, Japanese, Mathematics, Music-Choral, Music-Instrumental, Physics, Political Science, Social Studies, Spanish and Space and Earth Science. Students in art, music and dance complete a K-12 endorsement in their field. Art and dance education majors are offered through corresponding Bachelor of Fine Arts degree programs. Those seeking certification in music may focus on either the choral-general music or instrumental music concentrations offered through the Bachelor of Music degree program.

## Secondary Education (Geography) (BAE) EDGCUBAE <br> MARY LOU FULTON COLLEGE OF EDUCATION, TEMPE

Program Description: The BAE in Secondary Education program in the Mary Lou Fulton College of Education 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 College of Education maintains connections with academic departments across the university. Each program semester requires an internship in the schools, and some courses are taught in the field.

## Language Requirement: N | Program Fee: N

Career Opportunities: Graduates are eligible for secondary certification in grades seven to 12 in one of 19 subject specializations: Art, Biological Sciences, Business, Chemistry, Dance, Economics, English, French, Geography, German, History, Japanese, Mathematics, Music-Choral, Music-Instrumental, Physics, Political Science, Social Studies, Spanish and Space and Earth Science. (Students in art, music and dance complete a K-12 endorsement in their field. Art and dance education majors are offered through corresponding Bachelor of Fine Arts degree programs. Those seeking certification in music may focus on either the choral-general music or instrumental music concentrations offered through the Bachelor of Music degree program.)

## Secondary Education (German) (BAE) EDGERBAE

MARY LOU FULTON COLLEGE OF EDUCATION, TEMPE
Program Description: The BAE in Secondary Education program in the Mary Lou Fulton College of Education 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 College of Education maintains connections with academic departments across the university. Each program semester requires an internship in the schools, and some courses are taught in the field.

## Language Requirement: N | Program Fee: N

Career Opportunities: Graduates are eligible for secondary certification in grades seven to 12 in one of 19 subject specializations: Art, Biological Sciences, Business, Chemistry, Dance, Economics, English, French, Geography, German, History, Japanese, Mathematics, Music-Choral, Music-Instrumental, Physics, Political Science, Social Studies, Spanish and Space and Earth Science. Students in art, music and dance complete a K-12 endorsement in their field. Art and dance education majors are offered through corresponding Bachelor of Fine Arts degree programs. Those seeking certification in music may focus on either the choral-general music or instrumental music concentrations offered through the Bachelor of Music degree program.

## Secondary Education (History) (BAE) EDHISBAE <br> MARY LOU FULTON COLLEGE OF EDUCATION, TEMPE

Program Description: The BAE in Secondary Education program in the Mary Lou Fulton College of Education 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 College of Education maintains connections with academic departments across the university. Each program semester requires an internship in the schools, and some courses are taught in the field.

## Language Requirement: $\mathrm{N} \mid$ Program Fee: N

Career Opportunities: Graduates are eligible for secondary certification in grades seven to 12 in one of 19 subject specializations: Art, Biological Sciences, Business, Chemistry, Dance, Economics, English, French, Geography, German, History, Japanese, Mathematics, Music-Choral, Music-Instrumental, Physics, Political Science, Social Studies, Spanish and Space and Earth Science. Students in art, music and dance complete a K-12 endorsement in their field. Art and dance education majors are offered through corresponding Bachelor of Fine Arts degree programs. Those seeking certification in music may focus on either the choral-general music or instrumental music concentrations offered through the Bachelor of Music degree program.

## Secondary Education (Japanese) (BAE) EDJPNBAE <br> MARY LOU FULTON COLLEGE OF EDUCATION, TEMPE

Program Description: The BAE in Secondary Education program in the Mary Lou Fulton College of Education 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 College of Education maintains connections with academic departments across the university. Each program semester requires an internship in the schools, and some courses are taught in the field.

## Language Requirement: $\mathrm{N} \mid$ Program Fee: N

Career Opportunities: Graduates are eligible for secondary certification in grades seven to 12 in one of 19 subject specializations: Art, Biological Sciences, Business, Chemistry, Dance, Economics, English, French, Geography, German, History, Japanese, Mathematics, Music-Choral, Music-Instrumental, Physics, Political Science, Social Studies, Spanish and Space and Earth Science. Students in art, music and dance complete a K-12 endorsement in their field. Art and dance education majors are offered through corresponding Bachelor of Fine Arts degree programs. Those seeking certification in music may focus on either the choral-general music or instrumental music concentrations offered through the Bachelor of Music degree program.

## Secondary Education (Mathematics) (BAE) EDMATBAE <br> MARY LOU FULTON COLLEGE OF EDUCATION, TEMPE

Program Description: The BAE in Secondary Education program in the Mary Lou Fulton College of Education 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 College of Education maintains connections with academic departments across the university. Each program semester requires an internship in the schools, and some courses are taught in the field.

## Language Requirement: N | Program Fee: N

Career Opportunities: Graduates are eligible for secondary certification in grades seven to 12 in one of 19 subject specializations: Art, Biological Sciences, Business, Chemistry, Dance, Economics, English, French, Geography, German, History, Japanese, Mathematics, Music-Choral, Music-Instrumental, Physics, Political Science, Social Studies, Spanish and Space and Earth Science. Students in art, music and dance complete a K-12 endorsement in their field. Art and dance education majors are offered through corresponding Bachelor of Fine Arts degree programs. Those seeking certification in music may focus on either the choral-general music or instrumental music concentrations offered through the Bachelor of Music degree program.

## Secondary Education (Physics) (BAE) EDPHYBAE <br> MARY LOU FULTON COLLEGE OF EDUCATION, TEMPE

Program Description: The BAE in Secondary Education program in the Mary Lou Fulton College of Education 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 College of Education maintains connections with academic departments across the university. Each program semester requires an internship in the schools, and some courses are taught in the field.

## Language Requirement: $\mathrm{N} \mid$ Program Fee: N

Career Opportunities: Graduates are eligible for secondary certification in grades seven to 12 in one of 19 subject specializations: Art, Biological Sciences, Business, Chemistry, Dance, Economics, English, French, Geography, German, History, Japanese, Mathematics, Music-Choral, Music-Instrumental, Physics, Political Science, Social Studies, Spanish and Space and Earth Science. Students in art, music and dance complete a K-12 endorsement in their field. Art and dance education majors are offered through corresponding Bachelor of Fine Arts degree programs. Those seeking certification in music may focus on either the choral-general music or instrumental music concentrations offered through the Bachelor of Music degree program.

## Secondary Education (Political Science) (BAE) EDPOSBAE <br> MARY LOU FULTON COLLEGE OF EDUCATION, TEMPE

Program Description: The BAE in Secondary Education program in the Mary Lou Fulton College of Education 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 College of Education maintains connections with academic departments across the university. Each program semester requires an internship in the schools, and some courses are taught in the field.

## Language Requirement: $\mathrm{N} \mid$ Program Fee: N

Career Opportunities: Graduates are eligible for secondary certification in grades seven to 12 in one of 19 subject specializations: Art, Biological Sciences, Business, Chemistry, Dance, Economics, English, French, Geography, German, History, Japanese, Mathematics, Music-Choral, Music-Instrumental, Physics, Political Science, Social Studies, Spanish and Space and Earth Science. Students in art, music and dance complete a K-12 endorsement in their field. Art and dance education majors are offered through corresponding Bachelor of Fine Arts degree programs. Those seeking certification in music may focus on either the choral-general music or instrumental music concentrations offered through the Bachelor of Music degree program.

## Secondary Education (Social Studies) (BAE) EDSSTBAE <br> MARY LOU FULTON COLLEGE OF EDUCATION, TEMPE

Program Description: The BAE in Secondary Education program in the Mary Lou Fulton College of Education 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 College of Education maintains connections with academic departments across the university. Each program semester requires an internship in the schools, and some courses are taught in the field.

## Language Requirement: N | Program Fee: N

Career Opportunities: Graduates are eligible for secondary certification in grades seven to 12 in one of 19 subject specializations: Art, Biological Sciences, Business, Chemistry, Dance, Economics, English, French, Geography, German, History, Japanese, Mathematics, Music-Choral, Music-Instrumental, Physics, Political Science, Social Studies, Spanish and Space and Earth Science. Students in art, music and dance complete a K-12 endorsement in their field. Art and dance education majors are offered through corresponding Bachelor of Fine Arts degree programs. Those seeking certification in music may focus on either the choral-general music or instrumental music concentrations offered through the Bachelor of Music degree program.

## Secondary Education (Spanish) (BAE) EDSPABAE <br> MARY LOU FULTON COLLEGE OF EDUCATION, TEMPE

Program Description: The BAE in Secondary Education program in the Mary Lou Fulton College of Education 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 College of Education maintains connections with academic departments across the university. Each program semester requires an internship in the schools, and some courses are taught in the field.

## Language Requirement: $\mathrm{N} \mid$ Program Fee: N

Career Opportunities: Graduates are eligible for secondary certification in grades seven to 12 in one of 19 subject specializations: Art, Biological Sciences, Business, Chemistry, Dance, Economics, English, French, Geography, German, History, Japanese, Mathematics, Music-Choral, Music-Instrumental, Physics, Political Science, Social Studies, Spanish and Space and Earth Science. Students in art, music and dance complete a K-12 endorsement in their field. Art and dance education majors are offered through corresponding Bachelor of Fine Arts degree programs. Those seeking certification in music may focus on either the choral-general music or instrumental music concentrations offered through the Bachelor of Music degree program.

## Special Education (BAE) EDSPEBAE <br> MARY LOU FULTON COLLEGE OF EDUCATION, TEMPE

Program Description: The special education program prepares preservice teachers to teach children and adolescents in kindergarten through 12th grade who have learning disabilities, mental retardation, or emotional/ behavioral disorders. Teaching in special education requires an in-depth knowledge of how individuals with special needs learn. Preservice teachers are prepared to develop strategies and techniques for teaching along with a broad knowledge of general education subjects. A school internship is required for each semester of the program. The program is aligned with the standards of the Council for Exceptional Children.

[^3]Career Opportunities: The Bachelor of Arts in Education (BAE) in special education leads to a recommendation for certification in K-12 special education in Arizona. This program provides preparation in each disability area; however the certificate the student qualifies for will be determined by his or her student teaching placement.

# EDUCATIONAL INNOVATION AND TEACHER PREPARATION, SCHOOL OF 

Early Childhood Education (BAE) ECEDCBAE<br>SCHOOL OF EDUCATIONAL INNOVATION AND TEACHER PREPARATION, POLY<br>Contact: http://poly.asu.edu/education/ | polytechniceducation@asu.edu | SH 140 | 480/727-1103

Program Description: The BAE in Early Childhood Education is a practice-oriented degree program designed to prepare future teachers for the Pre K-3 classroom. This program is unique in its focus on field experiences, professional development, practical application of current theory and educational technologies. The newly revised curriculum focuses on and directly aligns with Arizona's standards for teachers and the requirements for Early Childhood certification. Students apply what they are learning by participating in field internships each semester that are directly linked to course discussions and assignments. 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 educational methodology courses in the evening at the Polytechnic campus and intensive field experiences in local preschool and K-3 grade classrooms. Students graduate from this program ready to start a successful teaching career.

Language Requirement: N | Program Fee: N
Career Opportunities: The Early Childhood Education program is primarily focused on preparing teachers for Preschool and K-3 classrooms and related professions in the broader discipline. Additional career opportunities exist in the areas of educational sales, professional development leadership, technical education, child care and tutoring. With advanced training, graduates can also pursue careers in a range of areas including school administration, instructional design, special education, counseling and physical education.

## Elementary Education (BAE) ECEEDBAE

SCHOOL OF EDUCATIONAL INNOVATION AND TEACHER PREPARATION, POLY
Program Description: The BAE in Elementary Education is a practice-oriented degree program designed to prepare future teachers for 1-8 grade classroom settings. This program is unique in its focus on field experiences, professional development, practical application of current theory and educational technologies. The curriculum directly aligns with Arizona's standards for teachers. Students apply what they are learning by participating in field internships each semester that are directly linked to course discussions and assignments. 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 educational methodology courses and intensive field experiences/student teaching in daytime or evening cohorts at the Polytechnic campus or in evening district-based school partnerships. Course instructors have taught in a variety of Pre K-12 grade settings and augment class experiences with practical applications.

Language Requirement: N | Program Fee: N
Career Opportunities: The Elementary Education program focuses on preparing classroom teachers for grades 1-8 and related professions in the broader discipline. Additional career opportunities exist in the areas of educational sales, professional development leadership, technical education, child care and tutoring. With advanced training, graduates can also pursue careers in a range of areas including school administration, instructional design, special education, counseling and physical education.

# Secondary Education (Physical Education) (BAE) ECPPEBAE 

SCHOOL OF EDUCATIONAL INNOVATION AND TEACHER PREPARATION, POLY

Contact: http://poly.asu.edu/education/ | polytechniceducation@asu.edu | SH 140 | 480/727-1103
Program Description: The physical education concentration under the BAE in Secondary Education prepares future teachers for the K-12 physical education classroom. This program is unique in its practice-oriented focus on intensive field experiences, practical application of current theories, a field-tested and widely used curriculum and classroom management model, and an emphasis on current technology. The newly revised curriculum directly aligns with Arizona's standards for teachers and the National Association for Sport and Physical Education's 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 educational methodology courses and intensive field experiences at both the elementary and secondary level. Course instructors use their experience teaching in a variety of K-12 settings and coaching environments to augment class experiences with many practical applications.

## Language Requirement: $\mathrm{N} \mid$ Program Fee: N

Career Opportunities: The physical education program prepares educators who wish to teach in kindergarten through 12th grade and related professions in the broader discipline. Students receive a secondary teaching certificate with a K-12 endorsement for physical education. School districts often offer additional stipends for coaching sport teams, ESL and BLE endorsements, extracurricular activities, and administrative responsibilities. With advanced training, graduates can pursue careers in a range of areas including school administration, instructional design, special education, counseling and sports administration.

Additional Admissions 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.

## Special Education (BAE) ECSPEBAE

SCHOOL OF EDUCATIONAL INNOVATION AND TEACHER PREPARATION, POLY
Contact: http://poly.asu.edu/education/ | polytechniceducation@asu.edu | SH 140 | 480/727-1103
Program Description: The BAE in Special Education is a practice-oriented degree program that uses extensive field experiences along with both general and special education methods courses to provide students with an understanding of a variety of classroom environments and the responsibilities of programming for children with disabilities. This program is unique in its focus on field experiences, professional development, practical application of current theory and educational technologies. Students apply what they are learning by participating in field internships each semester that are directly linked to course discussions and assignments. 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 educational methods courses in the evening at the Polytechnic campus and intensive field experiences in local K-12 classrooms. Graduates will be eligible for K-12 special education cross-categorical certification and may choose to dually certify in elementary education or in a specific content area for secondary education. Course instructors have taught in a variety of K-12 settings and augment class experiences with practical applications.

## Language Requirement: $\mathrm{N} \mid$ Program Fee: N

Career Opportunities: The Special Education program focuses on preparing classroom teachers for the K-12 setting and related professions in the broader discipline. Additional career opportunities exist in the areas of professional development leadership, child care and tutoring. With advanced training, graduates can also pursue careers in a range of areas including school administration, instructional design, special education, counseling and physical education.

## ENGINEERING, IRA A. FULTON SCHOOL OF

## Aerospace Engineering (Aeronautics) (BSE) ESAEROBSE

IRA A. FULTON SCHOOL OF ENGINEERING, TEMPE

Contact: http://mae.fulton.asu.edu | mae@asu.edu | ECG 346 | 480/965-3291
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 BSE in Aerospace Engineering, emphasizes aeronautical engineering. Topics in required courses cover aerodynamics, aerospace materials, aircraft structures, propulsion, flight mechanics, and stability and control. Required astronautics topics include orbital mechanics, attitude control and rocket propulsion.The objectives of the Aerospace Engineering program at ASU are:1) (Career Preparation) Provide the depth and breadth of engineering education that prepares graduates for employment in the aerospace engineering profession; admission to graduate programs in aerospace engineering or a related field; or the pursuit of advanced education in other professional areas, such as business, law or medicine. 20 (Technical Competence) Provide graduates with the technical skills for career success, including the ability to think in a critical and evaluative manner and to consider a broad perspective in order to solve technical and nontechnical problems.3) (Professionalism) Prepare graduates with the professional skills for career success, including an awareness of ethical responsibility and the ability to communicate well and work successfully within diverse groups.The Aerospace Engineering programs at ASU are accredited by the Engineering Accreditation Commission of ABET, 111 Market Place, Suite 1050, Baltimore, MD 21202-4012, telephone 410/347-7700.

## Language Requirement: $\mathrm{N} \mid$ Program Fee: N

Career Opportunities: A majority of students entering the field of aerospace engineering share a desire to work on the design and analysis of aerospace vehicles. Thus most graduates are employed in the aerospace industry or in government positions related to aerospace. Specific careers in aerospace engineering include vehicle design and performance, vehicle and component analysis using computer-aided tools, wind-tunnel and flight testing, space mission design and analysis, propulsion engineering, aeronautical and space systems integration, material and structural design, and configuration development.

Additional Admissions Requirements: The admission requirements for majors in the Ira A. Fulton School of Engineering are higher than minimum university admission requirements. Students should select a second major choice outside Engineering when applying for admission. Students who are not eligible for admission to Engineering and who do not indicate a second major choice will be placed in exploratory mathematics, physical sciences, engineering and technology within University College.

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 (http://students.asu.edu/international-admission), 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 more than 24 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).


# Aerospace Engineering (Astronautics) (BSE) ESAEASBSE 

IRA A. FULTON SCHOOL OF ENGINEERING, TEMPE

Contact: http://mae.fulton.asu.edu | mae@asu.edu | ECG 346 | 480/965-3291
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 concentration, under the BSE in Aerospace Engineering, is offered in partnership with the School of Earth and Space Exploration. The curriculum covers orbital mechanics, space environment, attitude determination and control, telecommunications, space structures, rocket propulsion, and gas dynamics, as well as elective topics in aeronautics. Students in the astronautics concentration study alongside students majoring in exploration science, and design projects are carried out within transdisciplinary student teams.The objectives of the Aerospace Engineering program at ASU are:1) (Career Preparation) Provide the depth and breadth of engineering education that prepares graduates for employment in the aerospace engineering profession; admission to graduate programs in aerospace engineering or a related field; or the pursuit of advanced education in other professional areas, such as business, law or medicine.2) (Technical Competence) Provide graduates with the technical skills for career success, including the ability to think in a critical and evaluative manner and to consider a broad perspective in order to solve technical and nontechnical problems.3) (Professionalism) Prepare graduates with the professional skills for career success, including an awareness of ethical responsibility and the ability to communicate well and work successfully within diverse groups.The Aerospace Engineering programs at ASU are accredited by the Engineering Accreditation Commission of ABET, 111 Market Place, Suite 1050, Baltimore, MD 21202-4012, telephone 410/347-7700.

## Language Requirement: $\mathrm{N} \mid$ Program Fee: N

Career Opportunities: A majority of students entering the field of aerospace engineering share a desire to work on the design and analysis of aerospace vehicles. Thus most graduates are employed in the aerospace industry or in government positions related to aerospace. Specific careers in aerospace engineering include vehicle design and performance, vehicle and component analysis using computer-aided tools, wind-tunnel and flight testing, space mission design and analysis, propulsion engineering, aeronautical and space systems integration, material and structural design, and configuration development.

Additional Admissions Requirements: The admission requirements for majors in the Ira A. Fulton School of Engineering are higher than minimum university admission requirements. Students should select a second major choice outside Engineering when applying for admission. Students who are not eligible for admission to Engineering and who do not indicate a second major choice will be placed in exploratory mathematics, physical sciences, engineering and technology within University College.

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 (http://students.asu.edu/international-admission), 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 more than 24 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).


## Bioengineering (BSE) ESBMEBSE

## IRA A. FULTON SCHOOL OF ENGINEERING, TEMPE

Contact: http://hdbe.fulton.asu.edu | http://hdbe.fulton.asu.edu/contact | ECG 334 | 480/965-3028
Program Description: Bioengineering uses principles and methods from engineering and the physical sciences to solve problems in biology and medicine. Faculty in the Ira A. Fulton School of Engineering offer the Bachelor of Science in Engineering (BSE) degree in bioengineering.Undergraduate students may choose one of eight areas of emphasis: biochemical, bioelectrical, biomaterials, biomechanical, imaging, biosystems, molecular and cellular engineering, and premedical engineering. All seniors complete a two-semester capstone design experience, in which they plan and create an independent medical system or medical/biotechnology device project. The capstone design course is taught in the department's new, state-of-the-art design studio.

## Language Requirement: $\mathrm{N} \mid$ Program Fee: N

Career Opportunities: Biomedical engineers are employed in industry, hospitals, research facilities affiliated with educational and medical institutions, teaching 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.

Additional Admissions Requirements: The admission requirements for majors in the Ira A. Fulton School of Engineering are higher than minimum university admission requirements. Students should select a second major choice outside Engineering when applying for admission. Students who are not eligible for admission to Engineering and who do not indicate a second major choice will be placed in exploratory mathematics, physical sciences, engineering and technology within University College.

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 (http://students.asu.edu/international-admission), 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 more than 24 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).


# Chemical Engineering (BSE) ESCHEBSE 

IRA A. FULTON SCHOOL OF ENGINEERING, TEMPE
Contact: http://che.fulton.asu.edu | http://che.fulton.asu.edu/contact | ECG 202 | 480/965-3313
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. he faculty in the Fulton School of Engineering offer the Bachelor of Science in Engineering degree in Chemical Engineering. 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.

## Language Requirement: N | Program Fee: N

Career Opportunities: Chemical engineers have traditionally played a key role in industries as varied as petroleum, food, artificial fibers, petrochemicals, plastics, ceramics, primary metals, glass and 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.

Additional Admissions Requirements: The admission requirements for majors in the Ira A. Fulton School of Engineering are higher than minimum university admission requirements. Students should select a second major choice outside Engineering when applying for admission. Students who are not eligible for admission to Engineering and who do not indicate a second major choice will be placed in exploratory mathematics, physical sciences, engineering and technology within University College.

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 (http://students.asu.edu/international-admission), 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 more than 24 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).


## Civil Engineering (BSE) ESCEEBSE

IRA A. FULTON SCHOOL OF ENGINEERING, TEMPE
Contact: http://cee.fulton.asu.edu/ | cee@asu.edu | ECG 252 | 480/965-3589

Program Description: The civil engineering profession involves the analysis, planning, design, construction and maintenance of many types of facilities for government, commerce, industry and the public domain. These include office towers, factories, schools, roadway systems, bridges, airports, tunnels and subway systems, dams, canals, and water purification facilities.The faculty in the Ira A. Fulton School of Engineering offer the Bachelor of Science in Engineering (BSE) degree in Civil Engineering. 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.

## Language Requirement: N | Program Fee: N

Career Opportunities: ASU graduates with a BSE degree in Civil Engineering readily find employment. Civil engineers work in many different types of companies, from large corporations to small, private consulting firms, or in 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.

Additional Admissions Requirements: The admission requirements for majors in the Ira A. Fulton School of Engineering are higher than minimum university admission requirements. Students should select a second major choice outside Engineering when applying for admission. Students who are not eligible for admission to Engineering and who do not indicate a second major choice will be placed in exploratory mathematics, physical sciences, engineering and technology within University College.

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 (http://students.asu.edu/international-admission), 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 more than 24 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).


## Civil Engineering (Construction Engineering) (BSE) ESCEECBSE

IRA A. FULTON SCHOOL OF ENGINEERING, TEMPE

Contact: http://cee.fulton.asu.edu | cee@asu.edu | ECG 252 | 480/965-3589
Program Description: Civil engineering is primarily concerned with the public domain. Faculty in the Ira A. Fulton School of Engineering offer the Bachelor of Science in Engineering (BSE) degree in Civil Engineering with a concentration in construction engineering. The emphasis in construction involves design, construction techniques, maintenance and operation of many types of facilities for government, commerce, and industry. These include office towers, factories, schools, roadway systems, bridges, airports, tunnels and subway systems, dams, canals, and environmental protection facilities such as solid waste and water treatment systems.

## Language Requirement: $\mathrm{N} \mid$ Program Fee: N

Career Opportunities: ASU graduates with the BSE degree in Civil Engineering with a concentration in construction 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 many and are likely to expand.

Additional Admissions Requirements: The admission requirements for majors in the Ira A. Fulton School of Engineering are higher than minimum university admission requirements. Students should select a second major choice outside Engineering when applying for admission. Students who are not eligible for admission to Engineering and who do not indicate a second major choice will be placed in exploratory mathematics, physical sciences, engineering and technology within University College.

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 (http://students.asu.edu/international-admission), 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 more than $\mathbf{2 4}$ 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).


## Civil Engineering (Environmental Engineering) (BSE) ESCEEEBSE

IRA A. FULTON SCHOOL OF ENGINEERING, TEMPE
Contact: http://cee.fulton.asu.edu | cee@asu.edu | ECG 252 | 480/965-3589 |
Program Description: Environmental engineering is a multidisciplinary field based on traditional civil engineering principles; and chemistry, biology, and geology. Environmental engineers are involved with the design and operation of water and wastewater treatment systems, remediation of contaminated soils and waters, construction of hazardous waste containment systems, analysis of the fate and transport of pollutants in natural environments, water conservation and reuse, air pollution technology, and surface water quality management.

## Language Requirement: $\mathrm{N} \mid$ Program Fee: N

Career Opportunities: University graduates with the B.S.E. Degree in Civil Engineering and an Environmental Engineering concentration 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 great and are likely to expand.

Additional Admissions Requirements: The admission requirements for majors in the Ira A. Fulton School of Engineering are higher than minimum university admission requirements. Students should select a second major choice outside Engineering when applying for admission. Students who are not eligible for admission to Engineering and who do not indicate a second major choice will be placed in exploratory mathematics, physical sciences, engineering and technology within University College.

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 (http://students.asu.edu/international-admission), 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 more than 24 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).


## Computer Science (BS) ESCSEBS

IRA A. FULTON SCHOOL OF ENGINEERING, TEMPE
Contact: http://sci.asu.edu/ | sci.advising@asu.edu | BYENG 553 | 480/965-3190
Program Description: The discipline of computer science is concerned with the design of computers, computational processes, and information transfer and transformation. Design of next generation computer systems, computer networking, biomedical information systems, gaming systems, search engines, web browsers and computerized package distribution systems are all examples of projects a computer scientist might work on. Computer scientists might also focus on improving software reliability, network security or information retrieval systems, or may even work as a consultant to a financial services company. Faculty in the Ira A. Fulton School of Engineering offer the Bachelor of Science (BS) degree in Computer Science. Students pursuing this degree may choose to concentrate their studies in software engineering or information assurance.

## Language Requirement: $\mathrm{N} \mid$ Program Fee: N

Career Opportunities: Because computer technology is embedded in so many products, services, and systems, computer scientists can be found in almost every industry. Although they are increasingly employed in every sector of the economy, the greatest concentration of computer scientists works in the computer systems design and related services industry. Firms in this industry provide services related to the commercial use of computers on a contract basis, including custom computer programming services; computer systems integration design services; computer facilities management services, including computer systems or data processing facilities support services for clients; and other computer-related services, such as disaster recovery services and software installation. Many computer scientists and database administrators are employed by Internet service providers; Web search portals; and data processing, hosting and related services firms. Others work for government, manufacturers of computer and electronic products, insurance companies, financial institutions and universities.

Additional Admissions Requirements: The admission requirements for majors in the Ira A. Fulton School of Engineering are higher than minimum university admission requirements. Students should select a second major choice outside Engineering when applying for admission. Students who are not eligible for admission to Engineering and who do not indicate a second major choice will be placed in exploratory mathematics, physical sciences, engineering and technology within University College.

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 (http://students.asu.edu/international-admission), 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 more than 24 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).


## Computer Systems Engineering (BSE) ESCSEBSE

IRA A. FULTON SCHOOL OF ENGINEERING, TEMPE
Contact: http://sci.asu.edu | sci.advising@asu.edu | BYENG 553 | 480/965-3190
Program Description: The Computer Systems Engineering program is concerned with the analysis, design and evaluation of computer systems, both hardware and software. The program emphasizes computer organization and architecture, systems programming, operating systems and digital hardware design. Computer engineers often find themselves focusing on problems or challenges that result in new "state of the art" products that integrate computer capabilities. They work on the design, planning, development, testing, and even the supervision of manufacturing of computer hardware -- including everything from chips to device controllers. They also focus on computer networks for the transmission of data and multimedia. They work on the interface between different pieces of hardware and strive to provide new capabilities to existing and new systems or products. The work of a computer engineer is grounded in the hardware -- from circuits to architecture -- but also focuses on operating systems and software. Computer engineers must understand logic design, microprocessor system design, computer architecture and computer interfacing, and continually focus on system requirements and design. Faculty in the Ira A. Fulton School of Engineering offer the Bachelor of Science in Engineering (BSE) degree in Computer Systems Engineering.

## Language Requirement: N | Program Fee: N

Career Opportunities: Computer engineers are employed in industry, government, education and consulting. They usually work in teams with other engineers and individuals from other functional areas. They may be working on a new design of an electronic component for an individual project, focused on the development of software specific to a new product or one being redesigned, or may work in sales or in supporting research activities. Computer engineers frequently work on new applications of computers, such as advances in digital television and photography, virtual meeting technology, intelligent highways and control systems and new technologies for cars, phones, security systems, telescopes, airplanes and space vehicles.

Additional Admissions Requirements: The admission requirements for majors in the Ira A. Fulton School of Engineering are higher than minimum university admission requirements. Students should select a second major choice outside Engineering when applying for admission. Students who are not eligible for admission to Engineering and who do not indicate a second major choice will be placed in exploratory mathematics, physical sciences, engineering and technology within University College.

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 (http://students.asu.edu/international-admission), 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 more than 24 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).


## Construction (Concrete Industry Management) (BS) ESCONIMBS

## IRA A. FULTON SCHOOL OF ENGINEERING, TEMPE

Contact: http://construction.asu.edu/cim | dewsc@asu.edu | USE 138 | 48096553615
Program Description: The Del E. Webb School of Construction offers the Bachelor of Science degree in Construction with a concentration in concrete industry management (CIM). CIM 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.

## Language Requirement: N | Program Fee: N

Career Opportunities: The CIM 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. CIM career opportunities include field sales, operations, project and production management; technical service; concrete production; cement, admix, or equipment manufacturing; concrete or general contracting; and development.

Additional Admissions Requirements: The admission requirements for majors in the Ira A. Fulton School of Engineering are higher than minimum university admission requirements. Students should select a second major choice outside Engineering when applying for admission. Students who are not eligible for admission to Engineering and who do not indicate a second major choice will be placed in exploratory mathematics, physical sciences, engineering and technology within University College.

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 (http://students.asu.edu/international-admission), 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 more than $\mathbf{2 4}$ 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).


## Construction (General Building Construction) (BS) ESCONGBS

## IRA A. FULTON SCHOOL OF ENGINEERING, TEMPE

Contact: http://construction.asu.edu | dewsc@asu.edu | USE 138 | 48096553615
Program Description: Through the BS in Construction degree 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 in the nation.

## Language Requirement: $\mathrm{N} \mid$ Program Fee: N

Career Opportunities: The general building 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.

Additional Admissions Requirements: The admission requirements for majors in the Ira A. Fulton School of Engineering are higher than minimum university admission requirements. Students should select a second major choice outside Engineering when applying for admission. Students who are not eligible for admission to Engineering and who do not indicate a second major choice will be placed in exploratory mathematics, physical sciences, engineering and technology within University College.

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 (http://students.asu.edu/international-admission), 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 $\mathbf{2 4}$ 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 more than $\mathbf{2 4}$ 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).


## Construction (Heavy Construction) (BS) ESCONHBS

## IRA A. FULTON SCHOOL OF ENGINEERING, TEMPE

Contact: http://construction.asu.edu | dewsc@asu.edu | USE 138 | 48096553615

Program Description: Through the BS in Construction degree program (with a concentration in heavy 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 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 in the nation.

## Language Requirement: N | Program Fee: N

Career Opportunities: The heavy construction concentration prepares students for careers related to the public works discipline. Gradates become project managers, estimators, schedulers, or a combination of all three at an executive level. Typical heavy construction-oriented projects include highways, airports, bridges, power plants, rapid transit systems, harbor and water facilities, pipelines, dams, tunnels, canals, sewerage systems, and 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.

Additional Admissions Requirements: The admission requirements for majors in the Ira A. Fulton School of Engineering are higher than minimum university admission requirements. Students should select a second major choice outside Engineering when applying for admission. Students who are not eligible for admission to Engineering and who do not indicate a second major choice will be placed in exploratory mathematics, physical sciences, engineering and technology within University College.

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 (http://students.asu.edu/international-admission), 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 more than 24 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).


# Construction (Residential Construction) (BS) ESCONRBS 

IRA A. FULTON SCHOOL OF ENGINEERING, TEMPE

Contact: http://construction.asu.edu | dewsc@asu.edu | USE 138 | 48096553615
Program Description: Through the BS in Construction degree 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 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 in the nation. This option covers the specific methods and processes during the planning, production, marketing, and business related activities common to residential construction.

Language Requirement: N | Program Fee: N
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 an executive level.

Additional Admissions Requirements: The admission requirements for majors in the Ira A. Fulton School of Engineering are higher than minimum university admission requirements. Students should select a second major choice outside Engineering when applying for admission. Students who are not eligible for admission to Engineering and who do not indicate a second major choice will be placed in exploratory mathematics, physical sciences, engineering and technology within University College.

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 (http://students.asu.edu/international-admission), 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 more than 24 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).


## Construction (Specialty Construction) (BS) ESCONSBS

Contact: http://construction.asu.edu | dewsc@asu.edu | USE 138 | 480/965-3615

Program Description: Through the BS in Construction degree program (with a concentration in specialty 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. This concentration program emphasizes the construction process at the subcontractor level. 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 in the nation.

## Language Requirement: $\mathrm{N} \mid$ Program Fee: N

Career Opportunities: The specialty construction concentration prepares students for careers with contractors- such as mechanical and electrical construction firms.

Additional Admissions Requirements: The admission requirements for majors in the Ira A. Fulton School of Engineering are higher than minimum university admission requirements. Students should select a second major choice outside Engineering when applying for admission. Students who are not eligible for admission to Engineering and who do not indicate a second major choice will be placed in exploratory mathematics, physical sciences, engineering and technology within University College.

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 (http://students.asu.edu/international-admission), 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 more than 24 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).


## Electrical Engineering (BSE) ESEEEBSE

IRA A. FULTON SCHOOL OF ENGINEERING, TEMPE<br>Contact: http://ee.fulton.asu.edu | eeinfo@asu.edu | ERC 552 | 480/965-3424

Program Description: The goal of the electrical engineering undergraduate program is to prepare graduates for entry-level positions as electrical engineers. Faculty in the Ira A. Fulton School of Engineering offer a Bachelor of Science in Engineering (BSE) degree in Electrical Engineering. Following initial course work in mathematics and sciences, the engineering core classes build a solid base of engineering knowledge. Beyond the engineering core, the electrical engineering curriculum includes a number of required electrical engineering and technical elective courses; areas include: systems, circuits, power, solid-state devices, electromagnetics, and computer engineering. 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 interests.

## Language Requirement: $\mathrm{N} \mid$ Program Fee: N

Career Opportunities: Graduates with the BSE in Electrical Engineering find many exciting opportunities in industry. These range from semiconductor chip designers and manufacturers, electric power utilities, consulting companies, communication equipment and network providers, computers and peripheral devices manufacturers, and defense organizations. The degree also prepares graduates for continued learning experiences, either in a formal graduate program or in continuing education applications.

Additional Admissions Requirements: The admission requirements for majors in the Ira A. Fulton School of Engineering are higher than minimum university admission requirements. Students should select a second major choice outside Engineering when applying for admission. Students who are not eligible for admission to Engineering and who do not indicate a second major choice will be placed in exploratory mathematics, physical sciences, engineering and technology within University College.

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 (http://students.asu.edu/international-admission), 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 more than $\mathbf{2 4}$ 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).


## Electrical Engineering (Electric Power and Energy Systems) (BSE) ESEEEPBSE

IRA A. FULTON SCHOOL OF ENGINEERING, TEMPE
Contact: http://ee.fulton.asu.edu | eeinfo@asu.edu | ERC 552 | 480/965-3424
Program Description: The goal of the electric power and energy systems concentration (EPES) is to prepare the graduates for entry-level positions in industries dealing with conventional power generation (fossil fuel and nuclear) and alternative energy systems, including solar, wind and fuel cells. Employment opportunities range from utility companies to power equipment manufacturers, consulting firms, research and design organizations. This concentration will also prepare students to pursue graduate degrees in the areas of power systems, power generation and renewable and sustainable energy sources.

## Language Requirement: $\mathrm{N} \mid$ Program Fee: N

Career Opportunities: Career opportunities for graduates with a concentration in electric power and energy systems include employment in utility companies, consulting engineer firms, power equipment manufacturers, state and municipal agencies, research and design organizations as well as entrepreneurial opportunities.

Additional Admissions Requirements: The admission requirements for majors in the Ira A. Fulton School of Engineering are higher than minimum university admission requirements. Students should select a second major choice outside Engineering when
applying for admission. Students who are not eligible for admission to Engineering and who do not indicate a second major choice will be placed in exploratory mathematics, physical sciences, engineering and technology within University College.

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 (http://students.asu.edu/international-admission), 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 more than $\mathbf{2 4}$ 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).


## Engineering Special Studies (Premedical Engineering) (BSE) ESESPPBSE

## IRA A. FULTON SCHOOL OF ENGINEERING, TEMPE

Contact: http://hdbe.fulton.asu.edu | http://hdbe.fulton.asu.edu/contact | ECG 334 | 480/965-3028
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 men and women with a knowledge of computer technology, transport phenomena, biomechanics, bioelectric phenomena, operations research and cybernetics.The Bachelor of Science in Engineering degree in Engineering Special Studies with a concentration in premedical engineering is designed to meet the needs of this growing profession.

## Language Requirement: N | Program Fee: N

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 research, aerospace and undersea medicine, artificial organs, prostheses, biomedical engineering or biophysics.

Additional Admissions Requirements: The admission requirements for majors in the Ira A. Fulton School of Engineering are higher than minimum university admission requirements. Students should select a second major choice outside Engineering when applying for admission. Students who are not eligible for admission to Engineering and who do not indicate a second major choice will be placed in exploratory mathematics, physical sciences, engineering and technology within University College.

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 (http://students.asu.edu/international-admission), 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 more than $\mathbf{2 4}$ 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).


## Industrial Engineering (BSE) ESIEEBSE

## IRA A. FULTON SCHOOL OF ENGINEERING, TEMPE

Contact: http://ie.fulton.asu.edu | ie@asu.edu | GWC 502 | 480/965-3185
Program Description: Industrial Engineers design and manage complex systems in the manufacturing and service industries through the integration of people, material, information, capital, energy and equipment. The faculty in the Ira A. Fulton School of Engineering offer the Bachelor of Science in Engineering degree in Industrial engineering.Industrial engineering (IE) applies systems modeling and analysis skills to ensure high quality products and services are achieved with the optimal use of resources. IE focuses on the total picture of developing, producing, delivering, and servicing products and services to satisfy customers. 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 IE broad knowledge of an organization and provides increased opportunities for advancement into management and leadership.

## Language Requirement: N | Program Fee: N

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 semiconductor manufacturing, automotive, aerospace, defense, banking, finance, transportation, health care, telecommunications, management consulting and government.

Additional Admissions Requirements: The admission requirements for majors in the Ira A. Fulton School of Engineering are higher than minimum university admission requirements. Students should select a second major choice outside Engineering when applying for admission. Students who are not eligible for admission to Engineering and who do not indicate a second major choice will be placed in exploratory mathematics, physical sciences, engineering and technology within University College.

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 (http://students.asu.edu/international-admission), 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 more than $\mathbf{2 4}$ 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).


## Materials Science and Engineering (BSE) ESMSEBSE

IRA A. FULTON SCHOOL OF ENGINEERING, TEMPE
Contact: http://som.asu.edu/ | som@asu.edu | ECG 303 | 480/727-9311
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 School of Engineering offer the Bachelor of Science in Engineering degree 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.

Language Requirement: N | Program Fee: N
Career Opportunities: Materials engineers are in demand in a wide range of industries, including the automotive, aerospace, electronics, semiconductor, computer and healthcare 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.

Additional Admissions Requirements: The admission requirements for majors in the Ira A. Fulton School of Engineering are higher than minimum university admission requirements. Students should select a second major choice outside Engineering when applying for admission. Students who are not eligible for admission to Engineering and who do not indicate a second major choice will be placed in exploratory mathematics, physical sciences, engineering and technology within University College.

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 (http://students.asu.edu/international-admission), 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 more than 24 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).


## Mechanical Engineering (BSE) ESMAEMBSE

IRA A. FULTON SCHOOL OF ENGINEERING, TEMPE<br>Contact: http://mae.fulton.asu.edu | mae@asu.edu | ECG 346 | 480/965-3291 |

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.The objectives of the Mechanical Engineering program at ASU are:1) (Career Preparation) Provide the depth and breadth of engineering education that prepares graduates for employment in the mechanical engineering profession; admission to graduate programs in mechanical engineering or a related field; or the pursuit of advanced education in other professional areas, such as business, law or medicine.2) (Technical Competence) Provide graduates with the technical skills for career success, including the ability to think in a critical and evaluative manner and to consider a broad perspective in order to solve technical and nontechnical problems.3) (Professionalism) Prepare graduates with the professional skills for career success, including an awareness of ethical responsibility and the ability to communicate well and work successfully within diverse groups.The Mechanical Engineering programs at ASU are accredited by the Engineering Accreditation Commission of ABET, 111 Market Place, Suite 1050, Baltimore, MD 21202-4012, telephone 410/347-7700.

## Language Requirement: N | Program Fee: N

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.

Additional Admissions Requirements: The admission requirements for majors in the Ira A. Fulton School of Engineering are higher than minimum university admission requirements. Students should select a second major choice outside Engineering when applying for admission. Students who are not eligible for admission to Engineering and who do not indicate a second major choice will be placed in exploratory mathematics, physical sciences, engineering and technology within University College.

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 (http://students.asu.edu/international-admission), 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 more than $\mathbf{2 4}$ 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).


# Mechanical Engineering (Computational and Mathematical Mechanics) (BSE) ESMAECBSE <br> IRA A. FULTON SCHOOL OF ENGINEERING, 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 BSE in Mechanical Engineering degree program, 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.The objectives of the Mechanical Engineering program at ASU are:1. Career preparation--provide the depth and breadth of engineering education that prepares graduates for employment in the mechanical engineering profession; admission to graduate programs in mechanical engineering or a related field; or the pursuit of advanced education in other professional areas, such as business, law or medicine.2. Technical competence--provide graduates with the technical skills for career success, including the ability to think in a critical and evaluative manner and to consider a broad perspective in order to solve technical and nontechnical problems.3. Professionalism--prepare graduates with the professional skills for career success, including an awareness of ethical responsibility and the ability to communicate well and work successfully within diverse groups.The Mechanical Engineering programs at ASU are accredited by the Engineering Accreditation Commission of ABET, 111 Market Place, Suite 1050, Baltimore, MD 21202-4012, telephone 410/347-7700.

## Language Requirement: $\mathrm{N} \mid$ Program Fee: N

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.

Additional Admissions Requirements: The admission requirements for majors in the Ira A. Fulton School of Engineering are higher than minimum university admission requirements. Students should select a second major choice outside Engineering when applying for admission. Students who are not eligible for admission to Engineering and who do not indicate a second major choice will be placed in exploratory mathematics, physical sciences, engineering and technology within University College.

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 (http://students.asu.edu/international-admission), 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 more than $\mathbf{2 4}$ 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).


# Mechanical Engineering (Energy and Environment) (BSE) ESMAEEBSE 

## IRA A. FULTON SCHOOL OF ENGINEERING, TEMPE

Contact: http://mae.fulton.asu.edu | mae@asu.edu | ECG 346 | 480/965-3291
Program Description: The concentration in energy and environment, under the Bachelor of Science in Engineering (BSE) degree program, seeks to prepare students to analyze technical problems in energy efficiency, renewable energy, environmental sustainability, air pollution, climate change and other 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.

The objectives of the Mechanical Engineering program at ASU are:1) (Career Preparation) Provide the depth and breadth of engineering education that prepares graduates for employment in the mechanical engineering profession; admission to graduate programs in mechanical engineering or a related field; or the pursuit of advanced education in other professional areas, such as business, law or medicine.2) (Technical Competence) Provide graduates with the technical skills for career success, including the ability to think in a critical and evaluative manner and to consider a broad perspective in order to solve technical and nontechnical problems.3) (Professionalism) Prepare graduates with the professional skills for career success, including an awareness of ethical responsibility and the ability to communicate well and work successfully within diverse groups.The Mechanical Engineering programs at ASU are accredited by the Engineering Accreditation Commission of ABET, 111 Market Place, Suite 1050, Baltimore, MD 21202-4012, telephone 410/347-7700.

## Language Requirement: N | Program Fee: N

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. Students completing this concentration have opportunities as power plant designers, environmental consultants and HVAC engineers.

Additional Admissions Requirements: The admission requirements for majors in the Ira A. Fulton School of Engineering are higher than minimum university admission requirements. Students should select a second major choice outside Engineering when applying for admission. Students who are not eligible for admission to Engineering and who do not indicate a second major choice will be placed in exploratory mathematics, physical sciences, engineering and technology within University College.

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 scoreIf the university requires a TOEFL score from the applicant (http://students.asu.edu/international-admission), 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 more than $\mathbf{2 4}$ 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).


# HONORS - BARRETT, THE HONORS COLLEGE 

## Honors College

BARRETT, THE HONORS COLLEGE, TEMPE
Contact: http://honors.asu.edu/ | Irish A 121 | 480/965-4033
Program Description: Barrett, The Honors College at Arizona State University is a selective, residential college that recruits academically outstanding undergraduates across the nation. Named "Best Honors College" in the nation, this residential community has more National Merit Scholars than Princeton, Yale or Stanford, and Barrett students benefit from a $\$ 10$ million endowment used exclusively to support honors students and their projects.

Barrett students have the unique advantage of both experiencing a small, intellectually and socially vibrant environment, while having access to the vast resources of a major research university in ASU. All Barrett students are also enrolled in a disciplinary college and pursue one or more of the 250 available majors and concentrations. Their education is the result of the collaborative efforts of the Barrett's directly appointed faculty and of faculty appointed in the college of their major.

Barrett accepts high performing, academically engaged students and works with them in collaboration with all of the units at ASU to contribute to student success. Most students enter as freshmen but about 90 each year enter after one or more semesters at a university or college (primarily from ASU).

## Special Opportunities:

- Lorraine W. Frank Office of National Scholarship Advisement: This office assists students in identifying nationally competitive scholarship programs appropriate to each individual's intellectual and career goals. Lorraine W. Frank Office of National Scholarship Advisement (http://honors.asu.edu/w-National_Scholarships-53.aspx)
- Undergraduate Research Opportunities: Barrett encourages students to participate in undergraduate research throughout the university. The college maintains a list of current opportunities university wide. Undergraduate Research Opportunities (http://honors.asu.edu/w-Research_Opportunities-51.aspx)
- Travel: Barrett study abroad programs, directed and taught by Barrett faculty, occur during the summer and allow students to earn honors credit. Students can also take advantage of the Great American Cities program and visit cities throughout the U.S. Travel (http://honors.asu.edu/w-Travel_Abroad-52.aspx)
- Internships: Students in Barrett participate in special internship opportunities - in government, industry, and the private sector - throughout metropolitan Phoenix and elsewhere. Internships (http://honors.asu.edu/w-Internships50.aspx)
- Events/Programming: Students enrolled in Barrett benefit from preeminent guest speakers, special lectures, and visits from some of the nation's greatest contributors to contemporary thought in society. The college hosts two of the university's premier scholar-in-residence programs, the Centennial Lecture and the John J. Rhodes Chair.


## Barrett Honors Requirements Overview

Students complete 36 hours of honors credits within the 120 hours required to earn a bachelor's degree by completing HON courses, honors-only courses in other ASU units, special class projects with faculty in other ASU units, internships, undergraduate research and summer study abroad.

To graduate from Barrett, students must complete the required honors courses with a minimum grade of "C," defend a thesis/creative project and have a cumulative GPA of 3.25.

All students entering Barrett:

- with < 60 credits completed at a university/college after high school graduation:
- must complete HON171 and HON272/273 (The Human Event) by the time they reach 45 credits at ASU,
- must complete 36 honors credits, of which at least 18 must be upper division,
- and may have up to 30 of the 36 honors credits as upper division courses.
- with > 60 credits completed at a university/college after high school graduation:
- must complete 21 upper division honors credits, one an HON 300-level seminar.

Language Requirement: N | Program Fee: Y
Additional Admissions 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 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. For more admission information, please visit the Honors Application (http://honors.asu.edu/w-Apply-40.aspx ) Web page.

## JOURNALISM AND MASS COMMUNICATION, WALTER CRONKITE SCHOOL OF

## Journalism and Mass Communication (BA) CSJMCBA

WALTER CRONKITE SCHOOL OF JOURNALISM AND MASS COMMUNICATION, DTPHX
Contact: cronkiteadvising@asu.edu
Program Description: The Cronkite School, 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/online journalism, broadcast journalism, or strategic media/public relations, leading to a Bachelor of Arts degree in Journalism and Mass Communication. In fall 2008, the Cronkite School will move to a new building at the Downtown Phoenix campus in the heart of the 13th largest media market in the United States. The school will feature state-of-the-art computer labs, editing suites, production studios, and classrooms dedicated to journalism education.

Language Requirement: Y|Program Fee: Y
Career Opportunities: Walter Cronkite School of Journalism and Mass Communication graduates work for newspapers, radio and TV stations, online services, magazines, public relations firms, and corporate communication divisions. Positions include reporters, editors, photojournalists, writers, and media managers.

Additional Admissions 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 3.25 or higher and no English competency deficiencies. Transfers should contact the school for additional steps after admission to ASU. Students should select a second major on the application. For more information regarding transfer admission, see http://cronkite.asu.edu/undergrad/xfer_major_change.php.

## LETTERS AND SCIENCES, SCHOOL OF

## Interdisciplinary Studies (BIS) LSBISBIS

SCHOOL OF LETTERS AND SCIENCES, DTPHX
Contact: http://sls.asu.edu/bis/index.html | bis@asu.edu | USAB 203 | 480/965-1970
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. Through the ASU BIS program, majors may choose and combine two of nearly 100 concentration areas or one double concentration that represents academic interests they wish to integrate. 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.

Degree completion students may also choose to apply to the BIS in Organizational Studies online program. For more information visit http://asuonline.asu.edu/programs/ or email orgstudies@asu.edu.

## Language Requirement: N | Program Fee: N

Career Opportunities: Because of the flexibility of the BIS degree, BIS 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.

Additional Admissions Requirements: The BIS degree is available to all students in good academic standing. Students must complete the online BIS Cyber Workshop (found online at http://sls.asu.edu/bis/) prior to meeting with an advisor to declare their major as Interdisciplinary Studies. Specific prerequisites must be met prior to enrolling in any of the BIS core classes. These prerequisites are:

- junior standing (56 or more credits earned),
- ASU GPA of 2.00 or higher,
- the completion of two courses in both of their chosen academic disciplines with grades of "C" or better, and
- the completion of the university requirement for English composition and mathematics.


## Interdisciplinary Studies (Organizational Studies) (BIS) lsorgbis

SCHOOL OF LETTERS AND SCIENCES, ONLNE<br>Contact: School of Letters and Sciences

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. Through ASU's BIS program, majors may choose and combine two of nearly 100 concentration areas or one double concentration that represent academic interests they wish to integrate. 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.

## Language Requirement: $\mathrm{N} \mid$ Program Fee: N

Career Opportunities: Because of the flexibility of the BIS degree, BIS 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, 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.

## LIBERAL ARTS AND SCIENCES, COLLEGE OF

African and African American Studies (BA) LAAFRBA<br>COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE

Program Description: African and African American Studies (AAAS) is an interdisciplinary Bachelor of Arts program that focuses on people of African descent throughout the world and the diversity of past and present experiences of those who live in the United States, Africa, the Caribbean, South America and Central America. As an institutional program, AAAS is structured to (a) prepare students of all ethnicities to better understand, value and more effectively participate in our increasingly diverse society, (b) combine knowledge of the African diaspora with intellectual and practical training in specific areas to create more effective communities and global partnerships, and (c) 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.

Language Requirement: $\mathrm{Y} \mid$ Program Fee: N
Career Opportunities: Because of its emphasis on various social aspects and groups, AAAS provides students with practical applications useful for various work places. The minor requirement of AAAS helps students develop cultural sensitivity and prepares them for careers in administration, advertising, counseling, travel, business, international relations, justice, journalism, human resources, management, and education. 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, and many more.

## American Indian Studies (BS) LAAISBS

COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE
Program Description: The Bachelor of Science program in American Indian Studies (AIS) provides students with unique opportunities to evaluate issues of American Indian nations within a domestic and international context. The Bachelor of Science in AIS encompasses two areas of emphasis: legal, policy and community and economic development and 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.

Language Requirement: $\mathrm{N} \mid$ Program Fee: N

Career Opportunities: AIS 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. Graduates of AIS 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.

## Anthropology (BA) LAASBBA

COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE
Contact: http://shesc.asu.edu/node/252 | shesc@asu.edu | Anthropology 233 | 480/965-6213
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 what it means to be human in past, present and future environments. A special feature of the ASU anthropology program is its relevance to other disciplines, including economics, sociology, biology, public health, psychology, medicine, law, community planning, architecture, religious studies, fine arts, area or cultural group studies, global studies and applied mathematics. Anthropology provides many exciting hands-on learning opportunities through laboratories and field-based courses that focus on finding ancient human fossils; unearthing buried cities, villages, and hunter-gatherer camps; understanding health, disease and human biology; and appreciating the languages and cultures of such diverse areas as Southeast Asia, the South Pacific, Latin America, and the Mediterranean Basin; and many other topics that explore humans of the past and present.

Language Requirement: $\mathrm{Y} \mid$ Program Fee: N
Career Opportunities: The B.A. in Anthropology is beneficial and useful for careers in areas such as postgraduate academic research and teaching; consulting for large and small private and public organizations; directing programs in the private or public sector; providing healthcare as nurses, doctors or public or global health professionals; analyzing and proposing policies; acting as legal advocates in international cases; curating cultural resources; planning communities; and directing nonprofit organizations.

## Asian Languages - Chinese (BA) LACHIBA

COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE
Contact: http://www.asu.edu/languages/chi/chinese.html | silc@asu.edu | LL 440 | 480/965-6281
Program Description: Students in the Bachelor of Arts program in Asian Languages with a concentration in Chinese study the language, literature and culture of China. They gain a respectable measure of competence in reading, writing, and oral/aural skills in the Chinese language. Throughout the program, students take courses in either Japanese or Korean and related courses in Chinese and East Asian culture on topics such as Chinese history, art, religion, government, literary and cultural theory, and linguistics. In addition, ASU has a summer overseas program to study Chinese.

## Language Requirement: Y | Program Fee: N

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 United States or China. Other graduates work for government agencies or teach (usually English) in China. Some pursue graduate work in Chinese studies, eventually teaching the language and/or culture in universities or colleges.

## Asian Languages - Japanese (BA) LAJPNBA

COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE
Contact: http://www.asu.edu/languages/jpn/japanese.html | silc@asu.edu | LL 440 | 480/965-6281
Program Description: Students in the Bachelor of Arts program in Asian Languages with a concentration in Japanese 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 Japanese history, art, religion, government, literary and cultural theory, and linguistics. In addition, ASU offers summer or yearlong overseas programs to study Japanese.

## Language Requirement: Y | Program Fee: N

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 United States 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.

## Biochemistry (BA) LABCHBA

## COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE

Program Description: The Bachelor of Arts 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.

## Language Requirement: Y | Program Fee: N

Career Opportunities: A solid undergraduate education in biochemistry provides the necessary background for career paths in research, teaching, health care, chemical industries, government, 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.

## Biochemistry (BS) LABCHBS

COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE
Program Description: The Bachelor of Science 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.

## Language Requirement: $\mathrm{N} \mid$ Program Fee: N

Career Opportunities: A solid undergraduate education in biochemistry provides the necessary background for career paths in research, teaching, health care, chemical industries, government, 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.

## Biochemistry (Medicinal Chemistry) (BS) LABCHMBS

## COLLEGE OF LIBERAL ARTS AND SCIENCES, 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 Bachelor of Science in Biochemistry with a concentration in medicinal chemistry emphasizes aspects of biochemistry that will be useful to those planning careers in medically-related areas.

Language Requirement: N | Program Fee: N

Career Opportunities: A solid undergraduate education in biochemistry provides the necessary background for career paths in research, teaching, health care, chemical industries, government, 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.

## Biological Sciences (BS) LABSCBS

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COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE
Contact: http://sols.asu.edu/ugrad/uadvising.php | sols.advising@asu.edu | LSC 206 | 480/727-6277
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Program Description: The Bachelor of Science in Biological Sciences is designed for students who desire a broad background in many areas of biology or who want to postpone selection of a concentration until graduate school. Biological Sciences encompasses the study of all living things (microbes, plants and animals), and includes the study of basic organization and function (molecules, cells, tissues, organs), how organisms evolve, their roles in the natural environment, how hereditary information is transferred and the development of biotechnology.

## Language Requirement: $\mathrm{N} \mid$ Program Fee: N

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.

Are you exploring becoming a middle/high school teacher? Concurrent degrees in Biological Sciences (BS) and Education (BAE) (http://www.asu.edu/programs/concurrentdegrees/BAE_BS_BioSciences.html) are available.

## Biological Sciences (Animal Physiology and Behavior) (BS) LABSCABS

COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE
Contact: http://sols.asu.edu/ugrad/uadvising.php | sols.advising@asu.edu | LSC 206 | 480/727-6277
Program Description: The animal physiology and behavior concentration in the Bachelor of Science in Biological Sciences program 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 graduate-level study in physiology, neuroscience, and animal behavior; professional school in health professions; or careers in basic and biomedically oriented research.

## Language Requirement: N | Program Fee: N

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.

## Biological Sciences (Biology and Society) (BS) LABSCSBS

COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE
Contact: http://sols.asu.edu/ugrad/uadvising.php | sols.advising@asu.edu| LSC 206|sols.advising@asu.edu

Program Description: The biology and society concentration in the Bachelor of Science in Biological Sciences program 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.

## Language Requirement: $\mathrm{N} \mid$ Program Fee: N

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 history and philosophy of science, genetics or counseling psychology. Other graduates work in genetic counseling, health policy, and international disease studies and prevention.

Biological Sciences (Conservation Biology and Ecological Sustainability) (BS) LABSCCBS<br>COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE<br>Contact: http://sols.asu.edu/ugrad/uadvising.php | sols.advising@asu.edu | LSC 206 | 480/727-6277

Program Description: The conservation biology and ecological sustainability concentration in the Bachelor of Science in Biological Sciences program is designed to provide students with a broad background in conservation biology and ecological sustainability, while allowing them to specialize in a particular area of interest. The concentration provides for training in population biology, behavioral ecology, climate change, urban ecology, conservation of endangered species and social and historical aspects of conservation.

## Language Requirement: N | Program Fee: N

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 government, education, nongovernmental organizations, industry or certain technical fields.

## Biological Sciences (Ecology and Evolution) (BS) LABSCEBS <br> COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE

Program Description: The ecology and evolution concentration in the Bachelor of Science in Biological Sciences program provides training in the ecology, evolution and behavior of organisms, the diversity and systematic relationships among species and change in these relationships through time, and the responses of organisms and ecological systems to human activity and environmental change. Evolution forms the foundation for understanding everything in the biological sciences, while ecology examines the interaction of organisms with their environment.

## Language Requirement: $\mathrm{N} \mid$ Program Fee: N

Career Opportunities: Students graduating with this degree are broadly trained and well prepared for admission into graduate programs and professional schools. They may also directly enter positions in government, education, industry or certain technical fields.

## Biological Sciences (Genetics, Cell and Developmental Biology) (BS) LABSCGBS

COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE
Contact: http://sols.asu.edu/ugrad/uadvising.php | sols.advising@asu.edu | LSC 206 | 480/727-6277
Program Description: The genetics, cell and developmental biology concentration in the Bachelor of Science in Biological Sciences program 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 in the health professions.

Language Requirement: $\mathrm{N} \mid$ Program Fee: N

Career Opportunities: Students graduating with this degree are 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.

## Biological Sciences (Genomics and Bioinformatics) (BS) LABSCBBS

COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE
Contact: http://sols.asu.edu/ugrad/uadvising.php | sols.advising@asu.edu | LSC 206 | 480/727-6277
Program Description: The genomics and bioinformatics concentration in the Bachelor of Science in Biological Sciences program is intended for students interested in a flexible curriculum focused on modern genome science. This concentration will prepare students for careers in basic and biomedically oriented research or professional training in the health professions.

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.

## Biological Sciences (Plant Biology) (BS) LABSCPBS

COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE
Contact: http://sols.asu.edu/ugrad/uadvising.php | sols.advising@asu.edu | LSC 206|480/727-6277
Program Description: The plant biology concentration in the Bachelor of Science in Biological Sciences program provides breadth for students interested in all aspects of plant biology, from traditional areas such as anatomy, morphology, systematics, evolution, ecology and physiology to cellular, developmental and molecular plant biology. The concentration provides elective courses that permit students to further focus their education in these areas of specialization. One area is primarily for students interested in plant diversity, ecology and evolution, or other aspects of organismal biology; the other is appropriate for students interested in genetics and genomics, and cellular, molecular and developmental plant biology.

## Language Requirement: $\mathrm{N} \mid$ Program Fee: N

Career Opportunities: Students graduating with this degree are broadly trained and well prepared for admission into graduate programs, specimen-based collections research, and conservation and resource management agencies. They may also directly enter positions in government, education, industry or certain technical fields.

## Chemistry (BA) LACHMBA

COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE
Program Description: Chemistry is a central science field 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 are based on a thorough grounding in this area of science. Students in the Bachelor of Arts program in Chemistry 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. in Education with a specialization in Chemistry is also available.

## Language Requirement: Y|Program Fee: N

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.

## Chemistry (BS) LACHMBS

COLLEGE OF LIBERAL ARTS AND SCIENCES, 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 Bachelor of Science program in Chemistry 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. in Education with a specialization in Chemistry is also available.

## Language Requirement: N | Program Fee: N

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.

Are you exploring becoming a middle/high school teacher? Concurrent degrees in Biological Sciences (BS) and Education (BAE) (http://www.asu.edu/programs/concurrentdegrees/BAE_BS_BioSciences.html) are available.

## Chemistry (Environmental Chemistry) (BS) LACHMEBS

COLLEGE OF LIBERAL ARTS AND SCIENCES, 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 Bachelor of Science program in Chemistry 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.

## Language Requirement: $\mathrm{N} \mid$ Program Fee: N

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.

## Communication (BA) LACOMBA

COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE
Contact: http://asu.edu/clas/communication/undergraduate/ | communication@asu.edu | STAUF(A) 412 | 480/965-5095
Program Description: The Bachelor of Arts 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."

## Language Requirement: Y | Program Fee: N

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 sales, marketing, counseling, event planning, human resource management, nonprofit management, health care management, entrepreneurism, intercultural relations, campaign management, and public relations.

## Communication (BS) LACOMBS

COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE
Contact: communication@asu.edu | 480/965-5095
Program Description: The Bachelor of Science program 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."

Language Requirement: $\mathrm{N} \mid$ Program Fee: N

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 sales, marketing, counseling, event planning, human resource management, nonprofit management, health care management, entrepreneurism, intercultural relations, campaign management, and public relations.

## Computational Mathematical Sciences (BS) LACMSBS

COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE
Program Description: Mathematics is a crucial component in physics and engineering applications and in other disciplines such as business and economics, as well as in the life sciences and social sciences. The Bachelor of Science in Computational Mathematical Sciences is an interdisciplinary degree, with components in mathematics, science and computer science, 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.

Language Requirement: N | Program Fee: N
Career Opportunities: Employment opportunities for math majors can be found in virtually all sectors of industry: engineering, biotech, computer, government (consultant, federal and state organizations), business (actuary for bank or insurance company, operations research), applied math (scientific computing), medicine, academia (high-school or college teacher, university professor), and graduate school (mathematics or other fields). A B.S. in Computational Math 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.

## Earth and Space Exploration (BS) LASESBS

## COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE

Program Description: The Bachelor of Science in Earth and Space Exploration offers students an integrated education across earth sciences, planetary sciences, astrophysics and engineering. The degree incorporates strong quantitative preparation, a learning community that includes both science and engineering students, and a yearlong collaborative capstone senior exploration project. This strong foundation in geosciences, astrophysics and exploration engineering will prepare students for key roles in space research and industry, environmental and geologic engineering, earth resources and exploration, and water and environmental use policy.

## Language Requirement: N | Program Fee: N

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 the public sector.

## Economics (BS) LAECNBS

## COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE

Contact: http://wpcarey.asu.edu/ecn | wpcareyecn@asu.edu | BAC 659 | 480/965-3531
Program Description: What are the best ways to design compensation schemes to attract and retain top workers while maintaining a firm's productivity? Is off-shoring good or bad for the economy, the worker or the company? Why do business cycles exist? What are the economic consequences of laws and regulations? How should environmental safeguards be designed to simultaneously reduce pollution and maintain production efficiency? How should healthcare be provided such that the quality of the system remains high and innovative while also increasing access to health services? Economics provides a powerful
platform analyzing and answering questions such as these and many others. (The department is in the W. P. Carey School of Business, which also offers this major, with different requirements.)

The undergraduate degree in Economics (BS) is one of the top majors for students entering law school, MBA programs, and graduate programs in economics and public policy. In addition, economics graduates are in high demand by consulting firms, corporations and both state and federal government positions. The reason for this is because the economics curriculum focuses on strong quantitative training to hone the student's critical thinking skills. The Economics Department is committed to providing students with an exceptional educational experience.

Our faculty have consistently received top teaching awards. Furthermore, the department is highly regarded in terms of research-Professor Edward Prescott was awarded the 2004 Nobel Prize in economic sciences, and other faculty are members of the National Academy of Sciences and Fellows of the Econometrics Society. The economics faculty conducts scholarly research leading to publications in major economics journals and academic presentations around the world. Excellence in both teaching and research ensures that students receive the most current knowledge from acclaimed instructors.

## Language Requirement: N | Program Fee: N

Career Opportunities: Students who have sought careers following their undergraduate education have been very successful in business, consulting or government. Our graduates have taken positions as corporate economists who collect data and make forecasts concerning the nature of the business of the firm; as consultants who serve as advisers to both state and federal governments as well as private corporations; and as economic analysts for banks and financial firms. Others have gone on to the best law schools in the country, or to the top PhD and MBA 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 most recently, the Truman Award.

## English (Creative Writing) (BA) LAENGCBA

COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE
Program Description: The Bachelor of Arts in English in the College of Liberal Arts and Sciences at the Tempe campus 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, and 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. in Education with a specialization in English is also available.

## Language Requirement: Y | Program Fee: N

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 publishing, journalism, Web content development, public relations, professional writing and editing, banking, teaching, law, medicine, and business.

## English (Linguistics) (BA) LAENGNBA

COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE
Program Description: The Bachelor of Arts in English in the College of Liberal Arts and Sciences at the Tempe campus offers concentrations in creative writing, linguistics or literature. Students in the linguistics concentration focus on 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, and 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 BA in Education with a specialization in English is also available.

[^4]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 publishing, journalism, Web content development, public relations, professional writing and editing, banking, teaching, law, medicine, and business.

## English (Literature) (BA) LAENGTBA

COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE
Contact: | petie.roberts@asu.edu | LL 542 | 480/965-3535 |
Program Description: The Bachelor of Arts in English in the College of Liberal Arts and Sciences at the Tempe campus 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, and 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 BA in Education with a specialization in English is also available.

## Language Requirement: Y | Program Fee: N

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 publishing, journalism, Web content development, public relations, professional writing and editing, banking, teaching, law, medicine, and business.

## Family and Human Development (BS) LAFASBS

COLLEGE OF LIBERAL ARTS AND SCIENCES, ONLNE
Contact: http://www.asu.edu/clas/ssfd/ | ssfd@asdu.edu | SS 144 | 480/965-6978 |
Program Description: The Bachelor of Science 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.

## Language Requirement: $\mathrm{N} \mid$ Program Fee: N

Career Opportunities: As a liberal arts degree, the BS 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.

## Film (Film and Media Studies) (BA) LAFMSBA

COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE
Contact: http://film.asu.edu | filminfo@asu.edu | LL 641 | 480/965-6747 |
Program Description: The Bachelor of Arts 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 nations 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 BA in Film in the College of Liberal Arts and Sciences complete a concentration in film and media studies, and students accepted into the BA in Film in the Katherine K. Herberger College of 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.

Language Requirement: $\mathrm{Y} \mid$ Program Fee: N

Career Opportunities: The film and media studies concentration provides undergraduates with skills that can be applied in a number of professional fields, preparing students for a variety of career opportunities as leaders within media entertainment industries-including creative management, development, marketing and regulation, to name just a few-as well as teachers, critics and leaders within media entertainment industries. Former students of Film and Media Studies have gone on to pursue graduate studies at USC, UCLA, the University of Texas and Stanford. Others have selected career paths in the film, media, and entertainment industries.

## French (BA) LAFREBA

COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE
Contact: http://www.asu.edu/clas/silc/fre/ | silc@asu.edu | LL 440 | 480/965-6281
Program Description: Students in the Bachelor of Arts program in French 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 French history, art, religion, government, international business, literary and cultural theory and linguistics. 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 during the summer and academic year.

## Language Requirement: Y|Program Fee: N

Career Opportunities: Graduates have a variety of career opportunities in firms that deal with international trade, U.S. companies that have branches in France, with airlines, and in education or government service. 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.

## Geography (BA) LAGCUBA

COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE
Contact: http://geography.asu.edu | shaeffer@asu.edu | SCOB 330 | 480/965-7533
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 Bachelor of Arts 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 Latin America, Europe, Asia or Africa.

Language Requirement: Y | Program Fee: N
Career Opportunities: Bachelor of Arts geographers go on to careers as public sector transportation planners, geodemographic analysts, urban and regional planners, community developers, teachers, international trade consultants, and intelligence analysts, as well as work in the foreign service and a host of governmental and non-governmental organizations.

## Geography (BS) LAGCUBS

COLLEGE OF LIBERAL ARTS AND SCIENCES, 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 Bachelor of Science in Geography emphasizes spatial patterns in natural science features such as weather, water, landforms, plants, or in social science/environmental science dynamics involving human populations, economic patterns or transportation.

## Language Requirement: $\mathrm{N} \mid$ Program Fee: N

Career Opportunities: With a focus on geospatial techniques, Bachelor of Science geographers go on to careers as cartographers, Geographic Information System (GIS) specialists and analysts, remote sensing analysts, hydrology and water resource specialists, environment impact analysts, geospatial software developers, computer cartographers, and location analysts for businesses, and
are presented with a host of other geospatial career options in the burgeoning fields of Geographic Information Science (GISci), mapping and navigation systems.

## Geography (Meteorology-Climatology) (BS) LAGCUMBS

COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE
Contact: http://geography.asu.edu | shaeffer@asu.edu or cerveny@asu.edu | SCOB 330 | 480/965-7533
Program Description: The meteorology-climatology concentration under the Bachelor of Science 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 mathematics (requiring three semesters of calculus), physics (two semesters of university or calculus-based physics) and a sequence of classes in synoptic (operational weather forecasting) meteorology and dynamic (atmospheric physics) meteorology.

Language Requirement: $\mathrm{N} \mid$ Program Fee: N
Career Opportunities: Students successfully completing the program have found employment with the National Weather Service and other government agencies (e.g., Arizona Department of Environmental Quality, U.S. Environmental Protection Agency, U.S. Army Corps of Engineers), energy power companies (e.g., Salt River Project and Arizona Public Service), and the U.S. Air Force (in either meteorology or pilot training), or have gone on to graduate work in either meteorology or climatology.

## Geography (Urban Studies) (BS) LAGCUUBS

COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE
Program Description: The urban studies concentration under the Bachelor of Science 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.

## Language Requirement: N | Program Fee: N

Career Opportunities: Students successfully completing the program often find employment with city planning agencies, as well as government agencies at various levels, including county, state and federal levels. 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 transportation, economic development planning and housing issues.

## Geological Sciences (BS) LAGLGBS

COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE
Program Description: Geological science is the study of the Earth and other planets and the processes that have shaped them since the origin of the solar system. Volcanoes, earthquakes, groundwater, petroleum and ore deposits, exploration of the sea floor, the history of the Earth and planets, plate tectonics, mountain building, and fossils are all topics covered in geological science. A BS in Geological Sciences from ASU provides students with a solid background, drawing upon the fields of chemistry, mathematics and physics. Students gain a strong understanding of field methods as well as modern computing, remote sensing and instrumentation. The modern geological scientist uses computers, satellites and high tech instrumentation, as well as field mapping and exploration to understand the natural environment and Earth's resources.

## Language Requirement: N | Program Fee: N

Career Opportunities: Geological scientists are employed in jobs that range from the preservation of the environment to the discovery of natural resources on Earth and the exploration of the solar system and beyond. They work to understand the effects of natural and human processes on Earth. Careers in geological science usually involve a combination of field work, lab and computer analysis, and writing. Many geologists work in private industry in the environmental, mining and energy fields. Others hold jobs in public agencies or universities, working on natural hazards, resources, research, and informing the public. Work
environments can vary widely, relating to such diverse settings as the deep ocean floor and the moon and planets. Geologists have the skills and knowledge to address major issues of global importance.

## German (BA) LAGERBA

## COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE

Contact: http://www.asu.edu/clas/silc/ger/ | silc@asu.edu | LL 440 | 480/965-6281
Program Description: Students in the Bachelor of Arts program in German study the language, literature and culture of Germany. 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 German history, art, religion, government, and international business. Students are encouraged to study abroad in Germany as participants in ASU's summer program in Regensburg, or on one of the academic-year exchange programs available at several German universities.

Language Requirement: Y| Program Fee: N
Career Opportunities: Graduates have a variety of career opportunities in firms that deal with international trade, U.S. companies that have branches in Germany, with airlines, and in other fields. Some decide to pursue graduate work, eventually teaching the language and culture in universities or colleges. With state certification, high school teaching is also a possibility.

## Global Health (BA) LASSHBA

COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE
Contact: http://shesc.asu.edu/node/252 | shesc@asu.edu | SHESC 233|480/965-6215
Program Description: The BA 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 wellbeing 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.

## Language Requirement: $\mathrm{Y} \mid$ Program Fee: N

Career Opportunities: Nationally and internationally, the health field provides enormous and varied career opportunities, and demands for graduates with skills is high and only growing. The major would support the goals of those who plan to pursue careers in academic research and 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), NGOs, 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 reports prepared by such organizations as the Pew Health Professional Consortium and the National Commission on Allied Health, experts conclude that the best health professionals have interdisciplinary perspectives, social and cultural acuity (such as in cross-cultural settings), and team-oriented skills. In Arizona and elsewhere, there is a pressing need for professionals with appropriate skills to work in crosscultural 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. Graduates interested in pursuing research or scientific careers continue to graduate school to seek a master's or doctorate degree in fields such as Public Health, Anthropology, Evolutionary Biology, Infectious Diseases, Genetics, Applied Mathematics, Geography, Sociology, Sustainability, Environmental Studies, Demography or Biology.

Additional Admissions Requirements: Available for students applying Fall 2008

## Global Studies (BA) LASGSBA

COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE

Program Description: The School of Government, Politics and Global Studies serves global, national and academic communities by spearheading new intellectual perspectives in which people strive to attain a higher quality of life. The school is transdisciplinary in strategy and transformational in purpose. Students pursuing the Bachelor of Arts in Global Studies examine global issues from the perspective of an overarching theme of quality of life. Students organize their program of study by selecting a track. Students may choose a track in development; environment; global governance; urban systems; or violence, conflict, and human rights. The program is organized around key current research and teaching themes. The school's faculty as well as affiliated faculty from throughout the university offer courses.

Language Requirement: $\mathrm{Y} \mid$ Program Fee: N
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.

## History (BA) LAHISBA

COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE
Program Description: Students in the Bachelor of Arts program in History study the growth and development of human society from all aspects-political, social, economic and cultural. Students are required to complete course work in one geographic emphasis. The department covers the history of Europe, the United States, Asia, Latin America, Africa, and the Middle East, and courses are designed to give students both breadth and depth in understanding today's complex world.

## Language Requirement: Y | Program Fee: N

Career Opportunities: History majors seek jobs in education, government, business and industry, and pursue graduate study in history, law, theology, medicine, business, public administration, justice studies, and public history. History is an excellent preprofessional major for law, theology, medicine, business, public administration, justice studies, and for graduate academic work in public history. 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.

## Integrated Studies (BA) LAISTBA

COLLEGE OF LIBERAL ARTS AND SCIENCES, 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 Bachelor of Arts degree 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.

## Language Requirement: Y | Program Fee: N

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.

Additional Admissions Requirements: This major is not open for incoming students. It is open only to students who have completed 32 hours at ASU with a minimum cumulative GPA of 3.35.

## Integrated Studies (BS) LAISTBS

COLLEGE OF LIBERAL ARTS AND SCIENCES, 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 Bachelor of Science degree 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.

Language Requirement: $\mathrm{N} \mid$ Program Fee: N
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.

Additional Admissions Requirements: This major is not open for incoming students. It is open only to students who have completed 32 hours at ASU with a minimum cumulative GPA of 3.35 .

## International Letters and Cultures (BA) LASLCBA

## LIBERAL ARTS AND SCIENCES, TEMPE

Contact: http://www.asu.edu/silc/ | silc@asu.edu | LL 440 | 480/965-6281
Program Description: The Bachelor of Arts in International Letters and Cultures is a degree grounded in the study of at least one foreign language. It is a more intercultural and interdisciplinary 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 of study that requires study and research in a minimum of two cultures or disciplines (or both).

## Language Requirement: Y | Program Fee: N

Career Opportunities: This degree program will provide essential skills that employers in government, education, and various business sectors are looking for, including proficiency in another language or languages, knowledge of other cultures, strong written and oral communication skills, and valuable critical thinking and analytical skills.

## Italian (BA) LAITABA

COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE
Contact: http://www.asu.edu/clas/silc/ita/ | silc@asu.edu | LL 440 | 480/965-6281
Program Description: Students in the Bachelor of Arts program in Italian 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 Italian history, art, religion, and government. 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.

## Language Requirement: $\mathrm{Y} \mid$ Program Fee: N

Career Opportunities: There are numerous career opportunities for Italian graduates in art museums; firms that deal with international trade, including U.S. companies that have branches in Italy; airlines; and other fields. Some graduates pursue doctoral studies, eventually teaching the language in universities or colleges.

## Justice Studies (BS) LAJUSBS

COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE
Contact: justiceinfo@asu.edu | WILSN 228 |480/965-7682

Program Description: The School of Justice and Social Inquiry is an innovative social science program that places social justice at the center of it scholarship and teaching. The Bachelor of Science degree program 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: 1) Citizenship, Migration and Human Rights; 2) Media, technology and Culture; 3) Law, Policy and Social Change; 4) Globalization, Sustainability and Economic Justice; and 5) Social Identities and Communities. The goal is to enable students, faculty and graduates to use their skills to find solutions to complex social problems.

Language Requirement: $\mathrm{N} \mid$ Program Fee: N
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 law, non-governmental organizations, human welfare agencies, and other public service organizations.

## Kinesiology (BS) LAKINBS

COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE
Contact: http://www.asu.edu/clas/kines | kineswebmaster@asu.edu | PEBW 218 | 480/965-3875
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, and physical and social sciences. Undergraduate students in the program gain disciplinary knowledge of anatomical, biomechanical, developmental, physiological, psychological and sociological aspects of human movement and physical activity. The department's graduate programs, at both the master's and doctoral levels, are highly regarded nationally and internationally and have a strong interdisciplinary emphasis.

Language Requirement: $\mathrm{N} \mid$ Program Fee: N
Career Opportunities: Kinesiology graduates have a wide range of career options in health professions, the fitness industry, and the sports industry. Some typical job paths include: physical/occupational therapy, medicine, dentistry, pharmacy, cardiac rehabilitation, pharmaceutical sales and exercise equipment manufacturing.

## Liberal Studies (BLS) LABLSBLS

COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE
Contact: http://clas.asu.edu/liberalstudies/ | BLSAdvising@asu.edu | FNDN 245 | 480/965-3819
Program Description: The Bachelor of Liberal Studies (BLS) is an online degree-completion program for students who have already completed 60 or more semester hours toward an undergraduate degree. Students can complete their program from anywhere in the world, as long as a computer with Internet access is nearby. The BLS degree is an excellent choice for working adults and can sometimes be completed in as little as one year. Students in the BLS program are able to design their own transdisciplinary major based on their personal interests. For more information on eligibility requirements, call the Office of Student and Academic Programs at 480/965-3819.

Language Requirement: Y|Program Fee: N
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.

Additional Admissions Requirements: This program is not available for freshmen. Eligible students must have completed at least 60 credit hours at an accredited school AND must not have received credit for classes at a public four year Arizona university during the previous semester.

## Mathematics (BA) LAMATBA

COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE
Program Description: Mathematics is a crucial component in physics and engineering applications, as well as other disciplines such as business and economics, the life sciences and social sciences where the need for quantification in the analysis of phenomena is just as strong. The Bachelor of Arts 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 requirements are not as technical or advanced as in the BS program. The BA program also has a foreign language requirement. A Secondary Education BA in Education with a specialization in Mathematics is also available.

## Language Requirement: $\mathrm{Y} \mid$ Program Fee: N

Career Opportunities: Employment opportunities for math majors can be found in virtually all sectors of industry: engineering, biotech, computer, government (consultant, federal and state organizations), business (actuary for bank or insurance company, operations research), applied math (scientific computing), medicine, academia (high-school or college teacher, university professor), and graduate school (mathematics or other fields). Graduates with a BA in Mathematics may pursue a master's degree in a more applied field (social sciences) or an MBA and typically move on to "social" careers (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.

## Mathematics (BS) LAMATBS

COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE
Program Description: Mathematics is a crucial component in physics and engineering applications as well as other disciplines such as business and economics, and the life sciences and social sciences where the need for quantification in the analysis of phenomena is just as strong. The Bachelor of Science degree includes more analytical courses, as well as additional advanced courses compared to the Bachelor of Arts degree. It is the most popular math degree at ASU. Many BS majors are dual majors in a more applied field, such as physics and engineering.

## Language Requirement: $\mathrm{N} \mid$ Program Fee: N

Career Opportunities: Employment opportunities for math majors can be found in virtually all sectors of industry: engineering, biotech, computer, government (consultant, federal and state organizations), business (actuary for bank or insurance company, operations research), applied math (scientific computing), medicine, academia (high-school or college teacher, university professor), and graduate school (mathematics or other fields). 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.

Are you exploring becoming a middle/high school teacher? Concurrent degrees in Biological Sciences (BS) and Education (BAE) (http://www.asu.edu/programs/concurrentdegrees/BAE_BS_BioSciences.html) are available.

## Mathematics (Statistics) (BS) LAMATTBS

COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE
Program Description: Mathematics is a crucial component in physics and engineering applications as well as in other disciplines such as business and economics, in the life sciences and social sciences where the need for quantification in the analysis of phenomena is just as strong. The Bachelor of Science in Mathematics with a concentration in statistics focuses on coursework 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 the model. Many Bachelor of Science students in the statistics concentration are dual Business or Economics majors.

## Language Requirement: N | Program Fee: N

Career Opportunities: Employment opportunities for math majors can be found in virtually all sectors of industry: engineering, biotech, computer, government (consultant, federal and state organizations), business (actuary for bank or insurance company, operations research), applied math (scientific computing), medicine, academia (high-school or college teacher, university professor), and graduate school (mathematics or other fields). A course of study in statistics is especially useful in technical positions in finance, insurance, 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.

## Microbiology (BS) LAMICBS

COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE

Program Description: Students in the Bachelor of Science program in Microbiology 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 subdisciplines are included: medical and clinical microbiology, which concerns microbes that cause infectious diseases; virology; immunology, which involves the study of immune defense mechanisms; industrial microbiology and biotechnology; microbial fermentation, which involves growing microorganisms to make chemicals, antibiotics and other economically important products; food and pharmaceutical microbiology, including quality control; mycology, which is the study of fungi; soil and aquatic microbiology; biodegradation; microbial physiology and biochemistry; microbial genetics; recombinant DNA technology; and molecular biology.

## Language Requirement: $\mathrm{N} \mid$ Program Fee: N

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 research and development, production and testing of microbial products and quality control, public health and environmental microbiology, education and clinical applications.

## Molecular Biosciences/Biotechnology (BS) LAMBBBS

COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE

Contact: http://sols.asu.edu/mbb/index.php | sols@asu.edu | LS E206 | 480/727-6277
Program Description: Students in the Bachelor of Science program in Molecular Biosciences and Biotechnology focus on learning the fundamentals of biochemistry, molecular genetics, cell biology, physiology, and organismal structure and function. Students then apply these principles in research settings to discover more about the causes of disease and how organisms develop and respond to environmental changes. Special emphasis is devoted to understanding how these principles are applied by the biotechnology industry to improve the quality of life through the production of better and healthier foods with lower environmental impact and the treatment of illness and disease.

## Language Requirement: $\mathrm{N} \mid$ Program Fee: N

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 modern medical research and practice, plant research, pharmacology, and gene discovery. 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.

## Philosophy (BA) LAPHIBA

COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE

Program Description: A Bachelor of Arts 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."

Language Requirement: Y| Program Fee: N
Career Opportunities: The analytical, rhetorical, and writing skills developed through the study of philosophy provide ideal preparation for law, business, journalism, education, and a wide range of other career areas.

## Physics (BS) LAPHYBS

## COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE

Program Description: Physics is concerned with the nature, structure, and interactions of matter and radiation. Students in the Bachelor of Science program in Physics may pursue one of two options: The traditional "professional" Physics program, which is selected by a majority of our majors, particularly those who plan to pursue graduate work in physics, and an interdisciplinary physics program, which provides a strong physics core but also includes courses in a second "area of concentration," such as materials science, applied mathematics, physical chemistry, geophysics, or astronomy. Students also have the option of building a program that combines physics with business, journalism, law, premedical or other areas. There is considerable flexibility in this program. The student and advisor can custom-design a curriculum to meet specific career goals.

## Language Requirement: N | Program Fee: N

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 physics, engineering, astronomy, medicine, and other fields. The other half go directly into employment in areas such as engineering, design and development, materials science, education and business.

Are you exploring becoming a middle/high school teacher? Concurrent degrees in Biological Sciences (BS) and Education (BAE) (http://www.asu.edu/programs/concurrentdegrees/BAE_BS_BioSciences.html) are available.

## Political Science (BA) LAPOSBA

COLLEGE OF LIBERAL ARTS AND SCIENCES, ONLNE
Contact: http://asu.edu/clas/polisci | COOR 6801 | 480/965-1262
Program Description: The Bachelor of Arts 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.

Language Requirement: Y|Program Fee: N
Career Opportunities: Many of our graduates have gone on to some of the country's most prestigious graduate programs and schools, including Duke, Harvard and Princeton. Graduating seniors have also found a range of employment opportunities in the fields of law, politics, education, journalism, communication, and public service. In fact, some of our graduating seniors have been hired to work at the Federal Reserve, the Arizona governor's office, local and national newspapers, multinational corporations (e.g., Nike, Goodyear), state and local government, and the judiciary.

## Political Science (BS) LAPOSBS

COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE
Program Description: The Bachelor of Science 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 ideas.

## Language Requirement: N | Program Fee: N

Career Opportunities: Many of our graduates have gone on to some of the country's most prestigious graduate programs and schools, including Duke, Harvard and Princeton. Graduating seniors have also found a range of employment opportunities in the fields of law, politics, education, journalism, communication, and public service. In fact, some of our graduating seniors have been hired to work at the Federal Reserve, the Arizona governor's office, local and national newspapers, multinational corporations (e.g., Nike, Goodyear), state and local government, and the judiciary.

## Pre-Health/Pre-Med Professions (BNODEG) LAMEDPRE

COLLEGE OF LIBERAL ARTS AND SCIENCES, WEST
Contact: http://prehealth.asu.edu/ | prehealth@asu.edu | FNDN 110 | 480/965-2365
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, music, engineering, economics and psychology, as well as in biology and chemistry. The CLAS Health Career Services Office provides ongoing academic career advising for pre-health students who wish to pursue a career in medicine, chemistry, physical therapy, podiatry, pharmacy, optometry, or other related fields.

## Language Requirement: N | Program Fee: N

Career Opportunities: The Pre-Health 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.

Additional Admissions Requirements: Students must meet the admission requirements of the major to which they apply.

## Pre-Law (BNODEG) LALAWPRE

COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE
Contact: clasundergrad@asu.edu | Office of Student and Academic Programs, FNDN 110 | 480/965-6506
Program Description: This program is designed for students interested in pursuing a legal career. 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 (see http://prelaw.asu.edu/).

## Language Requirement: N | Program Fee: N

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.

## Psychology (BA) LAPGSBA

COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE
Contact: PSY 237 | 480/965-3326
Program Description: Psychologists study behavior, emotions and mental processes. The BA degree in Psychology is designed to prepare students to work in a variety of settings that provide opportunities to apply concepts and principles of psychology. Students in the BA program acquire knowledge and skills related to 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? In
addition, BA majors learn about statistics and research methods and use elective courses to develop skill sets in diverse settings, including the department's child development facilities.

## Language Requirement: Y|Program Fee: N

Career Opportunities: This degree provides students with 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 leading to many career opportunities. To practice psychology, advanced degrees in clinical, developmental, experimental, cognitive systems, behavior, behavioral neuroscience, or social psychology are required. Opportunities exist for professionals in applied mental health settings and in industry. This degree also leads to professional postgraduate programs in the fields of law and medicine.

## Psychology (BS) LAPGSBS

COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE
Contact: PSY 237| 480/965-3326
Program Description: Psychology is the study behavior, emotions and the mental processes of individuals and groups, approached through a scientific methodology. The BS degree in Psychology is designed to prepare students to pursue graduate work in psychology and related fields. Students in the BS 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? In addition, BS majors take advanced course work in statistics, and receive hands-on research experience by working with faculty members in the laboratory.

## Language Requirement: N | Program Fee: N

Career Opportunities: This degree prepares students to pursue graduate degrees in psychology and cognate fields such as counseling, social work, and family therapy. To practice psychology, advanced degrees in clinical, developmental, experimental, cognitive systems, behavior, behavioral neuroscience, or social psychology are required. Opportunities exist for professionals who complete advanced degrees in academic and clinical settings.

## Religious Studies (BA) LARELBA

## COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE

Program Description: Students in the Bachelor of Arts program in Religious Studies 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 Department of Religious Studies at ASU enjoys an excellent national reputation and 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.

## Language Requirement: Y | Program Fee: N

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, law, journalism and social work.

## Russian (BA) LARUSBA

COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE
Contact: http://www.asu.edu/clas/silc/slav/index.html | silc@asu.edu | LL 440 | 480/965-6281
Program Description: Students in the BA program in Russian 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 Russian literature, history, art,
religion, government, international business, linguistics, and literary and cultural theory. 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, and Polish through the Critical Language Institute at ASU. A studyabroad program is offered in Macedonia, and advanced Russian language students may study in Moscow and St. Petersburg during the summer.

## Language Requirement: Y | Program Fee: N

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, and 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.

## Sociology (BA) LASOCBA

COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE
Contact: http://asu.edu/ssfd | ssfd@asdu.edu | SS 144 | 480/965-6978
Program Description: Sociology is the study of social life, social change and the social causes and consequences of human behavior. The Bachelor of Arts 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.

## Language Requirement: Y|Program Fee: N

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.

## Spanish (BA) LASPABA

COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE
Contact: http://www.asu.edu/clas/silc/spa/ | silc@asu.edu | LL 440 | 480/965-6281
Program Description: Students in the BA program in Spanish have the opportunity to gain oral, reading, speaking and written proficiency in the language. The program offers two study tracks from which to choose: Literature and Culture or 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). 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.

## Language Requirement: Y | Program Fee: N

Career Opportunities: Graduates may choose from several career options. They may pursue college or university teaching and research in linguistics or literature through advanced degrees, become certified to teach high school, pursue translation or interpretation studies, or combine Spanish with other fields with an international emphasis, such as journalism, engineering, political science, and business.

## Speech and Hearing Science (BS) LASHSBS

## COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE

Program Description: Students in the Bachelor of Science program in Speech and Hearing Science study the normal aspects of the communication process. Emphasis is placed on speech, language and hearing science; anatomy and physiology of the hearing
mechanism; and the human communication system, including normal development of speech and language. 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.

## Language Requirement: N | Program Fee: N

Career Opportunities: Employment opportunities for those with a BS may include positions as research assistants/associates in behavioral disciplines, management trainees, or 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 medicine, education, teaching for the deaf, special education, rehabilitation, or law. Graduates in SLP and Audiology can work in a variety of settings from schools to hospitals and clinics.

## Transborder Chicana/o and Latina/o Studies (Media, Literature and Arts) (BA) LATCLMBA

COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE

Contact: http://www.asu.edu/clas/transborder/ | COOR 6633 | 480/965-5091
Program Description: The Bachelor of Arts 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. The department already enjoys great faculty strengths in this area. Its media focus includes cinematography, film production, video and electronic communication, performance art, cultural and literary studies, and long distance learning and development. This area will prepare students with critical, analytical and some technical skills, as well as the theoretical underpinnings of the use of media for human communication within the context of transnational and transborder processes. Simultaneously, the literary and creative study of the major works and canons in Chicana/o, Latina/o, Mexican and Latin American corpuses provide the academic templates for understanding the emotive and psychological basis of identity and cultural change of border and transnational populations. Literary and artistic works are templates of creativity from whence broader discussions of theory, history, and multiple identities emerge ensconced within broad criticisms situated in transcultural settings.

## Language Requirement: Y | Program Fee: N

Career Opportunities: The bachelor's program in Transborder Chicana/o and Latina/o (TCL) Studies prepares ASU graduates for career opportunities in a variety of national and international fields, including justice studies, business fields, education, public policy and administration, communication, and health services. TCL majors will also be well prepared to enter graduate study in such high need career fields as education, law, social work, medicine, business and public health.

## Transborder Chicana/o and Latina/o Studies (Transborder Community Development and Health) (BA) LATCLTBA

COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE
Contact: http://www.asu.edu/clas/transborder/ | COOR 6633 | 480/965-5091
Program Description: The Bachelor of Arts 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 poverty, limited access to insurance, reliance on emergency measures and facilities, and differential health care, as well as learn how to develop the appropriate mitigating applied programs. Other major orientations with an applied focus will include environmental home health; vulnerable population's well being through the life cycle, work and labor accidents, ecological and environmental degradation, and epidemiological trends and issues of Mexican origin and Latina/o populations. Deeply embedded within local and transborder communities, methodological instruction and skills will be especially stressed.

Career Opportunities: The bachelor's program in Transborder Chicana/o and Latina/o (TCL) Studies prepares ASU graduates for career opportunities in a variety of national and international fields, including justice studies, business fields, education, public policy and administration, communication, and health services. TCL majors will also be well prepared to enter graduate study in such high need career fields as education, law, social work, medicine, business and public health.

# Transborder Chicana/o and Latina/o Studies (US and Mexican Regional Immigration Policy and Economy) (BA) LATCLUBA 

COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE
Contact: http://www.asu.edu/clas/transborder/ | COOR 6633 | 480/965-5091
Program Description: The Bachelor of Arts 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: (1) the borderlands where close to 12 million persons live in the immediate U.S.-Mexico border region and (2) the entire country with a total of 20.6 million persons of Mexican origin, either born or migrated to the United States. Our focus concerns 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 the present state of human migration, ecological conditions, economic policy towards trade, demographic transitions, and the nexus of relations that are established across borders at local, regional, and transborder levels. We will focus primarily on the U.S. Mexico region but transnational economics and political policies have, and will continue to, affect the manner in which Spanish speaking Caribbean, and Central and South American regions respond. We will pay special attention to those policies concerning trade, agriculture, manufactured and assembled goods, and such major policies as NAFTA and CAFTA. The department is well served by having some faculty strength in this area but is less strong in some aspects including economic, demographic and quantitative analysis. The recent hire of a sociological demographer, however, will greatly strengthen this area.

Language Requirement: Y | Program Fee: N
Career Opportunities: The bachelor's program in Transborder Chicana/o and Latina/o (TCL) Studies prepares ASU graduates for career opportunities in a variety of national and international fields, including justice studies, business fields, education, public policy and administration, communication, and health services. TCL majors will also be well prepared to enter graduate study in such high need career fields as education, law, social work, medicine, business and public health.

## Women and Gender Studies (BA) LAWSTBA

COLLEGE OF LIBERAL ARTS AND SCIENCES, TEMPE
Contact: http://wgs.asu.edu | womens.studies@asu.edu | WHALL 205 | 480/965-2358
Program Description: The Bachelor of Arts in Women and Gender Studies offers a comprehensive program of study that empowers students to make a difference in the world. Through the study of history, culture, literature, politics, film, science, and economics students learn to challenge conventional wisdom about gender and learn new ways of viewing the world. Internship and leadership opportunities in business, government, and nonprofit organizations, for example, allow students to pursue career goals.

Language Requirement: Y | Program Fee: N
Career Opportunities: The interdisciplinary Women and Gender Studies program prepares students for many different career opportunities upon graduation. Graduates have created businesses, worked in nonprofit organizations and agencies serving women and girls, become lawyers and teachers, and worked in policy and government. They have become consultants and counselors and secured careers in public relations. Our graduates are also well prepared for graduate and law school and have been admitted to prestigious programs.

# MANAGEMENT AND AGRIBUSINESS, MORRISON SCHOOL OF 

## Agribusiness (Agribusiness Finance) (BS) AGAGBNBS

MORRISON SCHOOL OF MANAGEMENT AND AGRIBUSINESS, POLY
Contact: http://www.poly.asu.edu/msma/undergrad/ | agbiz@asu.edu | WANNER 101|480/727-1585
Program Description: The agribusiness sector is one of the most competitive and riskiest sectors of the global economy. It is also one of the largest users of borrowed capital in the world. This program, the agribusiness finance concentration under the BS in Agribusiness, is designed to prepare professionals to lead their companies in managing risk and in evaluating business opportunities.Agribusiness finance concentration graduates are expected to possess a broad knowledge of financial theory and practice as it pertains to the agribusiness sector. This will involve applying quantitative and computer-based analytical techniques to real-world agribusiness problems. Specific course content includes topics in financial management, financial markets, risk management, and the evaluation of financial assets and business alternatives.

Language Requirement: $\mathrm{N} \mid$ Program Fee: N
Career Opportunities: Specialists in agribusiness finance work as loan officers, credit analysts, commodity traders, financial advisors and financial managers. These positions are with banks, brokerage companies, food processing firms, commodity trading firms and insurance companies.

## Agribusiness (Food Science) (BS) AGAGBFBS

MORRISON SCHOOL OF MANAGEMENT AND AGRIBUSINESS, POLY
Contact: http://www.poly.asu.edu/msma/ | agbiz@asu.edu | WANNER 101 | 480/727-1585
Program Description: The food science concentration, under the Bachelor of Science in Agribusiness degree program, prepares individuals for positions in the food industry involving product development, product/food safety and basic food quality assurance. It focuses on both scientific and technical competency skills with an emphasis on food microbiology, food chemistry, biotechnology, mathematics and statistics. The program requires knowledge of chemistry, microbiology, statistical process control and other business and agribusiness concepts.

Language Requirement: N | Program Fee: N
Career Opportunities: This unique program prepares graduates for employment opportunities in the food, beverage and dairy industries; regulatory agencies such as the FDA and USDA; international organizations such as FAO and WHO; and consumer organizations.

## Agribusiness (Food/Agribusiness and Consumer Product Marketing) (BS) AGAGBDBS

MORRISON SCHOOL OF MANAGEMENT AND AGRIBUSINESS, POLY
Contact: http://www.poly.asu.edu/msma/ | agbiz@asu.edu | WANNER 101 | 480/727-1585
Program Description: The food industry is one of the largest marketing sectors in the world and one of the most innovative and active in terms of developing new products. This Bachelor of Science in Agribusiness degree program (with a concentration in food, agribusiness, and consumer product marketing) provides students with insights into the most basic decisions consumers make-decisions about the food they eat. Students develop critical skills relevant to dealing with firms involved in food, fiber, consumer products and pharmaceutical manufacturing; distribution; and retailing. Students also learn about the relationship between input suppliers, commodity associations and primary producers.

Language Requirement: N | Program Fee: N
Career Opportunities: This degree prepares graduates for careers in sales and marketing for food, beverage and consumer product companies.

# Agribusiness (General Agribusiness) (BS) AGAGBGBS 

MORRISON SCHOOL OF MANAGEMENT AND AGRIBUSINESS, POLY
Contact: http://www.poly.asu.edu/msma/ | agbiz@asu.edu | WANNER 101|480/727-1585
Program Description: The agribusiness major is an applied, industry-oriented curriculum. The study of the food and fiber system in the U.S. and around the world forms the basis of this particular program. The general agribusiness concentration, under Bachelor of Science degree in Agribusiness, is specifically designed to meet the needs of the urban student interested in business and agriculture. Students learn to analyze firms involved in input and output supply activities, commodity trading, food manufacturing and food distribution.

Language Requirement: N | Program Fee: N
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.

## Agribusiness (Golf and Facilities Management) (BS) AGAGBCBS <br> MORRISON SCHOOL OF MANAGEMENT AND AGRIBUSINESS, POLY <br> Contact: http://www.poly.asu.edu/msma/ | agbiz@asu.edu | WANNER 101|480/727-1585

Program Description: The golf and facilities management concentration, under the Bachelor of Science in Agribusiness degree program, is designed to prepare students for careers as golf course superintendents. Through agribusiness core courses, students develop the critical skills needed to manage complex organizations. In addition, this concentration provides golf facilities management-related curriculum, including a hands-on internship experience at golf courses. The remaining course work is selected from the following areas: golf course operations; plants and landscaping; soils, irrigation, and water management; fertilizers; pest control; turf grass management; mechanics; and shop maintenance and repair.

Language Requirement: $\mathrm{N} \mid$ Program Fee: N
Career Opportunities: Golf is a billion-dollar-a-year industry in Arizona. Nationwide, more than 400 new golf courses will be built annually in the next 10 years. As a result, management careers in the golf industry, such as assistant superintendents, are abundant and the salaries are attractive.

## Agribusiness (International Agribusiness) (BS) AGAGBIBS

MORRISON SCHOOL OF MANAGEMENT AND AGRIBUSINESS, POLY
Contact: http://www.poly.asu.edu/msma/ | agbiz@asu.edu | WANNER 101 | 480/727-1585
Program Description: Agribusiness contributes to about 50 percent of the global economy. It employs about 23 percent of the U.S. workforce and 90 percent of the workforce in some countries. We are increasingly reliant on globally traded food products. The international agribusiness concentration, under the Bachelor of Science degree in Agribusiness, provides students with insights into the policies, institutions and commercial processes associated with global trade in food and agricultural products.

Language Requirement: $\mathrm{N} \mid$ Program Fee: N
Career Opportunities: Specialists in international agribusiness work in the private sector, government sector, and for nongovernmental organizations (NGOs). Their work entails trade in food and agricultural products and negotiations and administration of trade policies and regulations pertaining to food and agricultural products.

## Agribusiness (Management of Agribusiness) (BS) AGAGBTBS

MORRISON SCHOOL OF MANAGEMENT AND AGRIBUSINESS, POLY
Contact: http://www.poly.asu.edu/msma/ | agbiz@asu.edu | WANNER 101 | 480/727-1585
Program Description: Agribusiness managers encounter many problems and opportunities on a daily basis that are unique to the agribusiness sector. The management of agribusiness concentration, under the Bachelor of Science in Agribusiness, prepares
students to meet these challenges. Students pursuing this degree program develop skills in managing people, internal resources and external relationships in an increasingly dynamic environment.

## Language Requirement: N | Program Fee: N

Career Opportunities: All enterprises need confident and competent managers who have mastered business fundamentals. These needs exist in large multinational corporations, mid-size niche companies and entrepreneurial startups.

## Agribusiness (Preveterinary Medicine) (BS) AGAGBPBS

## MORRISON SCHOOL OF MANAGEMENT AND AGRIBUSINESS, POLY

Contact: http://www.poly.asu.edu/msma/ | agbiz@asu.edu | WANNER 101 | 480/727-1585
Program Description: A unique program offers students studying agribusiness an opportunity to prepare for admission to professional veterinary schools. Through the Bachelor of Science in Agribusiness (with a concentration in preveterinary medicine) degree program, students can elect to apply to veterinary college at the end of their third year at ASU and use the first year credits at the veterinary college to complete their BS degree at ASU. While completing the courses needed for acceptance into veterinary school, the student is broadening his or her career potential with agribusiness courses. Should a preveterinary student decide not to apply to a veterinary school, this major provides alternative career paths into human or veterinary pharmaceutical industries or the food industry.

Language Requirement: N | Program Fee: N
Career Opportunities: Veterinarians have a vast spectrum of career opportunities, including private practice, biotechnology research, and positions in federal and state governmental agencies.

## Agribusiness (Professional Golf Management) (BS) AGAGBMBS

MORRISON SCHOOL OF MANAGEMENT AND AGRIBUSINESS, POLY<br>Contact: http://www.poly.asu.edu/msma/ | agbiz@asu.edu | WANNER 101|480/727-1585

Program Description: The professional golf management concentration, under the Bachelor of Science degree in Agribusiness, is designed to prepare students for management careers in the golf industry. This program is appropriate for students who are skilled players and want to pursue a career on the player side of the business, such as a club professional. Students develop business skills and competencies while also becoming PGA Class A professionals.

## Language Requirement: $\mathrm{N} \mid$ Program Fee: Y

Career Opportunities: Golf is a billion-dollar-a-year industry in Arizona. Nationwide, more than 400 new golf courses will be built annually in the next 10 years. As a result, management careers in the golf industry, such as club professional, are abundant and the salaries are attractive.

## Business Administration (BS) AGBUABS

MORRISON SCHOOL OF MANAGEMENT AND AGRIBUSINESS, POLY

Program Description: Business administration is the study of the fundamental functions and activities performed in profitseeking and nonprofit organizations. The Bachelor of Science in Business Administration degree program enables students to gain essential business competencies, knowledge of business disciplines and methods, and an appreciation for contemporary business environments and cultures.

## Language Requirement: N | Program Fee: Y

Career Opportunities: Business graduates are prepared for careers that require broad background and general knowledge in the field of business is required. Graduates may choose to enter one of the areas of business or industry for which their emphasis on business fundamentals prepares them, start their own businesses, or pursue careers with local, state, or federal government. Some graduates choose to continue their education by enrolling in graduate programs or law school.

## Real Estate (BS) AGREABS

MORRISON SCHOOL OF MANAGEMENT AND AGRIBUSINESS, POLY

Contact: http://poly.asu.edu/msma/ | jay.butler@asu.edu | WANNER 140D | 480/727-1300
Program Description: Students in the Bachelor of Science in Real Estate degree program gain an understanding of both residential and commercial real estate markets. The curriculum combines the study of finance and real estate and focuses on competencies in real estate law, structuring real estate transactions, real estate valuation techniques, and an understanding of mortgages and mortgage markets. The program is organized around five aspects of real estate: brokerage/management, development, financing, investments and market analysis. Emphasis is placed on team work and involvement in projects designed to develop analytical, communication and technology skills.

Language Requirement: N | Program Fee: Y
Career Opportunities: Graduates are prepared to pursue careers in land development, investment analysis, appraisal, property management, brokering and mortgage finance. Graduates may also choose to continue their education by enrolling in graduate degree programs or law school.

# NEW COLLEGE OF INTERDISCIPLINARY ARTS AND SCIENCES 

## American Studies (BA) ASAMSBA <br> NEW COLLEGE OF INTERDISCIPLINARY ARTS AND SCIENCES, WEST

Program Description: The BA 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: (1) American systems, dealing with political, economic, religious, and legal institutions; (2) American cultures, concentrating on systems of belief and their symbolic expression in literature, art, philosophy, and regional and popular cultures; (3) American lives, exploring the ways in which categories of race, ethnicity, class, and gender intersect with individual and community experience; and (4) 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. Refer to DARS for New College proficiency requirements that pertain to this program.

## Language Requirement: N | Program Fee: N

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.

## Applied Computing (BS) ASACOBS

## NEW COLLEGE OF INTERDISCIPLINARY ARTS AND SCIENCES, WEST

Program Description: The Bachelor of Science in Applied Computing within the New College of Interdisciplinary Arts and Sciences prepares students to collect and analyze data; allow for efficient, effective, and ethical user interaction with computer systems; apply skills to lead the development of technology systems; engage in creative efforts; and 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, and networking and distributed processing.

## Language Requirement: N | Program Fee: N

Career Opportunities: Students are prepared to integrate technology with human activities and to respond to global changes, solve problems, and 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.

## Applied Mathematics (BS) ASMATBS

## NEW COLLEGE OF INTERDISCIPLINARY ARTS AND SCIENCES, WEST

Contact: gene.burgess@asu.edu | CLCC 217 | 602/543-4223
Program Description: The Bachelor of Science degree 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 non-profit organizations. Students will also do a capstone project involving real-world problems under the supervision of an adviser and in close consultation with an external project sponsor.

## Language Requirement: N | Program Fee: N

Career Opportunities: Students graduating with a BS in Applied Mathematics have a wide range of career options in industry, finance, government, non-profit organizations, and education, as well as advanced degrees in the mathematical sciences (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: Operations Research, Financial Mathematics, Mathematical Biology, Applied Mathematical Networks, and General Applied Mathematics.

## Applied Science (BAS) ASBASBAS

## NEW COLLEGE OF INTERDISCIPLINARY ARTS AND SCIENCES, WEST

Program Description: The Bachelor of Applied Science (BAS) programs are a flexible, 60-semester hour degree designed specifically for students who have earned an Associate of Applied Science (AAS) degree from a regionally accredited institution. In completing the BAS, students complete all ASU graduation requirements.The Applied Science BAS program within the New College of Interdisciplinary Arts and Sciences combines the technical concentration knowledge earned in the student's Associate of Applied Science degree 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 West campus 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, environmental issues and physical sciences, languages and cultures, social sciences and policy issues, education and teaching, criminal justice, and prelaw, to name a few. The Applied Science program is capped with an internship experience.

## Language Requirement: N | Program Fee: N

Career Opportunities: Emphasizing professional study combined with a specific area of concentration (e.g., business, communication studies, English, gerontology, history, psychology, or prelaw), 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.

Additional Admissions Requirements: Students applying to this program must have completed an Associate of Applied Science (A.A.S.) degree. Not available for freshmen.

# Communication Studies (BA) ASCOMBA 

NEW COLLEGE OF INTERDISCIPLINARY ARTS AND SCIENCES, WEST
Contact: http://newcollege.asu.edu/ | comm_studies@asu.edu | FAB S141C | 602/543-6606

At the outset of the 2008-09 academic year, this degree/certificate/major was offered by the College of Human Services on ASU's West campus. As a result of the academic reorganization that occurred during the 2008-09 academic year, this degree/certificate/major program was moved to the New College of Interdisciplinary Arts and Sciences at the West campus.

Program Description: Communication studies 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 publics, between social institutions and their constituents, and between members of different cultures.

## Language Requirement: $\mathrm{N} \mid$ Program Fee: N

Career Opportunities: The BA degree prepares students to work in communication environments such as training, human resources management and media relations. Communication studies 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 studies graduates work in a variety of fields including: management, personnel, training and development, sales and marketing, customer service and customer relations, media and public relations, legal professions, and education.

## Communication Studies (BS) ASCOMBS

NEW COLLEGE OF INTERDISCIPLINARY ARTS AND SCIENCES, WEST
Contact: http://newcollege.asu.edu/ | comm_studies@asu.edu | FAB S141C | 602/543-6606
At the outset of the 2008-09 academic year, this degree/certificate/major was offered by the College of Human Services on ASU's West campus. As a result of the academic reorganization that occurred during the 2008-09 academic year, this degree/certificate/major program was moved to the New College of Interdisciplinary Arts and Sciences at the West campus.

Program Description: Communication studies 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 publics, between social institutions and their constituents, and between members of different cultures. The BS degree prepares students to work in communication-rich environments such as training, human resources management and media relations. It also readies graduates to perform various forms of data analysis, communication assessment and technical reporting.

## Language Requirement: N | Program Fee: N

Career Opportunities: The program prepares students for advanced education; advancement toward careers in teaching, counseling, law, and medicine; and various careers and professions, including training and development, public relations, public administration, public office, public advocacy, speech writing, lobbying, research, advertising, mediation, customer relations, human resources, health and human services, international service, fund-raising, and the ministry.

## English (BA) ASENGBA

NEW COLLEGE OF INTERDISCIPLINARY ARTS AND SCIENCES, WEST
Program Description: The Bachelor of Arts in English within the New College of Interdisciplinary Arts and Sciences emphasizes the study of texts in context. Students study not only the forms of writing but also the history of those forms, as well as read and analyze literature from a broad range of periods and genres. Students learn to produce good expository prose. The program allows students to emphasize particular genres, periods, regions, and themes through a mix of required courses and electives. Students determine appropriate programs of study in consultation with department academic advisors. Refer to DARS for New College proficiency requirements that pertain to this program.

## Language Requirement: $\mathrm{N} \mid$ Program Fee: N

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.

## Ethnicity, Race, First Nation Studies (BA) ASETHBA

NEW COLLEGE OF INTERDISCIPLINARY ARTS AND SCIENCES, WEST
Program Description: Ethnicity, Race and First Nation Studies is the first such Bachelor of Arts 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.Refer to DARS for New College proficiency requirements that pertain to this program.

## Language Requirement: $\mathrm{N} \mid$ Program Fee: N

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 program in Ethnicity, Race and First Nation Studies will be positioned to enter the workforce and function effectively and critically as informed citizens in a diverse and complex society.

## History (BA) ASHISBA

## NEW COLLEGE OF INTERDISCIPLINARY ARTS AND SCIENCES, WEST

Program Description: The Bachelor of Arts 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. Students tailor the major to their personal and professional interests in consultation with a faculty advisor.Refer to DARS for New College proficiency requirements that pertain to this program.

## Language Requirement: N | Program Fee: N

Career Opportunities: The History program 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.

## Integrative Studies (BA) ASIASBA

## NEW COLLEGE OF INTERDISCIPLINARY ARTS AND SCIENCES, WEST

Contact: newcollege.asu.edu | iasinfo@asu.edu | FAB N279 | 602/543-6003
Program Description: The BA in Integrative Studies within the New College of Interdisciplinary Arts and Sciences prepares students for broad employment alternatives or for pursuing graduate studies. As a variation on 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 West campus 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, environmental issues and physical sciences, languages and cultures, social sciences and policy
issues, education and teaching, criminal justice, and prelaw, to name a few. Flexible and diverse, the program is capped with an internship experience.

## Language Requirement: N | Program Fee: N

Career Opportunities: Emphasizing interdisciplinary study combined with a specific area of concentration (e.g., business, communication studies, English, gerontology, history, psychology, or prelaw), 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, 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.

## Interdisciplinary Arts and Performance (BA) ASIAPBA

NEW COLLEGE OF INTERDISCIPLINARY ARTS AND SCIENCES, WEST
Program Description: The Bachelor of Arts in Interdisciplinary Arts and Performance (IAP) is an interdisciplinary study of the arts and digital media with an emphasis on 20th and 21st century arts, performance, technology and practice. The program encourages practical application of theory and content area knowledge with the integration of skills and performance. IAP courses highlight creativity, innovation, integration and presentation.

## Language Requirement: $\mathrm{N} \mid$ Program Fee: N

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 artsrelated professions in education, art and cultural journalism, government and community arts administration, media services, and production.

Additional Admissions 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.

## Life Sciences (BS) ASLSCBS

NEW COLLEGE OF INTERDISCIPLINARY ARTS AND SCIENCES, WEST
Program Description: The intricate connections between biology, chemistry and physics form the basis of the Life Sciences curriculum. The Bachelor of Science program emphasizes experiential learning: All required core courses have laboratories. By learning in an integrative environment that emphasizes the connectedness between 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.

## Language Requirement: $\mathrm{N} \mid$ Program Fee: N

Career Opportunities: The BS 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: Laboratory technician or research associate positions in university and government research laboratories and hospital and diagnostic laboratories, as well as 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, conservation officer).

## Political Science (BA) ASPOLBA

NEW COLLEGE OF INTERDISCIPLINARY ARTS AND SCIENCES, WEST
Contact: http://newcollege.asu.edu/programs/polisci/ | SBS.Dept@asu.edu | FAB N251 | 602/543-6058
Program Description: Students gain understanding of theory, practice and policy underlying political processes locally, nationally and internationally in the Political Science Bachelor of Arts 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, and 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.

## Language Requirement: N | Program Fee: N

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.

## Political Science (BS) ASPOLBS

NEW COLLEGE OF INTERDISCIPLINARY ARTS AND SCIENCES, WEST

Contact: http://newcollege.asu.edu/programs/polisci/
Program Description: Students gain understanding of theory, practice and policy underlying political processes locally, nationally and internationally in the Political Science Bachelor of 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, and 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. The BS program requires six more semester hours (SBS 304 Social Statistics and a political science elective) than the BA.

## Language Requirement: N | Program Fee: N

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.

## Psychology (BA) ASPGSBA

NEW COLLEGE OF INTERDISCIPLINARY ARTS AND SCIENCES, WEST
Contact: http://newcollege.asu.edu/programs/psychology/ | sbs.dept@asu.edu | FAB N251 | 602/543-6058
Program Description: The diverse Bachelor of Arts 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.

## Language Requirement: N | Program Fee: N

Career Opportunities: A degree in Psychology will prepare students for a career in the mental health professions (e.g., youth counselor, substance abuse counselor), the social services (e.g., high school psychology teacher, occupational analyst), and the 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, developmental, environmental, experimental, physiological, cognitive neuroscience, and social.

## Psychology (BS) ASPGSBS

## NEW COLLEGE OF INTERDISCIPLINARY ARTS AND SCIENCES, WEST

Contact: http://newcollege.asu.edu/programs/psychology/ | sbs.dept@asu.edu | FAB N251 | 602/543-6058
Program Description: The Bachelor of Science 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, and 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. The BS program is distinguished from the BA in that it requires two additional lab sciences (a life science and a physical science) and MAT 210 Brief Calculus. 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.

## Language Requirement: $\mathrm{N} \mid$ Program Fee: N

Career Opportunities: A Bachelor of Science in Psychology will prepare students for a career in the mental health professions (e.g., youth counselor, substance abuse counselor), the social services (e.g., high school psychology teacher; occupational analyst), and the 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, developmental, environmental, experimental, physiological, cognitive neuroscience, and social.

## Religion and Applied Ethics Studies (BA) ASRELBA

NEW COLLEGE OF INTERDISCIPLINARY ARTS AND SCIENCES, WEST
Program Description: Many people make ethical decisions in the context of their religious beliefs or worldviews. By combining the disciplines of religion and applied ethics studies, students are able to analyze problems more realistically. Students in the Bachelor of Arts program in Religion and Applied Ethics Studies (RAES) 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 and 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 RAES program is capped with a thesis and internship experience.

## Language Requirement: $\mathrm{N} \mid$ Program Fee: N

Career Opportunities: Graduates can anticipate opportunities in the following fields explored through their required internships: religious organizations, government, law, medicine, law enforcement, criminal justice, education, media, business, social services, and human resources.

# Social and Behavioral Sciences (Behavioral Sciences) (BA) ASSBSBBA 

NEW COLLEGE OF INTERDISCIPLINARY ARTS AND SCIENCES, WEST

Contact: http://newcollege.asu.edu/programs/sbs | SBS.Dept@asu.edu | FAB N251 | 602/543-6058
Program Description: The Bachelor of Arts curriculum in Social and Behavioral Sciences provides basic 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. Students choose either a social science or a behavioral science emphasis. All courses provide students with knowledge about the biological and/or social principles related to the behavior of individuals across multiple social contexts and institutions (family, community, society and culture).

## Language Requirement: N | Program Fee: N

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.

## Social and Behavioral Sciences (Behavioral Sciences) (BS) ASSBSBBS

NEW COLLEGE OF INTERDISCIPLINARY ARTS AND SCIENCES, WEST
Contact: http://newcollege.asu.edu/programs/sbs/ | SBS.Dept@asu.edu | FAB N251|602/543-6058
Program Description: The Social and Behavioral Sciences curriculum provides basic 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. Students choose either a social science or a behavioral science emphasis. All courses provide students with knowledge about the biological and/or social principles related to the behavior of individuals across multiple social contexts and institutions (family, community, society, and culture).

## Language Requirement: N | Program Fee: N

Career Opportunities: The interdisciplinary degree is an excellent means of creating a degree program that matches the individuals 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.

## Social and Behavioral Sciences (Social Sciences) (BA) ASSBSSBA

NEW COLLEGE OF INTERDISCIPLINARY ARTS AND SCIENCES, WEST
Contact: http://newcollege.asu.edu/programs/sbs | SBS.Dept@asu.edu | FAB N251 | 602/543-6058
Program Description: The Bachelor of Arts curriculum in Social and Behavioral Sciences provides basic 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. Students choose either a social science or a behavioral science emphasis. All courses provide students with knowledge about the biological and/or social principles related to the behavior of individuals across multiple social contexts and institutions (family, community, society and culture).

## Language Requirement: $\mathrm{N} \mid$ Program Fee: N

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.

## Social and Behavioral Sciences (Social Sciences) (BS) ASSBSSBS

NEW COLLEGE OF INTERDISCIPLINARY ARTS AND SCIENCES, WEST<br>Contact: http://newcollege.asu.edu/programs/sbs | SBS.Dept@asu.edu | FAB N251 | 602/543-6058

Program Description: The Social and Behavioral Sciences curriculum provides basic 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. Students choose either a social science or a behavioral science emphasis. All courses provide students with knowledge about the biological and/or social principles related to the behavior of individuals across multiple social contexts and institutions (family, community, society, and culture).

## Language Requirement: N | Program Fee: N

Career Opportunities: The interdisciplinary degree is an excellent means of creating a degree program that matches the individuals 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.

## Sociology (BA) ASSOCBA

## NEW COLLEGE OF INTERDISCIPLINARY ARTS AND SCIENCES, WEST

Program Description: The Bachelor of Arts 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.

## Language Requirement: N | Program Fee: N

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 research analysts, survey researchers, gerontologists, statisticians, urban planners, community developers, criminologists, or demographers.

## Sociology (BS) ASSOCBS

## NEW COLLEGE OF INTERDISCIPLINARY ARTS AND SCIENCES, WEST

Program Description: The Bachelor of Science 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 BS program requires six more semester hours of methods courses (both qualitative and quantitative) than the BA. This is a flexible program with individual and group experiences in working with faculty on concrete intellectual and policy issues.

## Language Requirement: $\mathrm{N} \mid$ Program Fee: N

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 research analysts, survey researchers, gerontologists, statisticians, urban planners, community developers, criminologists, or demographers.

## Spanish (BA) ASSPABA

NEW COLLEGE OF INTERDISCIPLINARY ARTS AND SCIENCES, WEST
Contact: lch.info@asu.edu | FAB N220 | 602/543-6090
Program Description: The Bachelor of Arts in Spanish program within the New College of Interdisciplinary Arts and Sciences consists of three tracks-language, literature and cultures-integrated within the discipline and with other disciplines within the college. Classes are taught through an intensive language approach using the most recent electronic technologies. Refer to DARS for New College proficiency requirements that pertain to this program.

## Language Requirement: $\mathrm{N} \mid$ Program Fee: N

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, the diplomatic corps, law enforcement agencies, and 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 NAFTA agreement.

## Women's Studies (BA) ASWSTBA

NEW COLLEGE OF INTERDISCIPLINARY ARTS AND SCIENCES, WEST
Contact: FAB N291 | 602/543-3300
Program Description: The Bachelor of Arts 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. Consistent with the university's design imperatives of social embeddedness and useinspired research, Women's Studies, through its course offerings, research initiatives and co-curricular programs in the Women's Resource Center, seeks to further the understanding of women and gender, and to promote social justice.

## Language Requirement: N | Program Fee: N

Career Opportunities: The Women's 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, health care services, human resources development, public and business administration, social services, and graduate study in the humanities and social sciences.

## Women's Studies (BS) ASWSTBS

## NEW COLLEGE OF INTERDISCIPLINARY ARTS AND SCIENCES, WEST

Program Description: The Bachelor of Science (BS) 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. Consistent with the university's design imperatives of social embeddedness and use-inspired research, Women's Studies, through its course offerings, research initiatives and co-curricular programs in the Women's Resource Center, seeks to further the understanding of women and gender, and to promote social justice. The BS degree program is distinguished by its quantitative emphasis.

Language Requirement: N | Program Fee: N

Career Opportunities: The Women's 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, health care services, human resources development, public and business administration, social services, and graduate study in the humanities and social sciences.

# NURSING \& HEALTHCARE INNOVATION, COLLEGE OF 

## Nursing (BSN) NUNURDBSN

COLLEGE OF NURSING AND HEALTHCARE INNOVATION, DTPHX
Program Description: Through a curriculum based upon evidence-based, critical thinking, sound knowledge, and strong interpersonal communication skills, the Bachelor of Science in Nursing (BSN) degree program prepares students to provide the highest quality of healthcare. General education course work within the curriculum, including biology, social science, and the humanities, provides a strong foundation for the nursing theory and clinical/experiential courses. Graduates deliver nursing care to individuals, families, and communities. BSN 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.

In addition to the traditional BSN program, ASU also offers these program options:
The RN to BSN entry option (http://nursing.asu.edu/programs/undergraduate/rnbsn/rnbsnchksht_nonalliance.pdf) offers
Registered Nurses the opportunity to complete Upper Division Nursing Program requirements leading to a Bachelor of Science in Nursing.

The Arizona State University/Maricopa County Community College District Nursing Alliance Program (http://nursing.asu.edu/programs/undergraduate/rnbsn/rnbsnchksht_alliance.pdf)is specifically designed for students in a Maricopa County Community College interested in the RN-BSN Track Program.

Language Requirement: $\mathrm{N} \mid$ Program Fee: N
Career Opportunities: The career outlook within the nursing field is excellent, with an estimated 100,000 vacant positions and a growing need. A nursing degree opens doors to many types of practice settings and provides a future in promoting health and preventing disease. Registered Nurses (RN's) work with diverse population groups in hospitals, clinics, schools, industry and communities. RN's are a critical link in providing care to individuals and families across the life span.

## PUBLIC PROGRAMS, COLLEGE OF

## Criminal Justice and Criminology (BS) PPCRIMJBS

COLLEGE OF PUBLIC PROGRAMS, DTPHX
Contact: sccj@asu.edu | 602/543-6607

At the outset of the 2008-09 academic year, this degree was offered by the College of Human Services on ASU's West campus. As a result of the academic reorganization that occurred during the 2008-09 academic year, this degree program was moved to the College of Public Programs at the Downtown Phoenix campus.

Program Description: The School of Criminology and Criminal Justice administers the program through the College of Public Programs. CRJ courses are offered on the Tempe, Downtown Phoenix and West campuses.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 School of Criminology and Criminal Justice offers undergraduate and graduate degrees in Criminal Justice and Criminology. The program provides an interdisciplinary social science perspective to the study crime and criminal justice. The focus is on the policies and practices of criminal justice system components, 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.

## Language Requirement: $\mathrm{N} \mid$ Program Fee: N

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 law enforcement, probation, parole, corrections, private security, court personnel, legal offices, and victim witness advocate agencies. Graduates may also pursue advanced degrees in law, criminology and criminal justice, and other social science disciplines.

## Nonprofit Leadership and Management (BS) PPNLMBS

COLLEGE OF PUBLIC PROGRAMS, DTPHX

Program Description: Through the Bachelor of Science in Nonprofit Leadership and Management degree 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. Having completed the undergraduate program, a student may also earn national certification from American Humanics, Inc. which will prepare him or her to lead and strengthen nonprofit organizations. For more information, access the School's Web site
(http://scrd.asu.edu/portal/ia/certificate-programs-1/).

## Language Requirement: $\mathrm{N} \mid$ Program Fee: N

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, March of Dimes, The Humane Society of the United States, National Urban League, United Way, and primarily 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, healthcare, and others. Typical positions include roles as program directors, development directors, field executives, volunteer coordinators, and similar positions from a variety of agencies and organizations.

## Parks and Recreation Management (BS) PPPRMBS

COLLEGE OF PUBLIC PROGRAMS, DTPHX

Program Description: The parks and recreation fields emerged from the youth development, recreation and park movements of the late 19th century. The Bachelor of Science (BS) in Parks and Recreation degree provides an interdisciplinary education in the management of parks, protected areas and community-based recreation services. Students learn to integrate the managerial, natural and social sciences to make informed decisions for recreation service delivery. The curriculum combines classroom instruction with field experiences and covers parks and recreation policy, programming, planning, management, communication, inclusive services and history. The BS 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.Students interested in the Bachelor of Science in Parks and Recreation Management may also be interested in the school's Therapeutic Recreation program; see the Web site (http://scrd.asu.edu/portal/programs/undergraduate/parks-recreation-management-prm/bs-in-parks-and-recreation-management-therapeutic-recreation-emphasis).

## Language Requirement: N | Program Fee: N

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 youth agencies, city park and recreation departments, county and state park agencies, tour operations, sport venues, special event management, hospitals and federal natural resource agencies. In such settings, graduates design, develop and manage services that address the recreational needs of a particular clientele.

## Social Work (BSW) PPSWUSWU

COLLEGE OF PUBLIC PROGRAMS, WEST
Program Description: Social work practitioners are committed to challenging inequities, enhancing human capacity to solve complex problems and creating a more just and humane society. The goal of the Bachelor of Social Work degree program is to prepare professional social workers for generalist practice. Of particular importance is a concern for and willingness to work with oppressed, diverse, and underserved populations. The program is designed to prepare students for culturally sensitive practice. The degree also provides a foundation for those who may later pursue graduate training in social work. During the freshman and sophomore years, students concentrate on obtaining a strong background in liberal arts and sciences and are classified as preprofessional until they are officially admitted to the professional program.

## Language Requirement: $\mathrm{N} \mid$ Program Fee: N

Career Opportunities: Graduates work in public and private social service agencies that provide services in child welfare, health, corrections, substance abuse, aging, mental health and public assistance. Due to the current demand for social services, agencies are now seeking more trained social work graduates.

## Tourism Development and Management (BS) PPTDMBS

COLLEGE OF PUBLIC PROGRAMS, DTPHX

Program Description: Through the Bachelor of Science in Tourism Development and Management degree program, 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 of Phoenix. Through the required internship component of the program, students gain practical experiences leading to professional positions in various travel, tourism, and related fields. Exposure to the businesses of heritage tourism, nature-based tourism, resort management, and meeting and convention planning prepare students for successful careers in the travel and tourism industry. Having completed the BS in Tourism Development and Management, a student may also complete a Certificate in Convention Sales and Meeting Planning.In addition, students may also choose to complete a study abroad program. For more information, access the school's Web site (http://scrd.asu.edu/portal/ia/study-abroad-programs/).

## Language Requirement: $\mathrm{N} \mid$ Program Fee: N

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 the air transportation sector, sports tourism, resorts and hotels, meetings and conventions, state and national parks, business and corporate travel, and the gaming and casino sectors.

## Urban and Metropolitan Studies (BA) PPURBBA

COLLEGE OF PUBLIC PROGRAMS, DTPHX
Contact: http://spa.asu.edu/new/urban/default.htm | spa@asu.edu | UCENT 450 | 602/496-0450
Program Description: The Bachelor of Arts degree program in Urban and Metropolitan Studies offers students the opportunity to explore a wide range of issues that influence the quality of urban life. The Phoenix metropolitan region is one of the nation's fastest growing urban centers and it's projected that the area will continue this trajectory of rapid growth. Located in the heart of downtown Phoenix, the Urban and Metropolitan Studies Program provides an ideal setting for training future leaders to effectively address the challenges of rapid growth along with other contemporary urban issues. Students examine and engage
these issues through multiple lenses-historic, social, cultural, economic and political.Through course work and hands-on internships, students engage in scholarship, practice and stewardship. As scholars, they contribute and expand our body of knowledge at the highest level. And as stewards, they contribute to enhance the health and well being of our places, institutions and communities.

## Language Requirement: Y|Program Fee: N

Career Opportunities: 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 urban planning, public policy, public administration, law, business, real estate development, arts administration, historic preservation, journalism, education, and other fields.

## Urban and Metropolitan Studies (BS) PPURBBS

COLLEGE OF PUBLIC PROGRAMS, DTPHX
Contact: http://spa.asu.edu/new/urban/default.htm | spal@asu.edu | UCENT 450 | 602/496-0450
Program Description: The Bachelor of Science degree program in Urban and Metropolitan Studies offers students the opportunity to explore a wide range of issues that influence the quality of urban life. The Phoenix metropolitan region is one of the nation's fastest growing urban centers and it's projected that the area will continue this trajectory of rapid growth. Located in the heart of downtown Phoenix, the Urban and Metropolitan Studies Program provides an ideal setting for training future leaders to effectively address the challenges of rapid growth along with other contemporary urban issues. Students examine and engage these issues through multiple lenses-historic, social, cultural, economic and political. Applying quantitative as well as qualitative research methods, students develop and implement innovative means for enhancing quality of place and quality of life in the contemporary metropolis. Students in the BS program are required to complete an upper-division course in statistics.

## Language Requirement: $\mathrm{N} \mid$ Program Fee: N

Career Opportunities: 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 urban planning, public policy, public administration, law, business, real estate development, arts administration, historic preservation, journalism, education, and other fields.

## SUSTAINABILITY, SCHOOL OF

## Sustainability (BA) SUSUSTBA

SCHOOL OF SUSTAINABILITY, TEMPE

Contact: http://schoolofsustainability.asu.edu | schoolofsustainability@asu.edu | GIOS 108 | 480/727-6963
Program Description: The Bachelor of Arts (BA) 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 BA in Sustainability is best suited to those inclined towards social sciences, planning or related fields. Students pursuing a BA in Sustainability can pursue the following tracks: society and sustainability; policy and governance in sustainable systems; international development 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 towards problem solving.

## Language Requirement: Y | Program Fee: N

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 challenges having to do with sustainable ecosystems, social transformations, energy, materials and technology, international development, urbanization and water resources.

## Sustainability (BS) SUSUSTBS

## SCHOOL OF SUSTAINABILITY, TEMPE

Contact: http://schoolofsustainability.asu.edu | schoolofsustainability@asu.edu | GIOS 108 | 480/727-6963
Program Description: The Bachelor of Science (BS) 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 BS in Sustainability is best suited to those inclined towards natural sciences or engineering.Students pursuing a BS in Sustainability can pursue the following tracks: sustainable energy, materials and technology; economics of sustainability; sustainable ecosystems. 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 towards problem solving.

## Language Requirement: Y|Program Fee: N

Career Opportunities: Recent interest in sustainability within business and government has created new employment opportunities (e.g., sustainability coordinators, directors, and managers) for School of Sustainability graduates. 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 challenges having to do with sustainable ecosystems, social transformations, energy, materials and technology, international development, urbanization, and water resources.Sustainability graduates are prepared for admission into strong graduate and professional schools or may assume positions in industry, consultancy, utilities, regulatory agencies, nonprofits, nongovernmental organizations or governmental agencies.

## TEACHER EDUCATION AND LEADERSHIP, COLLEGE OF

Early Childhood Teaching and Leadership (BAE) TEECTLBAE<br>COLLEGE OF TEACHER EDUCATION AND LEADERSHIP, DTPHX<br>Contact: http://ctel.asu.edu/programs/ | CTELquestions@asu.edu | FAB S218 | 602/543-6358

Program Description: The BAE in Early Childhood Teaching and Leadership (ECTL) program in the College of Teacher Education and Leadership is available on the West and Downtown Phoenix campuses. This program offers students a firm grounding in early childhood teaching and programming with special emphasis on community connectedness, technology integration, administration, and 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 BirthGrade 3 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.

## Language Requirement: $\mathrm{N} \mid$ Program Fee: N

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 2009. 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. Over 98 percent of graduates accept employment offers within the first year of completing this program.

## Elementary Education (BAE) TEEEDBAE

COLLEGE OF TEACHER EDUCATION AND LEADERSHIP, WEST
Contact: http://ctel.asu.edu/programs/ | CTELquestions@asu.edu | FAB S218 | 602/543-6358
Program Description: The BAE in Elementary Education degree program in the College of Teacher Education and Leadership is available on both the West and Downtown Phoenix 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 first-generation 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 BAE in Elementary Education are recommended for grades 1-8 teacher certification. All graduates of this program will have to pass a state certification test in content area knowledge and professional knowledge.

Language Requirement: N | Program Fee: N
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. Over 98 percent of graduates accept employment offers within the first year of completing this program.

## Elementary Education (Bilingual Education) (BAE) TEBLEBAE

COLLEGE OF TEACHER EDUCATION AND LEADERSHIP, WEST
Contact: http://ctel.asu.edu/programs/ | CTELquestions@asu.edu | FAB S218 | 602/543-6358
Program Description: The BAE in Elementary Education, Diversity in Languages and Literature with a Bilingual Endorsement in the College of Teacher Education and Leadership is available on the West and Downtown Phoenix campuses. This program is designed to give students a firm grounding in academic content with current research and best practices, accompanied by realworld classroom experiences. Students are engaged in field experiences and internships that align with their bilingual education academic program. The bilingual education concentration requires proficiency in Spanish. Students who complete the Bachelor of Arts in Elementary Education, Diversity in Languages and Literature with a bilingual endorsement are recommended for grades 1-8 teacher certification. All graduates of this program will have to pass the state certification test in content area knowledge and professional knowledge.

## Language Requirement: Y | Program Fee: N

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. Students seeking endorsement 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. Over 98 percent of graduates receive employment offers within the first year of completing this program.

## Elementary Education (English as a Second Language) (BAE) TEESLBAE

COLLEGE OF TEACHER EDUCATION AND LEADERSHIP, DTPHX

Contact: http://ctel.asu.edu/programs/ | CTELquestions@asu.edu | FAB S218 | 602/543-6358
Program Description: The Elementary Education, Diversity in Languages and Literature with an English as a Second Language endorsement program in the College of Teacher Education and Leadership is available on the West and Downtown Phoenix campuses. 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 semester hours of a foreign language or its equivalent
and will enable the student to work with second-language learners. Students who complete the BAE in Elementary Education, Diversity in Languages and Literature with an English as a Second Language endorsement are recommended for grades 1-8 teacher certification. All graduates of this program will have to pass the state certification test in content area knowledge and professional knowledge.

## Language Requirement: N | Program Fee: N

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. Over 98 percent of graduates receive employment offers within the first year of completing this program.

## Secondary Education (English) (BAE) TEENGBAE

COLLEGE OF TEACHER EDUCATION AND LEADERSHIP, WEST
Contact: http://ctel.asu.edu/programs/ | CTELquestions@asu.edu | FAB S5251A | 602/543-6445
Program Description: The Department of Secondary Education in the College of Teacher Education in Leadership offers a threesemester professional program leading to a degree 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, and 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 7-12.

## Language Requirement: N | Program Fee: N

Career Opportunities: Graduates of this program have a 95 percent placement rate for secondary education teaching positions within the first year. There is a demand for all teachers due to the retirement of the workforce and increased population growth; the highest demand is for teachers of mathematics and science. There will be more competition for teaching positions in English, history, and social studies. The career of teaching offers rich personal rewards. The fiscal compensation, although not as high as some other fields, has been increasing and the benefits are strong. Many other states accept Arizona certification through reciprocity agreements.

## Secondary Education (History) (BAE) TEHISBAE

COLLEGE OF TEACHER EDUCATION AND LEADERSHIP, WEST
Contact: http://ctel.asu.edu/programs/ | CTELquestions@asu.edu | FAB S5251A | 602/543-6445
Program Description: The Department of Secondary Education in the College of Teacher Education in Leadership offers a threesemester professional program leading to a degree 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, and 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 7-12.

## Language Requirement: N | Program Fee: N

Career Opportunities: Graduates of this program have a 95 percent placement rate for secondary education teaching positions within the first year. There is a demand for all secondary education teachers due to the retirement of the workforce and increased population growth; the highest demand is for teachers of mathematics and science. There will be more competition for teaching positions in English, history, and social studies. The career of teaching offers rich personal rewards. The fiscal compensation, although not as high as some other fields, has been increasing and the benefits are strong. Many other states accept Arizona certification through reciprocity agreements.

# Secondary Education (Mathematics) (BAE) TEMATBAE 

COLLEGE OF TEACHER EDUCATION AND LEADERSHIP, WEST
Contact: http://ctel.asu.edu/programs/ | CTELquestions@asu.edu | FAB S5251A | 602/543-6445
Program Description: The Department of Secondary Education in the College of Teacher Education in Leadership offers a threesemester professional program leading to a degree 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, and 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 7-12.

## Language Requirement: N | Program Fee: N

Career Opportunities: Graduates of this program have a 95 percent placement rate for secondary education teaching positions within the first year. There is a demand for all teachers due to the retirement of the workforce and increased population growth; the highest demand is for teachers of mathematics and science. The career of teaching offers rich personal rewards. The fiscal compensation, although not as high as some other fields, has been increasing and the benefits are strong. Many other states accept Arizona certification through reciprocity agreements.

## Secondary Education (Natural Sciences) (BAE) TENSCBAE

COLLEGE OF TEACHER EDUCATION AND LEADERSHIP, WEST
Program Description: Secondary education includes the span of grades 7 to 12. Broad labels include high school, junior high school, and middle school. Secondary education teachers have responsibility for teaching and assessing students in these grades and promoting positive learning climates. Secondary school teachers are typically specialized to teach one subject such as mathematics, history, English, or science.

## Language Requirement: $\mathrm{N} \mid$ Program Fee: N

Career Opportunities: Graduates of this program have a $95 \%$ placement rate for secondary education teaching positions within the first year. While there is a demand for all teachers due to the retirement of the workforce and increased population growth, the highest demand is for teachers of mathematics and science. The career of teaching offers rich personal rewards. The fiscal compensation, although not as high as some other fields, has been increasing and the benefits are strong. Many other states accept Arizona certification through reciprocity agreements.

## Secondary Education (Social Studies) (BAE) TESSTBAE

COLLEGE OF TEACHER EDUCATION AND LEADERSHIP, WEST
Contact: http://ctel.asu.edu/programs/ | CTELquestions@asu.edu | FAB S5251A | 602/543-6445
Program Description: The Department of Secondary Education in the College of Teacher Education in Leadership offers a threesemester professional program leading to a degree 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, and 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 7-12.

Language Requirement: N | Program Fee: N
Career Opportunities: Graduates of this program have a 95 percent placement rate for secondary education teaching positions within the first year. There is a demand for all teachers due to the retirement of the workforce and increased population growth; the highest demand is for teachers of mathematics and science. There will be more competition for teaching positions in English, history, and social studies. The career of teaching offers rich personal rewards. The fiscal compensation, although not as high as
some other fields, has been increasing and the benefits are strong. Many other states accept Arizona certification through reciprocity agreements

Special Education (BAE) TESPEBAE<br>COLLEGE OF TEACHER EDUCATION AND LEADERSHIP, DTPHX<br>Contact: http://ctel.asu.edu/programs/ | CTELquestions@asu.edu | FAB S252A | 602/543-6358

Program Description: The BAE in Special Education in the College of Teacher Education and Leadership is available on the West and Downtown Phoenix 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.

## Language Requirement: N | Program Fee: N

Career Opportunities: National and state studies report the current and projected need over the next 5-10 years will be foremost for special education teachers. Graduates of the BAE 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.

## TECHNOLOGY AND INNOVATION, COLLEGE OF

## Aeronautical Management Technology (Air Transportation Management) (BS) TSAMTMBS <br> COLLEGE OF TECHNOLOGY AND INNOVATION, POLY

Program Description: The air transportation management concentration, under the Bachelor of Science in Aeronautical Management Technology, provides students with a thorough technical background combined with an interdisciplinary general university education. The student gains a 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. The Aviation Accreditation Board International accredits this program.

## Language Requirement: N | Program Fee: Y

Career Opportunities: A degree in air transportation management prepares graduates for careers as air traffic control specialist, air carrier manager, airport manager, and general aviation operations manager. To facilitate career options, the student selects a focus area in either air carrier management or airport management.

Program Description: The professional flight concentration, under the Bachelor of Science degree in Aeronautical Management Technology, is designed for students who are seriously interested in becoming professional airline pilots. This program combines a thorough technical education with an interdisciplinary general university education. This combination prepares graduates 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. The Federal Aviation Administration (FAA) certifies flight instruction.

## Language Requirement: $\mathrm{N} \mid$ Program Fee: Y

Career Opportunities: The professional flight concentration offers students private pilot, commercial pilot, and flight instructor certificates; and 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.

Additional Admissions 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://eastair.poly.asu.edu/ for more information.

## Air Traffic Management (BS) TSATMBS

## COLLEGE OF TECHNOLOGY AND INNOVATION, POLY

Program Description: Air traffic control specialists guide aircraft to ensure a safe, orderly, and expeditious flow of aircraft traffic both on the ground and in the air. The Bachelor of Science degree in Air Traffic Management is designed to provide a technical foundation in air traffic control procedures and operations. Students gain a background in aircraft operations, management skills, and business principles through a variety of course work specific to air traffic control. This program is designed for students who are seriously interested in becoming air traffic controllers.

## Language Requirement: N | Program Fee: Y

Career Opportunities: It is estimated that the FAA will hire approximately 15,000 air traffic controllers in the next ten 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 trying to get into the schools than there are openings. However, graduates from this program have an excellent opportunity of being hired as air traffic controllers.

Additional Admissions 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.

## Applied Computer Science (BS) TSACSBS <br> COLLEGE OF TECHNOLOGY AND INNOVATION, POLY

Program Description: The Bachelor of Science degree in Applied Computer Science is designed to provide students with an education that targets the computing profession. Computer scientists 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.

[^5]Career Opportunities: Graduates find opportunities as members of an engineering team in software applications, in areas such as Web-based, database, limited device (cell phones), or network 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.

## Applied Science (BAS) TSAPSBAS COLLEGE OF TECHNOLOGY AND INNOVATION, POLY

Program Description: The Bachelor of Applied Science (B.A.S.) program has a flexible degree plan designed specifically for students who have earned an Associate of Applied Science (AAS) degree 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. Students in the B.A.S. program within the College of Technology and Innovation chose a field of study from a list of numerous concentrations. These concentrations include: aviation maintenance management technology, aviation management technology, computer systems administration, cyber security, microcomputer systems, software technology applications, digital media management, digital publishing, emergency management, fire service management, internet and Web development, law enforcement management, municipal operations management, operations management, technology graphics, alternative energy technologies, semiconductor technology, manufacturing technology and management, materials joining and manufacturing technology.

## Language Requirement: $\mathrm{N} \mid$ Program Fee: N

Career Opportunities: The wide range of concentrations to chose from offer Bachelor of Applied Science program graduates a great deal of diversity in terms of career opportunities. In general, course work provided by the B.A.S. program gives the graduate a broader understanding of what is required of 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.

Additional Admissions Requirements: Students applying to this program must have completed an Associate of Applied Science (AAS) degree. This program is not available for freshmen.

## Applied Science (Fire Service Management) (BAS) TSIMCFBAS

COLLEGE OF TECHNOLOGY AND INNOVATION, ONLNE
Program Description: The Bachelor of Applied Science (BAS) programs are a flexible, 60-semester hour degree designed specifically for students who have earned an Associate of Applied Science (AAS) degree from a regionally accredited institution. In completing the BAS, students complete all ASU graduation requirements. The concentration in Fire Service Management provides students with management, leadership, critical thinking, and communication skills - along with significant work in fire service management - that will broaden their career horizons, promote life-long learning, and enrich their personal and civic life.

## Language Requirement: $\mathrm{N} \mid$ Program Fee: N

Career Opportunities: ASU's Polytechnic campus Fire Service Programs prepare students and practitioners to successfully perform managerial duties in federal, state, and local, fire departments and related fire service organizations, including institutions of higher learning by providing them with cutting edge technology, education, and skills in the areas of fire service.

Additional Admissions 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.

## Applied Science (Internet and Web Development) (BAS) TSIWDBAS COLLEGE OF TECHNOLOGY AND INNOVATION, ONLNE

Program Description: The Bachelor of Applied Science (BAS) programs are a flexible, 60-semester hour degree designed specifically for students who have earned an Associate of Applied Science (AAS) degree from a regionally accredited institution. In completing the BAS, students complete all ASU graduation requirements.The concentraton in Internet and Web Development provides you with management, leadership, critical thinking, and communication skills along with significant work in a professional specialization that will broaden your career horizons, promote life-long learning, and enrich your personal and civic
life. This program makes extensive use of the Graphic Information Solutions facility where modern design practices and digital work flow combine with different print and reproduction processes to afford students a contextual learning environment. Students may further enrich their educational experience in the Student Web Development Enterprise, the GIT Commercial Photography Studio, or the X-Rite Color Metrology Laboratory.There are four options within the BAS in Internet and Web Development:

Digital Media Management
Digital Publishing
Internet and Web Development
Technical Graphics

## Language Requirement: N | Program Fee: N

Career Opportunities: The Technical Graphics option prepares graduates for positions in industries implementing technical and engineering graphics in Computer Aided Design and Computer Integrated Manufacturing.

The Web site design option prepares graduates for careers in the ever-expanding arena of Web site design and publishing. This degree is available as an entirely online degree program.

The Digital Publishing concentration prepares graduates for lead technical and entry-level management positions in the Printing and Publishing industry.

The Digital Media Management concentration prepares graduates for technical positions in industries implementing, planning, and producing interactive communications, integrated media, and multimedia for design, training, and marketing.

Additional Admissions 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.

## Applied Science (Operations Management Technology) (BAS) TSIMCOBAS COLLEGE OF TECHNOLOGY AND INNOVATION, ONLNE

Program Description: The Bachelor of Applied Science (BAS) programs are a flexible, 60-semester hour degree designed specifically for students who have earned an Associate of Applied Science (AAS) degree from a regionally accredited institution. In completing the BAS, students complete all ASU graduation requirements.The concentration in Operations Management Technology provides the tools needed for success as a manager. An effective manager is someone who can organize work, understands the work environment and can create a safe and healthful work environment, hires qualified workers that can do the job or can be trained/educated to perform the job, motivates and develops the workforce, effectively utilizes the resources available to create quality products and/or services, and accomplishes his/her unit's part in the mission of the organization.

Language Requirement: N | Program Fee: N
Career Opportunities: The BAS in Operations Managemtn Technology prepares undergraduate students for supervisory and management functions in industry, manufacturing, public service, and other service organizations.

Additional Admissions 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.

## Computer Systems (Computer Hardware Technology) (BS) TSCSTHBS COLLEGE OF TECHNOLOGY AND INNOVATION, POLY

Program Description: The computer hardware technology concentration, under the Bachelor of Science 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.

Language Requirement: N | Program Fee: N
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.

## Computer Systems (Embedded Systems Technology) (BS) TSCSTMBS COLLEGE OF TECHNOLOGY AND INNOVATION, POLY

Program Description: The embedded systems technology concentration, under the Bachelor of Science 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. Computer systems 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.

## Language Requirement: N | Program Fee: N

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.

## Electronics Engineering Technology (Alternative Energy Technologies) (BS) TSEETABS <br> COLLEGE OF TECHNOLOGY AND INNOVATION, POLY

Program Description: The alternative energy technologies concentration, under the BS 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 that comprises production of electricity from solar energy, and utilizing 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.

Language Requirement: $\mathrm{N} \mid$ Program Fee: N
Career Opportunities: The alternative energy technologies concentration is generally aimed at preparing graduates for careers in electric power conditioning, control systems, electronics and instrumentation. The specific positions might include system design, process control, application interface, technology analysis, policy analysis, environmental and reliability analysis.

## Electronics Engineering Technology (Electronic Systems) (BS) TSEETEBS

COLLEGE OF TECHNOLOGY AND INNOVATION, POLY
Program Description: 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, allows students to develop a broad-based knowledge of electrical/electronic fundamentals with an applications perspective. The Technology Accreditation Commission of the Accreditation Board accredits this program.

Language Requirement: $\mathrm{N} \mid$ Program Fee: N

Career Opportunities: The electronic systems concentration is generally aimed at preparing 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.

## Electronics Engineering Technology (Integrated Systems) (BS) TSEETINBS COLLEGE OF TECHNOLOGY AND INNOVATION, POLY

Program Description: The integrated electronic systems concentration, under the Bachelor of Science in Electronics Engineering Technology, 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 the real industry.

Language Requirement: $\mathrm{N} \mid$ Program Fee: N
Career Opportunities: Upon completion of this concentration graduates are prepared for careers in microelectronics industry. Graduates of this concentration secure positions in integrated circuit processing, testing, field applications, system integrators and as members of diverse scientific engineering teams.

## Electronics Engineering Technology (Telecommunications) (BS) TSEETTBS college of technology and innovation, poly

Program Description: The telecommunications concentration, under the Bachelor of Science in Electronics Engineering Technology, covers the processes and technology used to develop, design, implement and exploit reliable information transfer throughout the whole frequency spectrum with wired and wireless links. Applications include cable TV, fiber optic links and satellite transmission circuits and systems.

Language Requirement: N | Program Fee: N
Career Opportunities: Upon completion of this concentration graduates are prepared for careers in communications industry. Graduates of this concentration secure positions as communications specialists, system integrator, testing, field applications, and as members of diverse scientific engineering teams.

## Engineering (BSE) TSEGRBSE <br> COLLEGE OF TECHNOLOGY AND INNOVATION, POLY

Program Description: The emerging problems that engineers must solve require a broad set of interdisciplinary skills. Engineers are challenged with improving the quality of life for humankind, designing new innovative products, preparing for potential catastrophes, and providing society with technological leadership. The Bachelor of Science in Engineering (B.S.E.) degree 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 concentrations, providing both breadth and depth. This provides a greater flexibility in curricular and career pathways allowing for multidisciplinary experiences and novel combinations of expertise.

Language Requirement: N | Program Fee: N
Career Opportunities: Engineers normally work as a member of a team that is designing, manufacturing and delivering technological objects and services. While large corporations and governments employ many engineers, others work in small companies or start companies of their own.

## Environmental Technology Management (BS) TSETMBS <br> college of technology and innovation, poly

Program Description: This degree program 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 Bachelor of Science in Environmental Technology Management (ETM) curriculum includes courses in biology, chemistry, physics, calculus, computer science and statistics. The core of course work includes courses in environmental law; occupational hygiene; environmental chemistry; technologies for control of air pollution, water treatment and hazardous waste remediation; emergency management; and international environmental management. In addition to the technical course, students take management courses such as technical communications, project management and management dynamics.

Language Requirement: N | Program Fee: N
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 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.

## Graphic Information Technology (BS) TSGITBS

COLLEGE OF TECHNOLOGY AND INNOVATION, POLY
Program Description: The cross-media nature of the graphic information industry requires today's graduates to understand the full spectrum of graphic imaging and reproduction processes, and current business practices. The Bachelor of Science in Graphic Information Technology degree program prepares graduates for a seamless career in the graphics industry from traditional printing and publishing to the Internet and multimedia. This is an intensive program of study emphasizing theory and hands-on laboratory practice. Students develop skills to plan and execute graphic solutions using visualization and prepress, engineering graphic standards, technical document design, higher-level graphic programming languages, computer drawing and illustration, commercial digital photography, multimedia and three-dimensional modeling, project management, quality assurance, and ecommerce practices. The National Association of Industrial Technology professionally accredits the graphic information technology program.

Language Requirement: $\mathrm{N} \mid$ Program Fee: N
Career Opportunities: The Graphic Information Technology degree prepares graduates for technical and management positions in the diverse graphic communication and information technology industries: digital printing and publishing; technical/digital media production; management of graphic information assets; quality assurance of graphic products; planning and evaluation of print, Internet, multimedia, and computer-based communications.

## Manufacturing Engineering Technology (Manufacturing Engineering Technology) (BS) TSMETBS

COLLEGE OF TECHNOLOGY AND INNOVATION, POLY
Program Description: The Manufacturing Engineering Technology program emphasizes applied engineering practice through a Bachelor of Science degree program. In the program, engineering, math, and science principles are applied to the solution of technical problems in a lecture/laboratory environment. The 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. The program's manufacturing laboratories are among the best in the nation. Industrial "strength" manufacturing equipment (including CNC machining centers), welding, casting and forming, automation, and material testing facilities support the curriculum. Laboratory sections are restricted to 1215 or fewer students whenever possible. In addition, all faculty in the program have industry experience in addition to their doctoral degrees.

Language Requirement: N | Program Fee: N
Career Opportunities: The B.S. degree in Manufacturing Engineering Technology and its specialty concentration offer great flexibility in both type of work and location. Career employment opportunities include design and development, direct
manufacturing support, quality control and assurance, sales, and management. Companies large and small, in this region and outside of it, provide a wide range of opportunities for graduates.

## Manufacturing Engineering Technology (Mechanical Engineering Technology) (BS) TSMETMBS <br> COLLEGE OF TECHNOLOGY AND INNOVATION, POLY

Program Description: The Manufacturing Engineering Technology program emphasizes applied engineering practice through a Bachelor of Science degree program. In the program, engineering, math, and science principles are applied to the solution of technical problems in a lecture/laboratory environment. The 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. The program's manufacturing laboratories are among the best in the nation.

Students can customize Manufacturing Engineering Technology degree with a specialized mechanical concentration. The primary objective of the mechanical engineering technology concentration is to offer manufacturing students an emphasis in mechanics and design. The required 15 credits are:

MET 409, Applied Engineering Economics;<br>MET 410, Manufacturing Resource Management;<br>MET 434, Applied Fluid Mechanics;<br>MET 438, Machine Design II; and,<br>Technical Electives.

## Language Requirement: N | Program Fee: N

Career Opportunities: The B.S. Degree in Manufacturing Engineering Technology and its specialty concentration offer great flexibility in both type of work and location. Career employment opportunities include design and development, direct manufacturing support, quality control and assurance, sales, and management. Companies large and small, in this region and outside of it, provide a wide range of opportunities for graduates.

## Mechanical Engineering Technology (Aeronautical Engineering Technology) (BS) TSMECEBS

COLLEGE OF TECHNOLOGY AND INNOVATION, POLY
Program Description: The Mechanical Engineering Technology program emphasizes applied engineering practice through a Bachelor of Science degree program. Students can customize their degree with a specialized concentration in aeronautical, engineering technology. The aeronautical engineering technology concentration provides a specialty content area in aircraft airframe, propulsion, and aircraft production and operations. It prepares students for employment in areas such as aircraft design and manufacturing, aerodynamics, propulsion and wind tunnel testing. However, aeronautical concentration graduates have a good general background in mechanical engineering technology and are not limited to employment opportunities in just the aviation industry.

## Language Requirement: N | Program Fee: N

Career Opportunities: The B.S. degree 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.

# Mechanical Engineering Technology (Automation Engineering Technology) (BS) TSMECUBS 

COLLEGE OF TECHNOLOGY AND INNOVATION, POLY

Program Description: The Mechanical Engineering Technology program emphasizes applied engineering practice through a Bachelor of Science degree program. Students can customize their degree with a specialized concentration in automation engineering technology. The automation engineering technology concentration provides specialty content in mechanical automation. Automated assembly and testing are major components of most modern, high-volume mechanical systems and manufacturing operations. As a specialty area, this concentration provides students with an opportunity to develop knowledge and skill in the broad area of automation. It also dovetails well with the semiconductor industry where most process tools are highly automated.

## Language Requirement: $\mathrm{N} \mid$ Program Fee: N

Career Opportunities: The B.S. degree 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.

## Mechanical Engineering Technology (Automotive Engineering Technology) (BS) TSMECTBS

COLLEGE OF TECHNOLOGY AND INNOVATION, POLY
Program Description: The Mechanical Engineering Technology program emphasizes applied engineering practice through a Bachelor of Science degree program. Students can customize their degree a specialized concentration in automotive engineering technology. The automotive concentration provides comprehensive exposure to modern automobiles. The concentration's course configuration is based on the functional structure of an automotive company and emphasizes system integration. Courses include an introduction to automotive engineering (including interior and exterior body design), powertrains, chassis design, electrical and control systems, thermal design, and system integration and testing.

## Language Requirement: N | Program Fee: N

Career Opportunities: The B.S. degree 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.

## Mechanical Engineering Technology (Mechanical Engineering Technology) (BS) TSMECBS <br> COLLEGE OF TECHNOLOGY AND INNOVATION, POLY

Program Description: The Mechanical Engineering Technology program emphasizes applied engineering practice through a Bachelor of Science degree program. Students in this program are people who enjoy the practice of engineering. As graduates, they often work as members of design and development teams, cooperating with other people both in and outside of their company. The program emphasizes understanding how engineering principles are applied in practice. Graduates have an understanding of energy and power technology (including alternative energy systems), the behavior of fluids, the design of machines and components, the selection of machine components, and engineering measurements. The mechanical engineering technology program has a "practice-based" approach and uses both laboratories and industry projects to make mechanical engineering "real" to students. Engineering, math, and science principles are applied to the solution of technical problems in a lecture/laboratory environment.

Career Opportunities: The B.S. degree 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.

Operations Management Technology (BS) TSOMTBS COLLEGE OF TECHNOLOGY AND INNOVATION, POLY

Program Description: The Bachelor of Science in Operations Management Technology degree program prepares students for supervisory and administrative positions within a broad range of industries. Course work includes human resource management, quality management, project management, operations management, legal issues in technology, safety management, lean manufacturing, industrial organization, labor relations, economics, effective decision making, finance, international management, ethical studies and marketing. Students who lack previous work experience are encouraged to complete an industry internship before graduation.

## Language Requirement: N | Program Fee: N

Career Opportunities: Career opportunities for graduates with a degree in operations management technology include, but are not limited to, positions in technical operations, technical sales, municipal management, industrial management, industrial planning, design, customer relations, and personnel training and development.

## UNIVERSITY COLLEGE

## Exploratory Health and Life Sciences UCHSCIEXPL

UNIVERSITY COLLEGE, DTPHX
Contact: http://uc.asu.edu/
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 included in this Exploratory major, reference the Major Map listed below.

Language Requirement: $\mathrm{N} \mid$ Program Fee: N
Career Opportunities: Career opportunities are specific to the ultimate major of choice.
Additional Admissions Requirements: This is not a degree granting major. Students with more than 45 transfer hours will not be admitted to this major and should select a different major on the application for admission.

## Exploratory Humanities, Fine Arts and Design UCHUFAEXPL

 UNIVERSITY COLLEGE, DTPHXContact: http://uc.asu.edu/
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 included in this Exploratory major, reference the Major Map listed below.

Language Requirement: $\mathrm{N} \mid$ Program Fee: N
Career Opportunities: Career opportunities are specific to the ultimate major of choice.

Additional Admissions Requirements: This is not a degree granting major. Students with more than 45 transfer hours will not be admitted to this major and should select a different major on the application for admission.

## Exploratory Math, Physical Sciences, Engineering and Technology UCEMTPEXPL

UNIVERSITY COLLEGE, DTPHX
Contact: http://uc.asu.edu/
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 included in this Exploratory major, reference the Major Map listed below.

## Language Requirement: $\mathrm{N} \mid$ Program Fee: N

Career Opportunities: Career opportunities are specific to the ultimate major of choice.
Additional Admissions Requirements: This is not a degree granting major. Students with more than 45 transfer hours will not be admitted to this major and should select a different major on the application for admission.

## Exploratory Social and Behavioral Sciences UCSBSEXPL

UNIVERSITY COLLEGE, DTPHX
Contact: http://uc.asu.edu/
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. For a complete list of all majors included in this Exploratory major, reference the Major Map listed below.

Language Requirement: N | Program Fee: N
Career Opportunities: Career opportunities are specific to the ultimate major of choice.
Additional Admissions Requirements: This is not a degree granting major. Students with more than 45 transfer hours will not be admitted to this major and should select a different major on the application for admission.

Major Map: Applied Biological Sciences -<br>Bachelor of Science (B.S.)<br>School of Applied Arts \& Sciences, Polytechnic Campus

Catalog Year: 2008-2009


## Graduation Requirements Summary:

| Total Hours <br> $(120$ minimum $)$ | Total Hrs at ASU <br> $(30$ minimum $)$ | Hrs Resident Credit for Academic <br> Recognition $(56$ minimum $)$ | Major GPA <br> $(2.00$ Min. $)$ | Total UD Hrs <br> $(45$ minimum $)$ | Total Comm. College Hrs. <br> $(64$ maximum $)$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |

General University Requirements: Legend

- General Studies Core Requirements:
- Literacy and Critical Inquiry (L) (6 credit hours)
- Mathematical Studies (MA) (3 credit hours)
- Computer/Statistics/Quantitative applications (CS) (3 credit hours)
- Humanities, Fine Arts, and Design (HU) (6-9 credit hours)
- Social and Behavioral Sciences (SB) (6-9 credit hours)
- Natural Science-Quantitative (SQ) (4-8 credit hours) (cumulative SQ/SG credit must equal 8 credit hours)
- Natural Science-General (SG) (0-4 credit hours) (cumulative SQ/SG credit must equal 8 credit hours)
- General Studies Awareness Requirements
- Cultural Diversity in the US (C) (3 credit hours) (may be combined with other general studies requirements.)
- Global Awareness (G) ( 3 credit hours) (may be combined with other general studies requirements.)
- Historical Awareness (H) (3 credit hours) (may be combined with other general studies requirements.)
- First-Year Composition (ENG 101 \& 102 OR ENG 107 \& 108 or ENG 105)

Major Map: Applied Biological Sciences (Secondary Education in Biology) Bachelor of Science (B.S.)
School of Applied Arts \& Sciences, Polytechnic Campus
Catalog Year: 2008-2009


Graduation Requirements Summary:

| Total Hours (120) | Total Hrs at ASU <br> (minimum 30) | Resident Credit for Academic <br> Recognition (minimum 56) | Major GPA (2.50 <br> Min.) | Total UD Hrs <br> (minimum 45) | Total Comm. College <br> Hrs. (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:

Major Map: Applied Biological Sciences (Urban Horticulture) - Bachelor of Science (B.S.)<br>School of Applied Arts \& Sciences, Polytechnic Campus Catalog Year: 2008-2009



Major Map: Applied Biological Sciences
(Urban Horticulture) - Bachelor of Science (B.S.)
School of Applied Arts \& Sciences, Polytechnic Campus
Catalog Year: 2008-2009

## 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 upper division <br> Hrs (45 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:

Major Map：Applied Biological Sciences<br>（Wildlife and Restoration Ecology）－<br>Bachelor of Science（B．S．）<br>School of Applied Arts \＆Sciences，Polytechnic Campus<br>Catalog Year：2008－2009

|  | Hrs． |  | Completed ATP：$\square$ Yes $\quad \square$ No |  | Completed AGEC： Yes $\square$ No |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Course Subject and Title （courses in bold／shading are critical） |  | $\begin{aligned} & \hline \text { Upper } \\ & \text { Division } \end{aligned}$ | Transfer Course／Grade | $\begin{aligned} & \text { Minimum Grade if } \\ & \text { Required } \\ & \hline \end{aligned}$ | Additional Critical Requirement Notes |
| TERM ONE： 015 CREDIT HOURS |  |  |  |  |  |
| BIO 187：General Biology I（SG）or BIO 188：General Biology II （SQ） | 4 | $\square$ |  | 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 |
| ASU 101：The ASU Experience | 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 |  |
| Humanities，Fine Arts \＆Design（HU）AND Cultural Diversity in the US（C），Global Awareness（G）or Historical Awareness（H） | 3 | $\square$ |  |  |  |
| Social \＆Behavioral Sciences（SB）AND Cultural Diversity in the US （C），Global Awareness（G）or Historical Awareness（H） | 3 | $\square$ |  |  |  |
| TERM TWO： 1630 CREDIT HOURS |  |  |  |  |  |
| BIO 187：General Biology I（SG）or BIO 188：General Biology II （SQ） | 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 |  |
| CHM 113：General Chemistry I（SQ） | 4 | $\square$ |  |  |  |
| Humanities，Fine Arts \＆Design（HU）AND Cultural Diversity in the US（C），Global Awareness（G）or Historical Awareness（H） | 3 | $\square$ |  |  |  |
| TERM THREE： 3145 CREDIT HOURS |  |  |  |  |  |
| ABS 274：Introduction to Wildlife Management | 4 | $\square$ |  | Grade of C | －Completed First Year Composition Requirement （ENG 101／107 and ENG 102／108 or ENG 105） |
| CHM 231：Elementary Organic Chemistry | 3 | $\square$ |  | Grade of C |  |
| MAT 210：Brief Calculus（MA） | 3 | $\square$ |  |  |  |
| Literacy \＆Critical Inquiry（L） | 3 | $\square$ |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| TERM FOUR： $46 \mathbf{6 0}$ CREDIT HOURS |  |  |  |  |  |
| ABS 270：Sustainable Biological Systems | 3 | $\square$ |  | Grade of C | －See advisor for list of courses that fulfill Approved elective in ABS \＆Science |
| ABS 207：Applied Plant Taxonomy | 3 | $\square$ |  | Grade of C |  |
| Social \＆Behavioral Sciences（SB）AND Cultural Diversity in the US （C），Global Awareness（G）or Historical Awareness（H） | 3 | $\square$ |  |  |  |
| Approved elective in ABS \＆Science | 3 | $\square$ |  | Grade of C |  |
| Approved elective in ABS \＆Science | 3 | $\square$ |  | Grade of C |  |
| TERM FIVE： 6175 CREDIT HOURS |  |  |  |  |  |
| ABS 302：Ethical \＆Policy Issues in Biology | 2 | 区 |  | Grade of C |  |
| ABS 370：Ecology | 3 | 区 |  | Grade of C |  |
| ABS 381：Natural Resources Policy | 3 | 囚 |  | Grade of C |  |
| ABS 485：GIS in Natural Resources | 3 | 区 |  | Grade of C |  |
| BIO 340：General Genetics | 4 | 区 |  |  |  |
| TERM SIX： 7690 CREDIT HOURS |  |  |  |  |  |
| ABS 402：Vegetation and Wildlife Measurement | 3 | 区 |  | Grade of C | －See advisor for list of courses that fulfill Approved elective in ABS \＆Science |
| Wildlife and Restoration Ecology Group course | 4 | $\square$ |  | Grade of C |  |
| Upper division Wildlife or Restoration Ecology Group course | 3 | 区 |  | Grade of C |  |
| Approved elective in ABS \＆Science | 3 | $\square$ |  | Grade of C |  |
| Upper Division Humanities，Fine Arts \＆Design（HU）or Social \＆ Behavioral Science（SB） | 3 | 区 |  |  |  |
| TERM SEVEN： 91105 CREDIT HOURS |  |  |  |  |  |
| ABS 350：Applied Statistics（CS） | 3 | 区 |  | Grade of C |  |
| ABS 440：Ecological Restoration Techniques | 3 | 区 |  | Grade of C |  |
| Upper division Wildlife or Restoration Ecology Group Course | 3 | 区 |  | Grade of C |  |
| Approved elective in ABS \＆Science | 3 | $\square$ |  | Grade of C |  |
| Complete 1 course from： <br> ABS 311：Applied Cellular Biology or <br> ABS 498：ST：Applied Plant Physiology or BIO 360：Animal Physiology | 3 | 区 |  |  |  |
| TERM EIGHT： 106120 CREDIT HOURS |  |  |  |  |  |
| ABS 480：Ecosystem Management and Planning（L） | 3 | 区 |  | Grade of C |  |
| ABS 490：Applied Biological Sciences Seminar | 1 | 区 |  | Grade of C |  |
| Upper division Wildlife Restoration Ecology Group course | 4 | 区 |  | Grade of C |  |
| Approved upper division elective in ABS \＆Science | 3 | 区 |  | Grade of C |  |
| Elective | 4 | $\square$ |  |  |  |

Major Map: Applied Biological Sciences
(Wildlife and Restoration Ecology) -
Bachelor of Science (B.S.)
School of Applied Arts \& Sciences, Polytechnic Campus
Catalog Year: 2008-2009

Graduation Requirements Summary:

| Total Hours (120 <br> 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 upper division <br> Hrs ( 45 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:

Choose one of the following course groupings:
Restoration Course Group includes:
ABS 225 Soils SQ (3)
ABS 226 Soils Laboratory $S Q$ (1)
ABS 433 Riparian and Wetland Ecology (3)
ABS 441 Ecological Restoration Practicum (1)
ABS 482 Ecology and Planning for Restoration (3)
ABS 483 Restoration Planning Practicum (2) --- or ---
Wildlife Course Group includes:
ABS 355 Vertebrate Zoology (4)
ABS 376 Wildlife Ecology (3)
ABS 475 Habitat Management for Small Wildlife (4)
ABS 476 Big Game Habitat Management (3)

Major Map: Applied Psychology - Bachelor of Science (B.S.)
School of Applied Arts \& Sciences, Polytechnic Campus Catalog Year: 2008-2009

\begin{tabular}{|c|c|c|c|c|c|}
\hline \& \& \multirow[b]{2}{*}{Upper Division} \& \multicolumn{2}{|l|}{Completed ATP: $\square$ Yes $\square$ No} \& Completed AGEC: $\square$ Yes $\square$ No <br>
\hline Course Subject and Title (courses in bold/shading are critical) \& Hrs. \& \& Transfer Course/Grade \& Minimum Grade if Required \& Additional Critical Requirement Notes <br>
\hline \multicolumn{6}{|l|}{TERM ONE: 015 CREDIT HOURS} <br>
\hline ASU 101: The ASU Experience \& \multirow[t]{2}{*}{1

3} \& $\square$ \& \& \& \multirow[t]{6}{*}{\begin{tabular}{l}

- 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>
- Minimum grade of "C" required in all PGS \& PSY courses
\end{tabular}} <br>

\hline | Complete 1 course from: |
| :--- |
| PGS 101: Introduction to Psychology (SB) |
| PSY 230: Introduction to Statistics (CS) |
| PSY 290: Research Methods (L) | \& \& $\square$ \& \& Grade of C \& <br>

\hline 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 \& <br>
\hline Humanities, Fine Arts \& Design (HU) AND Cultural Diversity in the US (C), Global Awareness (G) or Historical Awareness (H) \& 3 \& $\square$ \& \& \& <br>
\hline Elective \& 3 \& $\square$ \& \& \& <br>
\hline Elective \& 3 \& $\square$ \& \& \& <br>
\hline \multicolumn{6}{|l|}{TERM TWO: 1630 CREDIT HOURS} <br>
\hline MAT 119: Finite Mathematics (MA) \& 3 \& $\square$ \& \& Grade of C \& \multirow[t]{5}{*}{- Minimum grade of "C" required in all PGS \& PSY courses} <br>
\hline 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 \& <br>

\hline BIO 100: The Living World (SQ) OR Elective \& $$
\begin{gathered}
\hline 4 \text { or } \\
3 \\
\hline
\end{gathered}
$$ \& $\square$ \& \& \& <br>

\hline Humanities, Fine Arts \& Design (HU) AND Cultural Diversity in the US (C), Global Awareness (G) or Historical Awareness (H) \& 3 \& $\square$ \& \& \& <br>
\hline Elective: \& 3 \& $\square$ \& \& \& <br>
\hline \multicolumn{6}{|l|}{TERM THREE: 3145 CREDIT HOURS} <br>

\hline | Complete 1 additional course from: |
| :--- |
| PGS 101: Introduction to Psychology (SB) |
| PSY 230: Introduction to Statistics (CS) |
| PSY 290: Research Methods (L) | \& 3 \& $\square$ \& \& Grade of C \& \multirow[t]{5}{*}{| - Minimum grade of "C" required in all PGS \& PSY courses |
| :--- |
| - First year composition requirement completed |} <br>


\hline | Choose one Related Area BIO course from: |
| :--- |
| BIO 100: The Living World (if not already completed) |
| BIO 187: General Biology I |
| BIO 188: General Biology II |
| BIO 193: The Natural of Biological Science |
| BIO 201: Human Anatomy \& Physiology I |
| BIO 202: Human Anatomy \& Physiology II OR |
| Choose one Related Area MAT course from: |
| MAT 210: Brief Calculus |
| MAT 251: Calculus for Life Sciences |
| MAT 260: Technical Calculus I |
| MAT 262: Technical Calculus II |
| MAT 270: Calculus with Analytic Geometry I |
| MAT 271: Calculus with Analytic Geometry II |
| MAT 274: Elementary Differential Equations, |
| MAT 275: Modern Differential Equations | \& \[

$$
\begin{gathered}
4 \text { or } \\
3 \\
\hline
\end{gathered}
$$
\] \& $\square$ \& \& Grade of C \& <br>

\hline Upper division Humanities, Fine Arts \& Design (HU) OR Social \& Behavioral Sciences (SB) AND Cultural Diversity in the US (C), Global Awareness (G) or Historical Awareness (H) \& 3 \& 区 \& \& \& <br>
\hline Elective \& 3 \& $\square$ \& \& \& <br>
\hline Elective \& 3 \& $\square$ \& \& \& <br>
\hline \multicolumn{6}{|l|}{TERM FOUR: 4660 CREDIT HOURS} <br>

\hline | Complete remaining course from: |
| :--- |
| PGS 101: Introduction to Psychology (SB) |
| PSY 230: Introduction to Statistics (CS) |
| PSY 290: Research Methods (L) | \& 3 \& $\square$ \& \& Grade of C \& - Minimum grade of "C" required in all PGS \& PSY courses <br>


\hline | Choose one additional Related Area BIO course from: |
| :--- |
| BIO 100: The Living World |
| BIO 187: General Biology I |
| BIO 188: General Biology II |
| BIO 193: The Natural of Biological Science |
| BIO 201: Human Anatomy \& Physiology I |
| BIO 202: Human Anatomy \& Physiology II OR |
| Choose one additional Related Area MAT course from: |
| MAT 210: Brief Calculus |
| MAT 251: Calculus for Life Sciences |
| MAT 260: Technical Calculus I |
| MAT 262: Technical Calculus II |
| MAT 270: Calculus with Analytic Geometry I |
| MAT 271: Calculus with Analytic Geometry II |
| MAT 274: Elementary Differential Equations, |
| MAT 275: Modern Differential Equations | \& \[

$$
\begin{gathered}
4 \text { or } \\
3 \\
\hline
\end{gathered}
$$
\] \& $\square$ \& \& Grade of C \& <br>

\hline Natural Science-Quantitative (SQ) (if BIO 100 not taken) OR Elective (If BIO 100 completed) \& $$
\begin{gathered}
\hline 4 \text { or } \\
3 \\
\hline
\end{gathered}
$$ \& $\square$ \& \& \& <br>

\hline Elective \& 4 \& $\square$ \& \& \& <br>
\hline
\end{tabular}

Arizona State University
DEPARTMENT OF NUTRITION

## Bachelor of Applied Science Degree 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 are required for graduation.

General Studies Sequence (19 credits)

| Credits |  | Recommended courses |
| :---: | :---: | :---: |
| Numeracy (MA/CS) | 3 | ASC 315 |
| Science (SG) | 4 | Life Science Course |
| Literacy (L) | 3 | ENG 301 or TWC 301 |
| Humanities (HU) | 3 | Upper Division HU course |
| Social Science (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 or BUA 380 | Management | 3 |
| :--- | :--- | :--- |
| MKT 300 or BUA 382 | Marketing | 3 |
| NTR 300 | Computer Applications in Nutrition | 3 |
| NTR 344 | Nutrition Services Management | 3 |
| NTR 351 | Nutrition Communication | 3 |

Food Service Concentration (21 credits)

| NTR 343 |  | Food Service Purchasing |
| :--- | :--- | :--- |
| NTR 345 | Development of Healthy Cuisines | 3 |
| NTR 348 | Cultural Aspects of Food | 3 |
| NTR 401 | Professional Practice in Food Management | 3 |
| NTR 445 | Management of Food Service Systems | 3 |
| NTR Course | Nutrition Department Elective (Upper-division) | 3 |
| NTR/AGB Course | Nutrition/Agribusiness Elective (Upper-division) | 3 |

## Assignable Credits (5 credits)

## B.A.S. Degree Summary

| 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 |  | $\mathbf{1 2 0}$

BAS- Multimedia Writing and Technical Communication

Bachelor of Applied Science Degree

2008-2009 Curriculum Check Sheet
School of Applied Arts 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 2008-2009 |
| B.A.S. Academic Department | Advisor |
| Number of Upper Division Transfer Credits $\qquad$ 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] and [H] [C] | 3 |  |  |  |  |  |  |
| Social Science [SB] | 3 |  |  |  |  |  |  |
| General Studies [HU or SB] and [G] | 3 |  |  |  |  |  |  |

Sub Total 19 Hrs .

## B.A.S. Area Core ( $\mathbf{1 5}$ Hours)

| BAS Degree Summary | Credit Hours |
| :---: | :---: |
| A.A.S. Degree Block Transfer | 60 |
| General Studies |  |
| B.A.S. Area Core |  |
| Technical Writing |  |
| Assignable Credits |  |


| ASU |  |  |  |  |  |  |  | Transfer |  | Transfer From 301 General Principles of Multimedia Writing |  | 3 |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| TWC 401 Principles of Technical Communication | 3 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| TWC 347 Written Communication for Managers | 3 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| APM 301 Introductory 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 Individualized Instruction | 2 |  |  |  |
| TWC 3/4XX Elective | 3 |  |  |  |
| TWC 3/4XX Elective | 3 |  |  |  |

Assignable Credits (6 Hours) ASU Transfer Transfer From Grade


Advisor Comments
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$

Total Upper Division Hours Total ASU Resident Hours
$\qquad$
$\qquad$

## Bachelor of Applied Science Degree

2008-2009 Curriculum Check Sheet
School of Applied Arts 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 2008-2009 |
| 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)

|  | ASU | Transfer | Transfer From | Grade |
| :---: | :---: | :---: | :---: | :---: |
| Numeracy - ASC 315 | 3 |  |  |  |
| Science - ASC 325 | 4 |  |  |  |
| Literacy [L] Upper Division | 3 |  |  |  |
| Humanities [HU], [H] Upper Division | 3 |  |  |  |
| Social Science [SB] Upper Division | 3 |  |  |  |
| General Studies [HU or SB] Upper Division [G] | 3 |  |  |  |

$$
\text { Sub Total } 19 \mathrm{Hrs} .
$$

## B.A.S. Area Core ( $\mathbf{1 5}$ Hours)

| BAS Degree Summary | Credit Hours |
| :---: | :---: |
| A.A.S. Degree Block Transfer | 60 |
| General Studies |  |
| B.A.S. Area Core |  |
| Health Promotion |  |
| Assignable Credits |  |


| ASU |  |  | Transfer | Transfer From 300 Foundations of Exercise and Wellness (L) |
| :--- | :---: | :---: | :---: | :---: |
| EXW | 3 |  |  |  |
| EXW 310 Computer Skills \& Tech. for EXW (CS) | 3 |  |  |  |
| EXW 320 Program Development and Leadership | 3 |  |  |  |
| EXW 325 Fitness for Life | 3 |  |  |  |
| EXW 346 Program Evaluation in Health Promotion | 3 |  |  |  |

## Advisor Comments

## Sub Total 15 Hrs.

|  | ASU | Transfer | Transfer From | Grade |
| :---: | :---: | :---: | :---: | :---: |
| EXW Elective (upper division 300 or 400 level) | 3 |  |  |  |
| EXW 342 Health Behavior Change | 3 |  |  |  |
| EXW 350 Substance Abuse and Addictive Behavior | 3 |  |  |  |
| EXW 400 Stress Management for Wellness | 3 |  |  |  |
| EXW 442 Physical Activity in Health \& Disease (L) | 3 |  |  |  |
| EXW 444 Epidemiology | 3 |  |  |  |
| EXW 450 Cultural and Social Issues in EXW (SB, C) | 3 |  |  |  |

Assignable Credits (5 Hours) ASU Transfer Transfer From Grade

Sub Total 5 Hrs.

Total Upper Division Hours
Total ASU Resident Hours

## Student $\overline{\text { Signature }}$

Major Map：Applied Psychology－Bachelor of Science（B．S．）
School of Applied Arts \＆Sciences，Polytechnic Campus
Catalog Year：2008－2009

\begin{tabular}{|c|c|c|c|c|c|}
\hline Course Subject and Title （courses in bold／shading are critical） \& Hrs． \& \[
\begin{aligned}
\& \text { Upper } \\
\& \text { Division }
\end{aligned}
\] \& Transfer Course／Grade \& \[
\begin{aligned}
\& \text { Minimum Grade if } \\
\& \text { Required } \\
\& \hline
\end{aligned}
\] \& Additional Critical Requirement Notes \\
\hline \multicolumn{6}{|l|}{TERM FIVE： 6175 CREDIT HOURS} \\
\hline PSY 437：Human Factors \& 3 \& 区 \& \& Grade of C \& \multirow[t]{4}{*}{－Minimum grade of＂C＂required in all PGS \＆PSY courses} \\
\hline \begin{tabular}{l}
Complete two of the following Core Courses： \\
PSY 323：Sensation \＆Perception \\
PSY 324：Memory \＆Cognition \\
PSY 330：Statistical Methods \\
PGS 350：Social Psychology（SB）
\end{tabular} \& 3
3 \& 区
区 \& \& \begin{tabular}{l}
Grade of C \\
Grade of C
\end{tabular} \& \\
\hline Elective \& 2 \& \(\square\) \& \& \& \\
\hline Upper Division Elective \& 3 \& 区 \& \& \& \\
\hline \multicolumn{6}{|l|}{TERM SIX： \(76 \mathbf{9 0}\) CREDIT HOURS} \\
\hline \begin{tabular}{l}
Complete remaining two Core Courses： \\
PSY 323：Sensation \＆Perception \\
PSY 324：Memory \＆Cognition \\
PSY 330：Statistical Methods \\
PGS 350：Social Psychology（SB）
\end{tabular} \& 3
3 \& 区
区 \& \& \begin{tabular}{l}
Grade of C \\
Grade of C
\end{tabular} \& \multirow[t]{4}{*}{－Minimum grade of＂C＂required in all PGS \＆PSY courses} \\
\hline \begin{tabular}{l}
Elective OR \\
Complete one Related Area Course in computer science from： \\
CIS 220：Programming Concepts for Accountancy Majors \\
CSE 100：Principles of Programming with C＋＋ \\
CSE 110：Principles of Programming with Java \\
CSE 120：Digital Design Fundamentals \\
CSE 180：Computer Literacy \\
CSE 185：Introduction to Web Development \\
CST 100：Object－Oriented Software Development \\
Or other acceptable area AMT，BIO，CIS，CSE，EXW，MGT，and TWC
\end{tabular} \& 3 \& \(\square\) \& \& \& \\
\hline ENG 301：Writing for the Professions（L）or Upper division TWC \＆（L）course \& 3 \& 区 \& \& Grade of C \& \\
\hline Upper Division Elective \& 3 \& 区 \& \& \& \\
\hline \multicolumn{6}{|l|}{TERM SEVEN： 91105 CREDIT HOURS} \\
\hline \begin{tabular}{l}
Complete 2 courses from： \\
PGS 304：Effective Thinking \\
PGS 471：Psychological Testing \\
PSY 320：Learning and Motivation \\
PSY 325：Physiological Psychology \\
PSY 360：Cognitive Science \\
PSY 390：Experimental Psychology \\
PSY 438：Human－Computer Interaction \\
PSY 448：Human Factors in Transportation \\
PSY 449：Human Factors in Sports \\
PSY 439：Training \＆Skill Acquisition \\
PSY 440：Industrial／Organizational Psychology \\
PSY 494：Special Topics
\end{tabular} \& 3

3 \& 区 \& \& | Grade of C |
| :--- |
| Grade of C | \& \multirow[t]{4}{*}{－Minimum grade of＂C＂required in all PGS \＆PSY courses} <br>

\hline | Elective OR if CS related area course not completed－ |
| :--- |
| Complete one Related Area Course in computer science from： |
| CIS 220：Programming Concepts for Accountancy Majors |
| CSE 100：Principles of Programming with C＋＋ |
| CSE 110：Principles of Programming with Java |
| CSE 120：Digital Design Fundamentals |
| CSE 180：Computer Literacy |
| CSE 185：Introduction to Web Development |
| CST 100：Object－Oriented Software Development |
| Or other acceptable area AMT，BIO，CIS，CSE，EXW，MGT，TWC | \& | 3 |
| ---: |
|  |
|  |
|  |
|  | \& $\square$ \& \& Grade of C \& <br>

\hline Upper Division Elective \& 3 \& 区 \& \& \& <br>
\hline Upper Division Elective \& 3 \& 区 \& \& \& <br>
\hline \multicolumn{6}{|l|}{TERM EIGHT： 106120 CREDIT HOURS} <br>
\hline PSY 477：Applied Psychology Capstone Experience OR HON 493：Honors Thesis \& 3 \& 区 \& \& Grade of C \& \multirow[t]{4}{*}{－Minimum grade of＂C＂required in all PGS \＆PSY courses} <br>

\hline | Complete 2 additional courses from： |
| :--- |
| PGS 304：Effective Thinking |
| PGS 471：Psychological Testing |
| PSY 320：Learning and Motivation |
| PSY 325：Physiological Psychology |
| PSY 360：Cognitive Science |
| PSY 390：Experimental Psychology |
| PSY 438：Human－Computer Interaction |
| PSY 448：Human Factors in Transportation |
| PSY 449：Human Factors in Sports |
| PSY 439：Training \＆Skill Acquisition |
| PSY 440：Industrial／Organizational Psychology |
| PSY 494：Special Topics | \& 3 \& $\triangle$ \& \& | Grade of C |
| :--- |
| Grade of C | \& <br>

\hline Related Area Course in acceptable area（AMT，BIO，CIS，CSE，EXW， MGT，and TWC） \& 3 \& 区 \& \& Grade of C \& <br>
\hline Upper division Elective \& 3 \& 区 \& \& \& <br>
\hline
\end{tabular}

## 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 upper division <br> Hrs (45 minimum) | Total Comm. College <br> Hrs. (64 maximum) |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |

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) |

Literacy and Critical Inquiry (L)

- Computer/Statistics/Quantitative applications (CS)
- Humanities, Fine Arts, and Design (HU)
- Natural Science-Quantitative (SQ)
- General Studies Awareness Requirements
- Cultural Diversity in the US (C)
- Global Awareness (G)
- Historical Awareness (H)
- First Year Composition


## Additional Notes:

# Major Map: Exercise and Wellness (Exercise and Wellness) 

 - Bachelor of Science (B.S.)School of Applied Arts \& Sciences, Polytechnic Campus Catalog Year: 2008-2009


# Major Map：Exercise and Wellness（Exercise and Wellness） 

 －Bachelor of Science（B．S．）School of Applied Arts \＆Sciences，Polytechnic Campus Catalog Year：2008－2009

| 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 SIX： 7690 CREDIT HOURS |  |  |  |  |  |
| EXW 315：Physiological Foundations of Movement | 3 | 区 |  | Grade of C | －Minimum 2．00 ASU cumulative GPA recommended |
| EXW 330：Kinesiological Foundations of Movement | 3 | 区 |  | Grade of C |  |
| EXW 400：Stress Management for Wellness | 3 | 区 |  | Grade of C |  |
| Upper Division Elective | 3 | 区 |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| TERM SEVEN： 91105 CREDIT HOURS |  |  |  |  |  |
| EXW 420：Exercise Testing | 3 | 区 |  | Grade of C | －Minimum 2．00 ASU cumulative GPA recommended |
| EXW 425：Exercise Prescription | 3 | 区 |  | Grade of C |  |
| EXW 450：Cultural \＆Social Issues in Exercise \＆Wellness（L or SB） \＆C | 3 | 区 |  | Grade of C |  |
| Upper Division EXW Concentration Elective | 3 | 区 |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| TERM EIGHT： 106120 CREDIT HOURS |  |  |  |  |  |
| EXW 484：Internship | 6 | 区 |  | Grade of C | －Minimum 2．00 ASU cumulative GPA recommended |
| Upper Division Elective | 3 | 区 |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| Elective | 3 | $\square$ |  |  |  |

## Graduation Requirements Summary：

| Total Hours（120） | Total Hrs at ASU <br> （minimum 30） | Resident Credit for Academic <br> Recognition（minimum 56） | Major GPA（2．50 <br> Min．） | Total UD Hrs <br> （minimum 45） | Total Comm．College <br> Hrs．（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：

Major Map: Exercise and Wellness (Health Promotion) Bachelor of Science (B.S.)
School of Applied Arts \& Sciences, Polytechnic Campus Catalog Year: 2008-2009


Major Map: Exercise and Wellness (Health Promotion) -
Bachelor of Science (B.S.)
School of Applied Arts \& Sciences, Polytechnic Campus Catalog Year: 2008-2009

| Course Subject and Title <br> (courses in bold/shading are critical) | Hrs. | Upper <br> Division | Transfer <br> Course/Grade | Minimum Grade if <br> Required | Additional Critical Tracking Notes |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |

## Graduation Requirements Summary:

| Total Hours (120) | Total Hrs at ASU <br> $($ minimum 30) | Resident Credit for Academic <br> Recognition (minimum 56) | Major GPA (2.50 <br> Min.) | Total UD Hrs <br> (minimum 45) | Total Comm. College <br> Hrs. (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:

Major Map：History and Culture－Bachelor of Arts（B．A．）
School of Applied Arts \＆Sciences，Polytechnic Campus
Catalog Year：2008－2009

|  |  |  | Completed ATP：$\square$ Yes $\square$ No |  | Completed AGEC：$\square$ Yes $\square$ No |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 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： 016 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 and 102：First－Year Composition OR ENG 107 and 108：English for Foreign Students OR ENG 105：Advanced First－Year Composition | 3 | $\square$ |  | Grade of C |  |
| Humanities，Fine Arts \＆Design（HU） | 3 | $\square$ |  |  |  |
| MA（MAT 142 or higher） | 3 | $\square$ |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| TERM TWO： 1732 CREDIT HOURS |  |  |  |  |  |
| ENG 101 or 102：First－Year Composition ENG 105：Advanced First－Year Composition ENG 107 or 108：English for Foreign Students | 3 | $\square$ |  | Grade of C | －Minimum C grade in first－year composition courses <br> －Math（MA）requirement must be completed by the end of the second semester |
| Humanities，Fine Arts \＆Design（HU） | 3 | $\square$ |  |  |  |
| Computer／Statistics／Quantitative applications（CS） | 3 | $\square$ |  |  |  |
| Natural Science－Quantitative（SQ） | 4 | $\square$ |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| TERM THREE： 3347 CREDIT HOURS |  |  |  |  |  |
| HTY 301 Historical Research Methods（SB，H） | 3 | 区 |  | Grade of C | －First year composition requirement completed with a minimum＂$C$＂grade． <br> －Academic Review：Students should choose a track within the degree |
| Track specific focus area course（see list below） | 3 | $\square$ |  | Grade of C |  |
| Literacy \＆Critical Inquiry（L） | 3 | $\square$ |  |  |  |
| Natural Science－Quantitative（SQ）or General（G） | 4 | $\square$ |  |  |  |
| Elective | 2 | $\square$ |  |  |  |
| TERM FOUR： 4862 CREDIT HOURS |  |  |  |  |  |
| HST 343 American Southwest（ SB，H） | 3 | 区 |  | Grade of C | －A minimum of 6 hours of Upper Division Coursework must be completed in this semester |
| HST 344 Arizona（SB，H） | 3 | 区 |  | Grade of C |  |
| Track specific elective course（see list below） | 3 | $\square$ |  | Grade of C |  |
| Elective | 3 | $\square$ |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| TERM FIVE： 6376 CREDIT HOURS |  |  |  |  |  |
| Track specific focus area course（see list below） | 3 | $\square$ |  | Grade of C | －A minimum of 9 hours of Upper Division coursework must be completed in this semester． |
| Track specific focus area course（see list below） | 3 | $\square$ |  | Grade of C |  |
| Elective | 3 | $\square$ |  |  |  |
| Elective | 2 | $\square$ |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| TERM SIX： 7791 CREDIT HOURS |  |  |  |  |  |
| Track specific focus area course（see list below） | 3 | $\square$ |  | Grade of C | －A minimum of 9 hours of Upper Division coursework must be completed in this semester |
| Track specific elective area course（see list below） | 3 | $\square$ |  | Grade of C |  |
| Elective | 3 | $\square$ |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| TERM SEVEN： 92106 CREDIT HOURS |  |  |  |  |  |
| Track specific elective area course（see list below） | 3 | $\square$ |  | Grade of C | －A minimum of 9 hours of Upper Division coursework must be completed in this semester <br> －C（cultural awareness）requirement may be satisfied by track－specific course or other elective |
| Cultural Diversity in the US（C），or if completed，Elective | 3 | $\square$ |  |  |  |
| Upper Division Elective | 3 | 区 |  |  |  |
| Upper Division Elective | 3 | 区 |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| TERM EIGHT： $107 \mathbf{1 2 0}$ CREDIT HOURS |  |  |  |  |  |
| HTY498：History and Culture Capstone Project | 3 | 区 |  | Grade of C | －A minimum of 9 hours of Upper Division coursework must be completed in this semester <br> －G（global awareness）requirement may be satisfied by track－specific course or other elective |
| Global Awareness（G）or if completed，Elective | 3 | $\square$ |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| 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 upper division <br> Hrs (45 minimum) | Total Comm. College <br> Hrs. ( 64 maximum) |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |

## 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:
The B.A. in History and Culture has six tracks: The following are the focus area \& specific elective courses for each track:

| Track 1: Archival Preservation and Digital Media | Track 1: Archival Preservation and Digital Media |
| :--- | :--- |
| Focus Area Courses | Track Specific Elective Courses |
| GIT 294 Special Topics: Introduction to Digital Photography | Any courses with ARD, ARS, ART, GIT, HST, HTY or TWC |
| GIT 303 Digital Publishing | prefix |
| HTY 220/294 Intro to Digital Archives |  |

HTY 220/294 Intro to Digital Archives
HTY 230/294 Intro to Corporate Archiving
HTY 334/394 Archival Preservation and Digital Media
HTY 336/394 Editing Historical Documents
HTY 370/394 History of Collecting
HTY 410/394 Historic Preservation

| Track 2: Environmental History and Culture | $\frac{\text { Track 2: Environmental History and Culture }}{\text { Track Specific Elective Courses }}$ |
| :--- | :--- |
| Focus Area Courses | Any courses with an ABS, AGB, BIO, HST, or HTY prefix |
| HST 319 U.S. Urban History |  |

HTY 320/394 History of American Agriculture
HTY 326 History of Landscaping
HTY 350/394 Environmental History
HTY 374/394 Western Rivers
HTY 440/494 The Pre-Modern City
HTY 450/494 History of Ecology and Conservation
PHI 327 Environmental Philosophy

| Track 3: History and Culture of The American Southwest | Track 3: History and Culture of the American Southwest |
| :---: | :---: |
| Focus Area Courses | Track Specific Elective Courses |
| HST 293 Historical Themes in Latin America | Any courses with an AIS, CCS, HST, or HTY prefix. Students may also |
| HST 305 Studies in Latin American History | take courses with an SPA or SPN prefix. Students are strongly |
| HST 329 Women in $20^{\text {th }}$ Century U.S. West | encouraged to complete SPA 101 and SPA 102. |
| HST 330 Mexican Women in the U.S. Conquests and Migration |  |
| HST 331 Mexican-American History to 1900 |  |
| HST 332 Mexican-American History since 1900 |  |
| HST 337 American Indian History to 1900 |  |
| HST 338 American Indian History since 1900 |  |
| HST 341 U.S. West, $19^{\text {th }}$ Century |  |
| HST 342 U.S. West, $20^{\text {th }}$ Century |  |
| HST 417 Topics in Mexican American History |  |


| Track 4: History and Philosophy of Science and Technology | Track 4: History and Philosophy of Science and Technology |
| :--- | :--- |
| Focus Area Courses | Track Specific Elective Courses |
| HTY 310/394 History of Technology | Any courses with an ABS, AGB, BIO, GIT, HST, HTY, or PHI |
| HTY 312/344 History of Science | prefix. |
| HTY 324/394 History of Computing |  |
| HTY 316 History of Engineering |  |
| HTY 322/34 History of American Agriculture |  |
| HTY 325/394 History of American Business |  |
| HTY 326 History of Landscaping |  |
| HTY 330/394 History of Printing and Media |  |
| HTY 340/394 Exploration and Science |  |
| HTY 350/394 Environmental History |  |
| HTY 360/394 Women in Science |  |
| PHI 306 Applied Ethics |  |
| PHI 314 Philosophy of Science |  |

## Track 5: History and Public Policy

## Focus Area Courses

HST 109 The United States to 1865
Track 5: History and Public Policy
Track Specific Elective Courses
Any courses with an HST, HTY, PGV, PLS, or POS prefix.
HST 110 The United States since 1865
HST 210 American Social History
HST 315 Political History of the United States
HST 320 U.S. Urban History Since 1850
HST 325 Immigration and Ethnicity in the United States
HST 342 The U.S. West in the $20^{\text {th }}$ Century
HST 484 Internship
POS 220 Political Issues and Public Policy
POS 310 American National Government
POS 325 Public Policy Development
POS 426 Elements of Public Policy


Major Map: Literature, Writing and Film -

Bachelor of Arts (B.A.)
School of Applied Arts \& Sciences, Polytechnic Campus
Catalog Year: 2008-2009


Major Map: Literature, Writing and Film Bachelor of Arts (B.A.)
School of Applied Arts \& Sciences, Polytechnic Campus
Catalog Year: 2008-2009

## 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 upper division <br> Hrs (45 minimum) | Total Comm. College <br> Hrs. ( 64 maximum) |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |

## General University Requirements: Legend <br> - 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

The B.A. in Literature, Writing, and Film has six tracks. The following are the focus area \& specific elective courses for each track:

| Tracks | Track Specific Focus Area Courses | Track Specific Elective Courses |
| :---: | :---: | :---: |
| Literature and Film | Students choose from among the following: <br> ENH 230: Introduction to Film Studies (L or HU) <br> ENH 332: Literature on Film <br> ENH 372: Environmental Creative Nonfiction (L \& HU) <br> ENH 374: Environmental Issues in Literature (L \& HU) <br> ENH 378: The American Southwest in Literature and Film (L \& HU) <br> ENH 380: Medievalism in Modern Culture <br> ENH 430: Studies in International Film (L or HU, G) <br> ENH 436: American Film Musicals (L or HU) <br> ENH 440: Great Directors (L or HU) <br> ENH 475: Environmental Literary Criticism <br> ENG 221: Survey of English Literature (HU) <br> ENG 222: Survey of English Literature (HU, H) <br> ENG 241: Literatures of the United States to 1860 (HU) <br> ENG 242: Literatures of the United States, 1860-Present (HU) <br> ENG 321: Introduction to Shakespeare (L or HU) <br> ENG 365: History of Film (HU) <br> ENG 385: Career Development for English Majors (L) | Any ENG, ENH, or FMS prefix courses |
| Writing | Students choose from among the following: <br> ENH 245: Introduction to Writing Family History (L) <br> ENH 246: Introduction to Researching Family History <br> ENH 317: Publishing in Literary Magazines <br> ENH 320: Writing a Personal History (L) <br> ENH 322: Editing Family History for Public Audiences (L) <br> ENH 325: Writing Creative Nonfiction for Publication <br> ENH 346: Intermediate Family History Research <br> ENH 360: Travel Writing <br> ENH 362: Digital Project Management for Humanities and Arts <br> ENH 364: Digital Media in the Humanities and Arts <br> ENH 370: Travel Writing (L) <br> ENG 204: Introduction to Contemporary Literature (HU) <br> ENG 210: Introduction to Creative Writing <br> ENG 310: Intermediate Creative Writing <br> ENG 411: Advanced Creative Writing <br> ENG 412: Creative Nonfiction <br> ENG 212 English Prose Style <br> ENG 215 Strategies for Academic Writing <br> ENG 216 Persuasive Writing on Public Issues <br> ENG 385 Career Development for English Majors <br> ENG 472 Rhetorical Studies <br> TWC 301 General Principles of Multimedia Writing | Any ENG or ENH Writing courses <br> Any Upper Division ENG or ENH literature coursesAny of the following GIT courses: <br> GIT 194: Introduction to Computer Documents <br> GIT 294: Introduction to Digital Photography <br> GIT 210: Creative Thinking and Design Visualization <br> GIT 237: Web Content Design <br> GIT 233 Digital Publishing <br> GIT 333 Printing Technology <br> GIT 414 Web Site Design and Internet/Web Technologies <br> Any of the following TWC courses: <br> TWC 401 Principles of Technical Communication <br> TWC 403 Writing for Professional Publication <br> TWC 411 Principles of Visual Communication <br> TWC 421 Principles of Writing with Technology |
| English for Secondary Teachers | Students choose from among the following: <br> ENH 332: Literature on Film <br> ENH 378: The American Southwest in Literature (L \& HU) <br> ENH 380: Medievalism in Modern Culture (L \& HU) <br> ENH 420: Methods of Teaching Secondary Writing <br> ENH 425: Methods of Teaching Secondary Literature and Language <br> ENG 221: Survey of English Literature (HU) <br> ENG 222: Survey of English Literature (HU, H) <br> ENG 241: Literatures of the United States to 1860 (HU) <br> ENG 242: Literatures of the United States, 1860-Present (HU) <br> ENG 314 Modern Grammar <br> ENG 321: Introduction to Shakespeare (L or HU) <br> ENG 333 American Ethnic Literature | Any courses with an ENG or ENH prefix |

Major Map: Multimedia Writing \& Technical
Communication - Bachelor of Science (B.S.)
School of Applied Arts \& Sciences, Polytechnic Campus
Catalog Year: 2008-2009


Graduation Requirements Summary:

| Total Hours (120) | Total Hrs at ASU <br> (minimum 30) | Resident Credit for Academic <br> Recognition (minimum 56) | Major GPA (2.50 <br> Min.) | Total UD Hrs <br> (minimum 45) | Total Comm. College <br> Hrs. (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:

Major Map: Nutrition (Dietetics) -
Bachelor of Science (B.S.)
School of Applied Arts \& Sciences, Polytechnic Campus
Catalog Year: 2008-2009


## 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 upper division <br> Hrs (45 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:

Major Map: Nutrition (Food \& Nutrition Management) Bachelor of Science (B.S.)
School of Applied Arts \& Sciences, Polytechnic Campus Catalog Year: 2008-2009


Major Map：Nutrition（Food \＆Nutrition Management）－
Bachelor of Science（B．S．）
School of Applied Arts \＆Sciences，Polytechnic Campus Catalog Year：2008－2009

| $\begin{aligned} & \hline \text { Course Subject and Title } \\ & \text { (courses in bold/shading are critical) } \end{aligned}$ | Hrs． | Upper Division | Transfer Course／Grade | Minimum Grade if Required | Additional Critical Requirement Notes |
| :---: | :---: | :---: | :---: | :---: | :---: |
| TERM EIGHT： $106 \mathbf{1 2 0}$ CREDIT HOURS |  |  |  |  |  |
| NTR 401：Professional Practice in Food Management | 3 | 区 |  | Grade of C |  |
| NTR 445：Management of Food Service System | 3 | 囚 |  | Grade of C |  |
| Complete one marketing course from： <br> BUA 382：Small Business Sales \＆Market Development <br> MKT 300：Marketing \＆Business Performance <br> MKT 394：Special Topics | 3 | 区 |  |  |  |
| Upper division Elective | 3 | 区 |  |  |  |
| Elective | 3 | $\square$ |  |  |  |

## 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 upper division <br> Hrs（45 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：

Major Map：Nutrition（Human Nutrition）－<br>Bachelor of Science（B．S．）<br>School of Applied Arts \＆Sciences，Polytechnic Campus<br>Catalog Year：2008－2009

|  |  |  | Completed ATP：$\square$ Yes $\square$ No |  | Completed AGEC：$\square$ Yes $\square$ No |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 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 Requirement Notes |
| TERM ONE： 015 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> －CHM 101 or 113 depending on preparation；see course description <br> －ASU Math Placement Exam score determines placement in Mathematics course <br> －Minimum grade of＂C＂required in all critical courses |
| Introduction to Chemistry（CHM）course | 4 | $\square$ |  | Grade of C in CHM 113 |  |
| ENG 101 and 102：First－Year Composition OR ENG 107 and 108：English for Foreign Students OR ENG 105：Advanced First－Year Composition | 3 | $\square$ |  | Grade of C |  |
| MAT 142：College Mathematics（MA） | 3 | $\square$ |  |  |  |
| NTR 150：Introduction to the Professions in Nutrition and Dietetics | 1 | $\square$ |  |  |  |
| Social \＆Behavioral Sciences（SB）AND Cultural Diversity in the US （C），Global Awareness（G）or Historical Awareness（H） | 3 | $\square$ |  |  |  |
| TERM TWO： 1631 CREDIT HOURS |  |  |  |  |  |
| CHM 113：General Chemistry I（SQ）OR if completed，take CHM 116：General Chemistry II | 4 | $\square$ |  | Grade of C | －Minimum grade of＂ C ＂required in all critical courses |
| ENG 101 and 102：First－Year Composition OR ENG 107 and 108：English for Foreign Students OR ENG 105：Advanced First－Year Composition | 3 | $\square$ |  | Grade of C |  |
| Humanities，Fine Arts \＆Design（HU）AND Cultural Diversity in the US（C），Global Awareness（G）or Historical Awareness（H） | 3 | $\square$ |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| TERM THREE： 3247 CREDIT HOURS |  |  |  |  |  |
| NTR 241：Human Nutrition | 3 | $\square$ |  | Grade of C | －Minimum grade of＂C＂required in all critical courses <br> －First year composition requirement completed |
| CHM 116 General Chemistry II or If CHM 113 \＆ 116 are completed take： CHM 231：Elementary Organic Chemistry AND CHM 235 Lab | $\begin{gathered} \hline 4 \text { or } \\ 3 / 1 \\ \hline \end{gathered}$ |  |  |  |  |
| Humanities，Fine Arts \＆Design（HU）AND Cultural Diversity in the US（C），Global Awareness（G）or Historical Awareness（H） | 3 | $\square$ |  |  |  |
| Social \＆Behavioral Sciences（SB） | 3 | $\square$ |  |  |  |
| Literacy and Critical Inquiry（L） | 3 | $\square$ |  |  |  |
| TERM FOUR： 4863 CREDIT HOURS |  |  |  |  |  |
| BIO 201：Human Anatomy and Physiology I（SG） | 4 | $\square$ |  | Grade of C | －Minimum grade of＂C＂required in all critical courses <br> －Completed critical requirement courses （CHM 113；BIO 201；NTR 241） |
| CHM 231：Elementary Organic Chemistry（3）AND CHM 235 Lab（1） or if CHM 231／235 are completed take： <br> Elective（3） | $\begin{aligned} & 3 / 1 \\ & \text { or } 3 \\ & \hline \end{aligned}$ |  |  |  |  |
| NTR 142：Applied Food Principles | 3 | $\square$ |  |  |  |
| Computer／Statistics／Quantitative applications（CS）（NTR 300： Computer Applications in Nutrition recommended） | 3 | $\square$ |  |  |  |
| Upper division Humanities，Fine Arts \＆Design（HU）OR Social \＆Behavioral Sciences（SB） | 3 | 区 |  |  |  |
| TERM FIVE： 6479 CREDIT HOURS |  |  |  |  |  |
| BIO 202：Human Anatomy and Physiology II | 4 | $\square$ |  |  |  |
| NTR 341：Introduction to Planning Therapeutic Diets | 3 | 区 |  | Grade of C |  |
| Nutrition Elective（any upper division NTR class） | 3 | 区 |  | Grade of C |  |
| Upper division Literacy \＆Critical Inquiry（L） | 3 | 区 |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| TERM SIX： 8092 CREDIT HOURS |  |  |  |  |  |
| BCH 361：Principles of Biochemistry AND BCH 367：Laboratory | 3／1 | 区 |  | Grade of C |  |
| NTR 340：Applications in Human Nutrition | 3 | 区 |  | Grade of C |  |
| NTR 444：Medical Nutrition Therapy | 3 | 区 |  | Grade of C |  |
| Upper division Elective | 3 | 区 |  |  |  |
| TERM SEVEN： 93105 CREDIT HOURS |  |  |  |  |  |
| NTR 440：Advanced Human Nutrition I | 3 | 区 |  | Grade of C |  |
| Nutrition Elective（any upper division NTR class） | 3 | 区 |  | Grade of C |  |
| MIC 205：Microbiology AND MIC 206：Microbiology Lab | 3／1 | $\square$ |  |  |  |
| Upper division Elective | 3 | 区 |  |  |  |
| TERM EIGHT： $106 \mathbf{1 2 0}$ CREDIT HOURS |  |  |  |  |  |
| NTR 441：Advanced Human Nutrition II | 3 | 区 |  | Grade of C |  |
| NTR 446：Human Nutrition Assessment | 3 | 区 |  | Grade of C |  |
| Upper division Elective | 3 | 区 |  |  |  |
| Upper division Elective | 3 | 区 |  |  |  |
| Elective | 3 | $\square$ |  |  |  |

Major Map: Nutrition (Human Nutrition) Bachelor of Science (B.S.)
School of Applied Arts \& Sciences, Polytechnic Campus Catalog Year: 2008-2009

## 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 upper division <br> Hrs (45 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:

Major Map: Nutrition (Nutrition Communication) -
Bachelor of Science (B.S.)
School of Applied Arts \& Sciences, Polytechnic Campus Catalog Year: 2008-2009


Major Map：Nutrition（Nutrition Communication）－<br>Bachelor of Science（B．S．）<br>School of Applied Arts \＆Sciences，Polytechnic Campus Catalog Year：2008－2009

| 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： 91105 CREDIT HOURS |  |  |  |  |  |
| NTR 351：Nutrition \＆Health Communications | 3 | 区 |  | Grade of C |  |
| NTR 450：Nutrition in the Life Cycle I OR NTR 451：Nutrition in the Life Cycle II | 3 | 区 |  | Grade of C |  |
| MCO 498：PS：Media Analysis Senior Seminar | 3 | 区 |  | Grade of C |  |
| Complete one additional course from： <br> MCO 418：History of Mass Communication <br> MCO 430：International Mass Communication <br> MCO 435：Emerging Media Technologies <br> MCO 440：Applied Media Research <br> MCO 450：Visual Communication <br> MCO 460：Race，Gender \＆Media <br> MCO 494：Special Topics | 3 <br>  <br>  <br>  | 囚 |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| TERM EIGHT： 106120 CREDIT HOURS |  |  |  |  |  |
| NTR 448：Community Nutrition（L） | 3 | 区 |  | Grade of C |  |
| NTR 401：Professional Practice in Food Management | 3 | 区 |  | Grade of C |  |
| Nutrition Elective（any upper division NTR class） | 3 | 区 |  | Grade of C |  |
| Complete one additional course from： <br> MCO 418：History of Mass Communication <br> MCO 430：International Mass Communication <br> MCO 435：Emerging Media Technologies <br> MCO 440：Applied Media Research <br> MCO 450：Visual Communication <br> MCO 460：Race，Gender \＆Media <br> MCO 494：Special Topics | 3 | 囚 |  | Grade of C |  |
| Upper division elective | 3 | 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 upper division <br> Hrs（45 minimum） | Total Comm．College <br> Hrs．（64 maximum） |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |

## 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） |
| $\circ$ | 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：

Major Map: Science, Technology, and Society -
Bachelor of Science (B.S.)
School of Applied Arts \& Sciences, Polytechnic Campus
Catalog Year: 2008-2009


## 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 upper division <br> Hrs (45 minimum) | Total Comm. College <br> Hrs. (64 maximum) |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |

## 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) |
| $\circ$ | Natural Science-General (SG) |
| cral | Studies Awareness Requirements |
| $\circ$ | Cultural Diversity in the US (C) |
| $\circ$ | Global Awareness (G) |
| $\circ$ | Historical Awareness (H) |

- First Year Composition


## Additional Notes:

Students who begin the STS program at ASUPOLY as freshmen will take STS 101 and 110. STS 304 and 317 are for transfer students with 64 units who need upper division credit.

It is highly recommended that STS students take a statistics course for their (CS) general studies requirement.
Students in the Science, Technology, and Governance Track will complete the following coursework or their equivalents:

- POS 310 American National Government
- STS 318 Science, Technology, and Government
- STS 325 Science, Technology, and Public Policy
- STS 327 Ethical Issues in Science and Technology
- STS 364 Science, Technology, and National Security
- STS 425 Law, Values, and Science and Technology

Students in the Global Technology and Development Track will complete the following coursework or their equivalents:

- STS 328 Science, Technology, and Culture
- STS 329 Cultivating Technology in Newly Industrializing Countries
- STS 330 Information Technology and Globalization
- STS 327 Ethical Issues in Science and Technology
- STS 332 Seminar: Global Issues in Science and Technology
- STS 364 Science, Technology, and National Security

Students in the General STS Track must meet with an advisor to determine the coursework needed to fulfill this area of the degree.

- The General STS Track has been designed as the integrative component of the STS degree program. It can be used to design dual degrees and double majors with other programs. Students can utilize it in integrating other degree programs and courses available at ASU.
- For instance, the Track can be employed in establishing a pre-law degree program with more emphasis on a science and technology curriculum.
- Students seeking secondary teaching certification can incorporate social science pedagogy courses.
- In each instance when this Track is chosen by a student, the student will work in conjunction with faculty advisors within Social and Behavioral Sciences and other units to work out an appropriate program of study.
- Students can utilize courses available at any unit within ASU for this purpose.

All STS students must take an approved Minor for STS Majors (18 Semester Hours)

- Each approved program of study in the STS program must include at least one minor in a substantive field.
- STS students are encouraged to take minors in career fields, e.g., business, technology, technical communication, education, etc.
- The minor is to help prepare the student for a career upon graduation.
- Before taking minor courses, students must meet with their advisor to determine which minor is best suited for their chosen career field.

Major Map：Art（Art Education）－Bachelor of Fine Arts （B．F．A．）<br>Herberger College of The Arts，Tempe Campus<br>Catalog Year：2008－2009

|  |  |  | Completed ATP：$\square$ Yes $\square$ No |  | Completed AGEC：$\square$ Yes $\square$ No |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 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： 015 CREDIT HOURS |  |  |  |  |  |
| ASU 101：The ASU Experience | 1 | $\square$ |  |  | －ASU 101 is for freshman ASU 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 <br> －First－year composition requirement must be completed by end of term 3 <br> －MAT 142 （or higher）（MA）must be completed by end of term 2 <br> －Minimum 3.0 cumulative GPA required in ARA， ARE，ARS，ART courses <br> －Minimum 2.7 cumulative GPA required for portfolio review |
| Choose 1 from：ART 111 Drawing I，ART 112 2－D Design，ART 113 Color，ART 115 3－D Design | 3 | $\square$ |  | Grade of C |  |
| Choose 1 additional from：ART 111 Drawing I，ART 112 2－D Design，ART 113 Color，ART 115 3－D Design | 3 | $\square$ |  | Grade of C |  |
| Choose 1 from：ARS 101 Art Prehistory Through Middle Ages or ARS 102 Art from Renaissance to Present（HU \＆H） | 3 | $\square$ |  | Grade of C |  |
| ENG 101 and 102：First－Year Composition or ENG 107 and 108：English for Foreign Students or ENG 105：Advanced First－Year Composition | 3 | $\square$ |  | Grade of C |  |
| MAT 142 College Mathematics（MA）： | 3 | $\square$ |  |  |  |
| TERM TWO： 1630 CREDIT HOURS |  |  |  |  |  |
| Choose 1 additional from：ART 111 Drawing I，ART 112 2－D Design，ART 113 Color，ART 115 3－D Design | 3 | $\square$ |  | Grade of C | －First－year composition requirement must be completed by end of term 3 <br> －MAT 142 （or higher）（MA）must be completed by end of term 2 <br> －Minimum 3.0 cumulative GPA required in ARA， ARE，ARS，ART courses <br> －Minimum 2.7 cumulative GPA required for portfolio review |
| Choose 1 additional from：ART 111 Drawing I，ART 112 2－D Design，ART 113 Color，ART 115 3－D Design | 3 | $\square$ |  | Grade of C |  |
| Choose remaining course from：ARS 101 Art Prehistory Through Middle Ages or ARS 102 Art from Renaissance to Present（HU \＆ H） | 3 | $\square$ |  | Grade of C |  |
| ENG 101 and 102：First－Year Composition or ENG 107 and 108：English for Foreign Students or ENG 105：Advanced First－Year Composition | 3 | $\square$ |  | Grade of C |  |
| Computer／Statistics／Quantitative applications（CS） | 3 | $\square$ |  |  |  |
| TERM THREE： 3145 CREDIT HOURS |  |  |  |  |  |
| ARE 250 Teaching Inquiry in Art | 3 | $\square$ |  | Grade of B－ | －First Year Composition Completed <br> －Minimum cumulative 3．0 GPA required in APA， ARE，ARS，ART courses <br> －Minimum 2.7 cumulative GPA required for portfolio review <br> －Minimum grade of B－or better in ARE 250 for portfolio review． |
| Choose 1 2D art course from：ART 201／202 Photography／Lab， ART 204 Photography II，ART 211 Drawing II，ART 223 Painting I，ART 227 Watercolor I，or ART 253 Intro to Printmaking | 3 | $\square$ |  | Grade of C |  |
| Upper division ARS course | 3 | 区 |  | Grade of C |  |
| Social and Behavioral Science（SB）and Global Awareness（G） | 3 | $\square$ |  |  |  |
| Natural Science－Quantitative（SQ） | 4 | $\square$ |  |  |  |
| TERM FOUR： $46 \mathbf{6 0}$ CREDIT HOURS |  |  |  |  |  |
| ARE 440 Disciplines of Art Education | 3 | 区 |  | Grade of C（B－for ITC students） | －Minimum 3.0 cumulative GPA required in ARA， ARE，ARS，ART courses <br> －Minimum 2.7 cumulative GPA required for portfolio review <br> －MILESTONE－Submit portfolio review by March 1 （see htpp：／／art．asu．edu／undergraduate／admission＿ud．ht ml ） <br> －MILESTONE－Completion of successful art portfolio review． <br> －MILESTONE－Complete Art Education Proficiency Form with your advisor and have your art education faculty mentor approve your proficiency coursework |
| Choose 1 3D art course from：ART 231 Sculpture I，ART 261 Ceramic Survey，ART 272 Metalworking I：Intro，ART 274 Wood I，ART 276 Fibers I，or ART 294 Special Topics：Intermedia | 3 | $\square$ |  | Grade of C |  |
| Choose 1 additional 2D or 3D art course from：ART 201／202 Photography I／Lab，ART 204 Photography II，ART 211 Drawing II，ART 223 Painting I，ART 227 Watercolor I，ART 231 Sculpture I，ART 253 Intro to Printmaking，ART 261 Ceramic Survey，ART 272 Metalworking I：Intro，ART 274 Wood I，ART 276 Fibers I，or ART 294 Special Topics：Intermedia | 3 | $\square$ |  | Grade of C |  |
| Social and Behavioral Science（SB）\＆Cultural Diversity in the US（C） | 3 | $\square$ |  |  |  |
| Natural Science Quantitative（SQ）or General（SG） | 4 | $\square$ |  |  |  |
| TERM FIVE： 6175 CREDIT HOURS |  |  |  |  |  |
| ARE 370 Teaching Visual Culture | 3 | 囚 |  | Grade of C | －Art Proficiency courses：ARA，ARE，ARS and ART prefix；cannot be ARA 311，ARS 100 or ARS 300 <br> －Art History students generally take an upper division art history course with an HU designation to satisfy the upper division HU／SB requirement． If you have already done so，you may take an elective instead of an upper division HU／SB． |
| ARE 494 Special Topics | 3 | 囚 |  | Grade of C |  |
| Upper division ARS course（20 ${ }^{\text {th }}$ century focus） | 3 | 区 |  | Grade of C |  |
| Art Education Proficiency course | 3 | $\square$ |  | Grade of C |  |
| Upper division Humanities，Fine Arts，and Design（HU）OR Social and Behavioral Sciences（SB）OR Elective | 3 | 区 |  |  |  |
| TERM SIX： $76 \mathbf{9 0}$ CREDIT HOURS |  |  |  |  |  |
| ARE 482 Art Education：Teaching Art Processes | 3 | 区 |  | Grade of C | －Art Proficiency courses：ARE，ARS and ART prefix；cannot be ARA 311，ARS 100 or ARS 300 |
| Art Education Proficiency course | 3 | $\square$ |  | Grade of C |  |
| Art Education Proficiency course | 3 | $\square$ |  | Grade of C |  |
| Upper division ARS course | 3 | 区 |  | Grade of C |  |
| Literacy and Critical Inquiry（L） | 3 | $\square$ |  |  |  |


| 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： 91105 CREDIT HOURS |  |  |  |  |  |
| ART 486 Art Education：Strategies \＆Applications | 3 | 区 |  | Grade of C | －Art Proficiency courses：APA，ARA，ARE，ARS and ART prefix；cannot be ARA 311，ARS 100 or ARS 300 |
| Upper division Art Education Proficiency course | 3 | 区 |  | Grade of C |  |
| Upper division Art Education Proficiency course | 3 | 区 |  | Grade of C |  |
| Upper division Literacy and Critical Inquiry（L） | 3 | 区 |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| TERM EIGHT： $106 \mathbf{1 2 0}$ CREDIT HOURS |  |  |  |  |  |
| ARE 496 Methods and Assessment of Learning in Art | 3 | 区 |  | Grade of C | －Art Proficiency courses：ARA，ARE，ARS and ART prefix；cannot be ARA 311，ARS 100 or ARS 300 |
| Upper division Art Education Proficiency course | 3 | 区 |  | Grade of C |  |
| Upper division Art Education Proficiency course | 3 | 区 |  | Grade of C |  |
| Elective | 3 | $\square$ |  |  |  |

## 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：

|  |  |  | Completed ATP：$\square$ Yes $\square$ No |  | Completed AGEC：$\square$ Yes $\square$ No |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 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： 015 CREDIT HOURS |  |  |  |  |  |
| ASU 101：The ASU Experience | 1 | $\square$ |  |  | －ASU 101 is for freshman ASU 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 <br> －\＃6 hours of ART courses are recommended；ART 201 Photography I is recommended <br> －\＃\＃Second language requirement：cannot select from American Sign Language <br> －First－year composition requirement must be completed by end of term 3 <br> －MAT 142 （or higher）（MA）must be completed by end of term 2 <br> －Minimum 3.0 cumulative GPA required |
| \＃Choose 1 from：（ART 111 Drawing I，ART 112 2－D Design，ART 113 Color，ART 115 3－D Design，ART 201／202 Photography I／Lab， ART 274 Wood I，or ART 294 Special Topics）or 1 course with prefix of ARA（not ARA 311），ARE or APH | 3 |  |  | Grade of C |  |
| Choose 1 from：ARS 101 Art Prehistory Through Middle Ages or ARS 102 Art from Renaissance to Present（HU \＆H） | 3 | $\square$ |  | Grade of B－ |  |
| \＃\＃Second Language | 4 | $\square$ |  | Grade of C |  |
| ENG 101 and 102：First－Year Composition or ENG 107 and 108：English for Foreign Students or ENG 105：Advanced First－Year Composition | 3 | $\square$ |  | Grade of B－ |  |
| MAT 142 College Mathematics（MA）： | 3 | $\square$ |  |  |  |
| TERM TWO： 16 30 CREDIT HOURS |  |  |  |  |  |
| \＃Choose 1 additional course from：（ART 111 Drawing I，ART 112 2－D Design，ART 113 Color，ART 115 3－D Design，ART 201／202 Photography I／Lab，ART 274 Wood I，or ART 294 Special Topics） or 1 course with prefix of ARA（not ARA 311），ARE or APH | 3 | $\square$ |  | Grade of C | －\＃6 hours of ART courses are recommended；ART 201 Photography I is recommended <br> －\＃\＃Second language requirement：cannot select from American Sign Language SAT or ACT scores determine placement in first－year composition course <br> －First－year composition requirement must be completed by end of term 3 <br> －MAT 142 （or higher）（MA）must be completed by end of term 2 <br> －Minimum 3.0 cumulative GPA required <br> －MILESTONE－Submit Art History Declaration Form |
| Choose remaining course from：ARS 101 Art Prehistory Through Middle Ages or ARS 102 Art from Renaissance to Present（HU \＆ H） | 3 | $\square$ |  | Grade of B－ |  |
| \＃\＃Second Language | 3 | $\square$ |  | Grade of C |  |
| ENG 101 and 102：First－Year Composition or ENG 107 and 108：English for Foreign Students or ENG 105：Advanced First－Year Composition | 3 | $\square$ |  | Grade of B－ |  |
| Computer／Statistics／Quantitative applications（CS） | 3 | $\square$ |  |  |  |
| TERM THREE： 3145 CREDIT HOURS |  |  |  |  |  |
| \＃Choose 1 additional course from：（ART 111 Drawing I，ART 112 2－D Design，ART 113 Color，ART 115 3－D Design，ART 201／202 Photography I／Lab，ART 274 Wood I，or ART 294 Special Topics） or 1 course with prefix of ARA（not ARA 311），ARE or APH | 3 | $\square$ |  | Grade of C | －\＃6 hours of ART courses are recommended；ART 201 Photography I is recommended <br> －\＃\＃Second language requirement：cannot select from American Sign Language First－year composition requirement must be completed by end of term 3 |
| ARS Course（non－western focus；ARS 201 Art of Asia or ARS 202 Art of Africa，Oceania and the Americas recommended）（HU \＆G） | 3 | $\square$ |  | Grade of C |  |
| \＃\＃Second Language | 4 | $\square$ |  | Grade pf C |  |
| Social and Behavioral Science（SB）AND Cultural Diversity in the US （C） | 3 | $\square$ |  |  |  |
| Literacy and Critical Inquiry（L） | 3 | $\square$ |  |  |  |
| TERM FOUR： 4660 CREDIT HOURS |  |  |  |  |  |
| Upper division course with prefix of ARA（not ARA 311），ARE or APH | 3 | 区 |  | Grade of C | －\＃\＃Second language requirement：cannot select from American Sign Language |
| Upper division ARS course（Ancient，Medieval， Renaissance／Baroque or Modern／Contemporary focus） | 3 | ® |  | Grade of C |  |
| \＃\＃Second Language | 4 | $\square$ |  | Grade of C |  |
| Natural Science－Quantitative（SQ） | 4 | $\square$ |  |  |  |
| TERM FIVE： 6175 CREDIT HOURS |  |  |  |  |  |
| Upper division ARS course（Ancient，Medieval， Renaissance／Baroque，or Modern／Contemporary focus） | 3 | 囚 |  | Grade of C |  |
| Upper division ARS course（HU）（Ancient，Medieval， Renaissance／Baroque or Modern／Contemporary focus）（not from ARS 300） | 3 | 区 |  | Grade of C |  |
| Social and Behavioral Science（SB） | 3 | $\square$ |  |  |  |
| Natural Science Quantitative（SQ）or General（SG） | 4 | $\square$ |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| TERM SIX： 7690 CREDIT HOURS |  |  |  |  |  |
| Upper division ARS course（Ancient，Medieval，Renaissance／Baroque or Modern／Contemporary focus） | 3 | 区 |  | Grade of C | －Art History students generally take an upper division art history course with an HU designation to satisfy the upper division $\mathrm{HU} / \mathrm{SB}$ requirement． If you have already done so，you may take an elective instead of an upper division HU／SB． |
| ARS 480 Research Methods（L） | 3 | 囚 |  | Grade of C |  |
| Upper division Humanities，Fine Arts，and Design（HU）OR Social and Behavioral Sciences（SB）OR Elective | 3 | 区 |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| Upper division elective | 3 | 区 |  |  |  |


| 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： 91105 CREDIT HOURS |  |  |  |  |  |
| Upper division ARS course | 3 | 区 |  | Grade of C |  |
| ARS 498 Pro－Seminar | 3 | 区 |  | Grade of C |  |
| Elective | 3 | $\square$ |  |  |  |
| Upper division elective | 3 | 区 |  |  |  |
| Upper division elective | 3 | 区 |  |  |  |
| TERM EIGHT： 106120 CREDIT HOURS |  |  |  |  |  |
| Upper division ARS course | 3 | 区 |  | Grade of C |  |
| Upper division elective | 3 | 区 |  |  |  |
| Upper division elective | 3 | 区 |  |  |  |
| Elective | 3 | $\square$ |  |  |  |

## 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：

Major Map: Art (Art Studies) - Bachelor of Arts (B.A.)
Herberger College of The Arts, Tempe Campus
Catalog Year: 2008-2009


| 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： 91105 CREDIT HOURS |  |  |  |  |  |
| Upper division Art Studies course elective：choose from ARA（not ARA 311），ARE，ARS（not ARS 100 or 300）or ART prefix | 3 | 区 |  | Grade of C | －Related area elective－choose a course related to art outside of the Herberger College．May include African／African／American Studies，Anthropology， American Indian Studies，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（dance，music or theatre course） | 3 | 区 |  | Grade of C |  |
| Upper division related elective | 3 | 囚 |  |  |  |
| Upper division Literacy and Critical Inquiry（L） | 3 | 区 |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| TERM EIGHT： $106 \mathbf{1 2 0}$ CREDIT HOURS |  |  |  |  |  |
| Upper division Art Studies course elective：choose from ARA（not ARA 311），ARE，ARS（not ARS 100 or 300）or ART prefix | 3 | 区 |  | Grade of C | －Related area elective－choose a course related to art outside of the Herberger College．May include African／African／American Studies，Anthropology， American Indian Studies，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（dance，music or theatre course） | 3 | 区 |  | Grade of C |  |
| Upper division elective | 3 | 区 |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| Elective | 3 | $\square$ |  |  |  |

## 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：

Major Map：Art（Ceramics）－Bachelor of Fine Arts（B．F．A．）
Herberger College of the Arts，Tempe Campus
Catalog Year：2008－2009

|  |  |  | Completed ATP：$\square$ Yes $\square$ No |  | Completed AGEC：$\square$ Yes $\square$ No |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 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： 015 CREDIT HOURS |  |  |  |  |  |
| ASU 101：The ASU Experience | 1 | $\square$ |  |  | －ASU 101 is for freshman ASU 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 <br> －First－year composition requirement must be completed by end of term 3 <br> －MAT 142 （or higher）（MA）must be completed by end of term 2 <br> －Minimum 3.0 cumulative GPA required in ARA， ARE，ARS，ART courses <br> －Minimum 2.7 cumulative GPA required for portfolio review |
| ART 112 2－D Design | 3 | $\square$ |  | Grade of C |  |
| ART 115 3－D Design | 3 | $\square$ |  | Grade of C |  |
| Choose 1 from：ARS 101 Art Prehistory Through Middle Ages or ARS 102 Art from Renaissance to Present（HU \＆H） | 3 | $\square$ |  | Grade of C |  |
| ENG 101 and 102：First－Year Composition or ENG 107 and 108：English for Foreign Students or ENG 105：Advanced First－Year Composition | 3 | $\square$ |  | Grade of C |  |
| MAT 142：College Mathematics（MA） | 3 | $\square$ |  |  |  |
| TERM TWO： 1630 CREDIT HOURS |  |  |  |  |  |
| ART 111 Drawing I | 3 | $\square$ |  | Grade of C | －First－year composition requirement must be completed by end of term 3 <br> －MAT 142 （or higher）（MA）must be completed by end of term 2 <br> －Minimum 3.0 cumulative GPA required in ARA， ARE，ARS，ART courses <br> －Minimum 2.7 cumulative GPA required for portfolio review |
| ART 261 Ceramic Survey | 3 | $\square$ |  | Grade of C |  |
| Choose remaining course from：ARS 101 Art Prehistory Through Middle Ages or ARS 102 Art from Renaissance to Present（HU \＆ H） | 3 | $\square$ |  | Grade of C |  |
| ENG 101 and 102：First－Year Composition or ENG 107 and 108：English for Foreign Students or ENG 105：Advanced First－Year Composition | 3 | $\square$ |  | Grade of C |  |
| Computer／Statistics／Quantitative applications（CS） | 3 | $\square$ |  |  |  |
| TERM THREE： 3145 CREDIT HOURS |  |  |  |  |  |
| ART 113 Color | 3 | $\square$ |  | Grade of C | －First－year composition requirement must be completed by end of term 3 <br> －Minimum 3.0 cumulative GPA required in ARA， ARE，ARS，ART courses <br> －Minimum 2.7 cumulative GPA required for portfolio review |
| Choose 1 2D art course from：ART 201／202 Photography I／Lab， ART 204 Photography II，ART 211 Drawing II，ART 214 Life Drawing I，ART 223 Painting I，ART 227 Watercolor I，or ART 253 Intro to Printmaking | 3 | $\square$ |  | Grade of C |  |
| Social and Behavioral Science（SB）\＆Global Awareness（G） | 3 | $\square$ |  |  |  |
| Literacy and Critical Inquiry（L） | 3 | $\square$ |  |  |  |
| Natural Science－Quantitative（SQ） | 4 | $\square$ |  |  |  |
| TERM FOUR： 4660 CREDIT HOURS |  |  |  |  |  |
| Choose 1 additional 2D or 3D art course from：ART 201／202 Photography I／Lab，ART 204 Photography II，ART 211 Drawing II，ART 214 Life Drawing I，ART 223 Painting I，ART 227 Watercolor I，ART 231 Sculpture I，ART 253 Intro to Printmaking，ART 272 Metalworking I：Intro，ART 274 Wood I， ART 276 Fibers I，or ART 294 Special Topics：Intermedia | 3 | $\square$ |  | Grade of C | －Minimum 3.0 cumulative GPA required in ARA， ARE，ARS，ART courses <br> －Minimum 2.7 cumulative GPA required for portfolio review <br> －MILESTONE－Submit portfolio review by March 1 （see htpp：／／art．asu．edu／undergraduate／admission＿ud．ht ml ） <br> －MILESTONE－Completion of successful art portfolio review <br> －MILESTONE－Meet with a Herberger College advisor or faculty member in Ceramics once portfolio results are received <br> －Students must complete 6 hours of upper division ARS coursework（not from ARS 300）；Must include 1 non－western course and $120^{\text {th }}$ century course． |
| Choose 1 3D art course from：ART 231 Sculpture I，ART 272 Metalworking I：Intro，ART 274 Wood I，ART 276 Fibers I，or ART 294 Special Topics：Intermedia | 3 | $\square$ |  | Grade of C |  |
| Upper division ARS course（non－western or 20 ${ }^{\text {th }}$ Century focus） | 3 | 区 |  | Grade of C |  |
| Natural Science Quantitative（SQ）or General（SG） | 4 | $\square$ |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| TERM FIVE： 6175 CREDIT HOURS |  |  |  |  |  |
| ART 360 Ceramic Throwing | 3 | 区 |  | Grade of C | －Art elective course cannot be ARA 311，ARS 100 or ARS 300 <br> －Students must complete 6 hours of upper division ARS coursework（not from ARS 300）；Must include 1 non－western course and $120^{\text {th }}$ century course． |
| ART 364 Ceramic Handbuilding I | 3 | 囚 |  | Grade of C |  |
| Upper division ARS course（non－western or $20{ }^{\text {th }}$ Century focus） | 3 | 区 |  | Grade of C |  |
| Art elective course：choose from courses with ARA，ARE，ARS or ART prefix | 3 | $\square$ |  | Grade of C |  |
| Upper division Literacy and Critical Inquiry（L） | 3 | 区 |  |  |  |
| TERM SIX： $76 \mathbf{9 0}$ CREDIT HOURS |  |  |  |  |  |
| ART 460 Ceramic Clay | 3 | 区 |  | Grade of C | －Art elective course cannot be ARA 311，ARS 100 or ARS 300 |
| ART 466 Special Problems in Ceramics | 3 | ® |  | Grade of C |  |
| Ceramics Art elective－Choose one from ART 365 Ceramic Handbuilding II，ART 460 Ceramic Clay，ART 463 Ceramic Glaze， ART 466 Special Problems in Ceramics，or ART 494 | 3 | 区 |  | Grade of C |  |
| Upper division Humanities，Fine Arts，and Design（HU）OR Social and Behavioral Sciences（SB）OR if completed，take Elective | 3 | 区 |  |  |  |
| Elective | 3 | $\square$ |  |  |  |

Major Map：Art（Ceramics）－Bachelor of Fine Arts（B．F．A．）
Herberger College of the Arts，Tempe Campus
Catalog Year：2008－2009

| 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： 91105 CREDIT HOURS |  |  |  |  |  |
| Ceramics Art elective－Choose additional course from ART 365 Ceramic Handbuilding II，ART 460 Ceramic Clay，ART 463 Ceramic Glaze，ART 466 Special Problems in Ceramics，or ART 494 | 3 | 区 |  | Grade of C | －Art elective course cannot be ARA 311，ARS 100 or ARS 300 |
| Ceramics Art elective－Choose additional course from ART 365 Ceramic Handbuilding II，ART 460 Ceramic Clay，ART 463 Ceramic Glaze，ART 466 Special Problems in Ceramics，or ART 494 | 3 | 区 |  | Grade of C |  |
| Upper division Art elective course：choose from courses with ARA， ARE，ARS or ART prefix | 3 | 区 |  | Grade of C |  |
| Upper division Art elective course：choose from courses with ARA， ARE，ARS or ART prefix | 3 | 区 |  | Grade of C |  |
| Elective | 3 | $\square$ |  |  |  |
| TERM EIGHT： $106 \mathbf{1 2 0}$ CREDIT HOURS |  |  |  |  |  |
| ART 494 Special Topics：Senior Exhibition | 1 | 区 |  | Grade of C | －Art elective course cannot be ARA 311，ARS 100 or ARS 300 |
| Art elective course：choose from courses with ARA，ARE，ARS or ART prefix | 3 | $\square$ |  | Grade of C |  |
| Upper division Art elective course：choose from courses with ARA， ARE，ARS or ART prefix | 3 | 区 |  | Grade of C |  |
| Upper division Art elective course：choose from courses with ARA， ARE，ARS or ART prefix | 3 | 区 |  | Grade of C |  |
| Elective | 3 | $\square$ |  |  |  |

## 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） |
| $\circ$ | 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：

Major Map: Art (Drawing) - Bachelor of Fine Arts (B.F.A.)
Herberger College of The Arts, Tempe Campus
Catalog Year: 2008-2009


| Course Subject and Title （courses in bold／shading are critical） | Hrs． | Upper Division | Transfer Course／Grade | $\begin{aligned} & \text { Minimum Grade if } \\ & \text { Required } \\ & \hline \end{aligned}$ | Additional Critical Requirements Notes |
| :---: | :---: | :---: | :---: | :---: | :---: |
| TERM SIX： $76 \mathbf{9 0}$ CREDIT HOURS |  |  |  |  |  |
| ART 411 Advanced Drawing | 3 | 囚 |  | Grade of 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 $120^{\text {th }}$ century course． |
| ART 414 Life Drawing III | 3 | 区 |  | Grade of C |  |
| Upper division ARS course（ $20^{\text {th }}$ Century focus or ARS elective） | 3 | 区 |  | Grade of C |  |
| Upper division art elective course：choose from courses with ARA， ARE，ARS or ART prefix | 3 |  |  | Grade of C |  |
| Elective | 3 | $\square$ |  |  |  |
| TERM SEVEN： 91105 CREDIT HOURS |  |  |  |  |  |
| Drawing Art elective－Choose 1 from ART 411 Advanced Drawing， ART 414 Life Drawing III，ART 494 Special Topics or ART 499 Individualized Study | 3 | 区 |  | Grade of C | －Art elective course cannot be ARA 311，ARS 100 or ARS 300 |
| Drawing Art elective－Choose 1 from ART 411 Advanced Drawing， ART 414 Life Drawing III，ART 494 Special Topics：Drawing or ART 499 Individualized Study：Drawing | 3 | 区 |  | Grade of C |  |
| Upper division art elective course：choose from courses with ARA， ARE，ARS or ART prefix | 3 | 区 |  | Grade of C |  |
| Upper division Literacy and Critical Inquiry（L） | 3 | 区 |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| TERM EIGHT： 106120 CREDIT HOURS |  |  |  |  |  |
| ART 494 Special Topics：Senior Exhibition | 1 | 区 |  | Grade of C | －Art elective course cannot be ARA 311，ARS 100 or ARS 300 |
| Drawing Art elective－Choose 1 from ART 411 Advanced Drawing， ART 414 Life Drawing III，ART 494 Special Topics：Drawing or ART 499 Individualized Study：Drawing | 3 | 区 |  | Grade of C |  |
| Upper division Art elective course：choose from courses with ARA， ARE，ARS or ART prefix | 3 | 区 |  | Grade of C |  |
| Art elective course：choose from courses with ARA，ARE，ARS or ART prefix | 2 | $\square$ |  | Grade of C |  |
| Elective | 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：



| Course Subject and Title （courses in bold／shading are critical） | Hrs． | Upper Division | Transfer Course／Grade | $\begin{aligned} & \hline \text { Minimum Grade if } \\ & \text { Required } \\ & \hline \end{aligned}$ | Additional Critical Requirement Notes |
| :---: | :---: | :---: | :---: | :---: | :---: |
| TERM SEVEN： 91105 CREDIT HOURS |  |  |  |  |  |
| Fibers elective－Choose additional course from ART 476 Woven Structures II，ART 477 Printed Textiles，ART 478 Advanced Surface Design，ART 479 3D Fibers，ART 494 Special Topics：Fibers，or ART 499 Individualized Study | 3 |  |  | Grade of C | －Art elective course cannot be ARA 311，ARS 100 or ARS 300 |
| Fibers elective－Choose additional course from ART 476 Woven Structures II，ART 477 Printed Textiles，ART 478 Advanced Surface Design，ART 479 3D Fibers，ART 494 Special Topics：Fibers，or ART 499 Individualized Study | 3 | 区 |  | Grade of C |  |
| Upper division Art elective course：choose from courses with ARA， ARE，ARS or ART prefix | 3 | 区 |  | Grade of C |  |
| Upper division Art elective course：choose from courses with ARA， ARE，ARS or ART prefix | 3 | 区 |  | Grade of C |  |
| Elective | 2 | $\square$ |  |  |  |
| TERM EIGHT： 106120 CREDIT HOURS |  |  |  |  |  |
| ART 494 Special Topics：Senior Exhibition | 1 | 区 |  | Grade of C | －Art elective course cannot be ARA 311，ARS 100 or ARS 300 |
| Fibers elective－Choose additional course from ART 476 Woven Structures II，ART 477 Printed Textiles，ART 478 Advanced Surface Design，ART 479 3D Fibers，ART 494 Special Topics：Fibers，or ART 499 Individualized Study | 3 | 区 |  | Grade of C |  |
| Upper division Art elective course：choose from courses with ARA， ARE，ARS or ART prefix | 3 | 区 |  | Grade of C |  |
| Art elective course：choose from courses with ARA，ARE，ARS or ART prefix | 3 | $\square$ |  | Grade of C |  |
| Elective | 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：


Major Map：Art（Intermedia）－Bachelor of Fine Arts（B．F．A．） Herberger College of The Arts，Tempe Campus Catalog Year：2008－2009

| Course Subject and Title （courses in bold／shading are critical） | Hrs． | $\begin{aligned} & \hline \text { Upper } \\ & \text { Division } \end{aligned}$ | Transfer Course／Grade | Minimum Grade if Required | Additional Critical Requirement Notes |
| :---: | :---: | :---: | :---: | :---: | :---: |
| TERM SIX： 7690 CREDIT HOURS |  |  |  |  |  |
| ART 440 New Media Concepts and ART 441 Video Art | 3／1 | 囚 |  | Grade of C | －Art Elective course cannot be from ARA 311，ARS 100 or 300 |
| Upper division Intermedia core course | 3 | 区 |  | Grade of C |  |
| Upper division art elective course：choose from courses with ARA， ARE，ARS or ART prefix | 3 | 囚 |  | Grade of C |  |
| Upper division Humanities，Fine Arts，and Design（HU）OR Social and Behavioral Sciences（SB）OR if completed，take Elective | 3 | 区 |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| TERM SEVEN： 91105 CREDIT HOURS |  |  |  |  |  |
| Intermedia Art elective－choose 1 from ART 345 Visualization \＆ Prototyping 1，ART 346 3D Computer Imagining \＆Animation，ART 348 Animation Motion Studies，ART 449 Computer Animation \＆ Video，ART 450 Computer Animation \＆Audio，ART 470 Computer Animation Portfolio，ART 494 Special Topics：Intermedia，or ART 499 Individualized Study | 3 | 囚 |  | Grade of C | －Art Elective course cannot be from ARA 311，ARS 100 or 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 $120^{\text {th }}$ century course． |
| Upper division ARS course（ $20^{\text {th }}$ Century focus or elective） | 3 | 区 |  | Grade of C |  |
| Upper division art elective course：choose from courses with ARA， ARE，ARS or ART prefix | 3 | 囚 |  | Grade of C |  |
| Art elective course：choose from courses with ARA，ARE，ARS or ART prefix | 3 | $\square$ |  | Grade of C |  |
| Elective | 1 | $\square$ |  |  |  |
| TERM EIGHT： $106 \mathbf{1 2 0}$ CREDIT HOURS |  |  |  |  |  |
| ART 494 Special Topics：Senior Exhibition | 1 | 区 |  | Grade of C | －Art Elective course cannot be from ARA 311，ARS 100 or 300 |
| Intermedia Art elective－choose 1 from ART 345 Visualization \＆ Prototyping 1，ART 346 3D Computer Imagining \＆Animation，ART 348 Animation Motion Studies，ART 449 Computer Animation \＆ Video，ART 450 Computer Animation \＆Audio，ART 470 Computer Animation Portfolio，ART 494 Special Topics：Intermedia，or ART 499 Individualized Study | 3 | 区 |  | Grade of C |  |
| Intermedia Art elective－choose 1 from ART 345 Visualization \＆ Prototyping 1，ART 346 3D Computer Imagining \＆Animation，ART 348 Animation Motion Studies，ART 449 Computer Animation \＆ Video，ART 450 Computer Animation \＆Audio，ART 470 Computer Animation Portfolio，ART 494 Special Topics：Intermedia，or ART 499 Individualized Study | 3 | 区 |  | Grade of C |  |
| Upper Division Elective | 3 | 区 |  |  |  |
| Elective | 3 | $\square$ |  |  |  |

## Graduation Requirements Summary：

| Total Hours（120 <br> minimum） | Total Hrs at ASU（30 <br> minimum） | Hrs Resident Credit for Academic <br> 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：



Major Map：Art（Metals）－Bachelor of Fine Arts（B．F．A．） Herberger College of the Arts，Tempe Campus Catalog Year：2008－2009

| Course Subject and Title （courses in bold／shading are critical） | Hrs． | $\begin{aligned} & \hline \text { Upper } \\ & \text { Division } \end{aligned}$ | Transfer Course／Grade | Minimum Grade if Required | Additional Critical Requirement Notes |
| :---: | :---: | :---: | :---: | :---: | :---: |
| TERM SIX： $76 \mathbf{9 0}$ CREDIT HOURS |  |  |  |  |  |
| ART 472 Metalworking IV or ART 473 Metalworking：Special Problems | 3 | 囚 |  | Grade of C | －Art elective course cannot be ARA 311，ARS 100 or ARS 300 |
| Metals elective－choose 1 from：ART 472 Metalworking IV，ART 473 Metalworking：Special Problems，ART 494 Special Topics：Metals or ART 499 Individualized Study | 3 | 区 |  | Grade of C |  |
| Art elective course：choose from courses with ARA，ARE，ARS or ART prefix | 3 | $\square$ |  | Grade of C |  |
| Upper division Humanities，Fine Arts，and Design（HU）OR Social and Behavioral Sciences（SB）OR if completed，take Elective | 3 | 区 |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| TERM SEVEN： 91105 CREDIT HOURS |  |  |  |  |  |
| ART 472 Metalworking IV or ART 473 Metalworking：Special Problems | 3 | 区 |  | Grade of C | －Art elective course cannot be ARA 311，ARS 100 or ARS 300 <br> －Students must complete 6 hours of upper division ARS coursework（not from ARS 300），Must include 1 non－western course and $120^{\text {th }}$ century course． |
| Metals elective－choose 1 from：ART 472 Metalworking IV，ART 473 Metalworking：Special Problems，ART 494 Special Topics：Metals or ART 499 Individualized Study | 3 | 区 |  | Grade of C |  |
| Upper division ARS course（non－western or $20^{\text {th }}$ Century focus） | 3 | 区 |  | Grade of C |  |
| Upper division Art elective course：choose from courses with ARA， ARE，ARS or ART prefix | 3 | 区 |  | Grade of C |  |
| Elective | 3 | $\square$ |  |  |  |
| TERM EIGHT： $106 \mathbf{1 2 0}$ CREDIT HOURS |  |  |  |  |  |
| ART 494 Special Topics：Senior Exhibition | 1 | 区 |  | Grade of C | －Art elective course cannot be ARA 311，ARS 100 or ARS 300 |
| Upper division Art elective course：choose from courses with ARA， ARE，ARS or ART prefix | 3 | 区 |  | Grade of C |  |
| Upper division Art elective course：choose from courses with ARA， ARE，ARS or ART prefix | 3 | 区 |  | Grade of C |  |
| Upper division Art elective course：choose from courses with ARA， ARE，ARS or ART prefix | 3 | 区 |  | Grade of C |  |
| Elective | 2 | $\square$ |  |  |  |

## Graduation Requirements Summary：

| Total Hours（120 <br> minimum） | Total Hrs at ASU（30 <br> minimum） | Hrs Resident Credit for Academic <br> 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：

Major Map：Art（Museum Studies）－Bachelor of Arts（B．A．）
Herberger College of The Arts，Tempe Campus
Catalog Year：2008－2009

|  |  |  | Completed ATP：$\square$ Yes $\square$ No |  | Completed AGEC： $\square$ YesNo |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Course Subject and Title （courses in bold／shading are critical） | Hrs． | Upper Division | Transfer Course／Grade | Minimum Grade if Required |  |
| TERM ONE： 015 CREDIT HOURS |  |  |  |  |  |
| ASU 101：The ASU Experience | 1 | $\square$ |  |  | －ASU 101 is for freshman ASU 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 <br> －\＃\＃Second language requirement：cannot select from American Sign Language <br> －First－year composition requirement must be completed by end of term 3 <br> －MAT 142 （or higher）（MA）must be completed by end of term 2 <br> －Minimum 3.0 cumulative GPA required |
| Choose 1 from：ARS 101 Art Prehistory Through Middle Ages or ARS 102 Art from Renaissance to Present（HU \＆H） | 3 | $\square$ |  | Grade of B－ |  |
| \＃\＃Second Language | 4 | $\square$ |  | Grade of C |  |
| ENG 101 and 102：First－Year Composition or ENG 107 and 108：English for Foreign Students or ENG 105：Advanced First－Year Composition | 3 | $\square$ |  | Grade of B－ |  |
| MAT 142 College Mathematics（MA） | 3 | $\square$ |  |  |  |
| Social and Behavioral Sciences（SB） | 3 | $\square$ |  |  |  |
| TERM TWO： 1630 CREDIT HOURS |  |  |  |  |  |
| Choose one additional course from：ARS 101 Art Prehistory Through Middle Ages or ARS 102 Art from Renaissance to Present （HU \＆H） | 3 | $\square$ |  | Grade of B－ | －\＃\＃Second language requirement：cannot select from American Sign Language <br> －First－year composition requirement must be completed by end of term 3 <br> －MAT 142 （or higher）（MA）must be completed by end of term 2 <br> －Complete 30 hours <br> －Minimum 3.0 cumulative GPA required <br> －MILESTONE－Submit Museum Studies Declaration |
| \＃\＃Second Language | 3 | $\square$ |  | Grade of C |  |
| ENG 101 and 102：First－Year Composition or ENG 107 and 108：English for Foreign Students or ENG 105：Advanced First－Year Composition | 3 | $\square$ |  | Grade of B－ |  |
| Social and Behavioral Sciences（SB）and Cultural Diversity in the US （C） | 3 | $\square$ |  |  |  |
| Computer／Statistics／Quantitative applications（CS） | 3 | $\square$ |  |  |  |
| TERM THREE： 3145 CREDIT HOURS |  |  |  |  |  |
| Choose 1 from：ARS 201 Art of Asia or ARS 202 Art of Africa， Oceania and the Americas（HU \＆G） | 3 | $\square$ |  | Grade of C | －\＃\＃Second language requirement：cannot select from American Sign Language |
| \＃\＃Second Language | 4 | $\square$ |  | Grade of C |  |
| Natural Science－Quantitative（SQ） | 4 | $\square$ |  |  |  |
| Literacy and Critical Inquiry（L） | 3 | $\square$ |  |  |  |
| TERM FOUR： 4660 CREDIT HOURS |  |  |  |  |  |
| Choose 1 additional course from：ARS 201 Art of Asia or ARS 202 Art of Africa，Oceania and the Americas（HU \＆G） | 3 | $\square$ |  | Grade of C | －\＃\＃Second language requirement：cannot select from American Sign Language |
| \＃\＃Second Language | 4 | $\square$ |  | Grade of C |  |
| Upper division Humanities，Fine Arts，and Design（HU）OR <br> Social and Behavioral Sciences（SB）－recommend upper division art history to satisfy this requirement with Ancient，Medieval， <br> Renaissance／Baroque，Modern／Contemporary focus | 3 | 区 |  |  |  |
| Natural Science－Quantitative（SQ）or General（SG） | 4 | $\square$ |  |  |  |
| TERM FIVE： 6175 CREDIT HOURS |  |  |  |  |  |
| Upper division ARS course（Ancient，Medieval， Renaissance／Baroque，or Modern／Contemporary focus） | 3 | 区 |  | Grade of C |  |
| Upper division ASB or ARS course（AST 471 Intro to Museums recommended） | 3 | 区 |  | Grade of C |  |
| Related subject course | 3 | $\square$ |  |  |  |
| Upper division elective | 3 | 区 |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| TERM SIX： $76 \mathbf{9 0}$ CREDIT HOURS |  |  |  |  |  |
| Upper division ARS course（Ancient，Medieval，Renaissance／Baroque or Modern／Contemporary focus） | 3 | 囚 |  | Grade of C |  |
| ARS 480 Research Methods（L） | 3 | 区 |  | Grade of C |  |
| Related subject course | 3 | 区 |  |  |  |
| Upper division elective | 3 | 区 |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| TERM SEVEN： 91105 CREDIT HOURS |  |  |  |  |  |
| ARS 484 Internship | 3 | 区 |  | Grade of C |  |
| ARS 498 Pro－Seminar | 3 | 区 |  | Grade of C |  |
| Choose 1 from：ARS 460 Gallery Exhibitions or ART 409 Photographic Exhibition | 3 | 区 |  | Grade of C |  |
| Upper division elective | 3 | 区 |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| TERM EIGHT： $106 \mathbf{1 2 0}$ CREDIT HOURS |  |  |  |  |  |
| ARS 484 Internship | 3 | 区 |  | Grade of C |  |
| Upper division ARS course（Ancient，Medieval，Renaissance／Baroque or Modern／Contemporary focus） | 3 | 区 |  | Grade of C |  |
| Related subject course | 3 | $\square$ |  |  |  |
| Upper division elective | 3 | 区 |  |  |  |
| Elective | 3 | $\square$ |  |  |  |

## 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:

Major Map：Art（Painting）－Bachelor of Fine Arts（B．F．A．） Herberger College of The Arts，Tempe Campus Catalog Year：2008－2009

|  |  |  | Completed ATP：$\square$ Yes $\quad \square$ No |  | Completed AGEC：$\square$ Yes $\square$ No |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { Course Subject and Title } \\ & \text { (courses in bold/shading are critical) } \end{aligned}$ | Hrs． | Upper Division | Transfer Course／Grade | Minimum Grade if Required | Additional Critical Requirement Notes |
| TERM ONE： 015 CREDIT HOURS |  |  |  |  |  |
| ASU 101：The ASU Experience | 1 | $\square$ |  |  | －ASU 101 is for freshman ASU 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 <br> －First－year composition requirement must be completed by end of term 3 <br> －MAT 142 （or higher）（MA）must be completed by end of term 2 <br> －Minimum 3.0 cumulative GPA required in ARA， ARE，ARS，ART courses <br> －Minimum 2.7 cumulative GPA required for portfolio review |
| ART 111 Drawing I | 3 | $\square$ |  | Grade of C |  |
| ART 113 Color | 3 | $\square$ |  | Grade of C |  |
| Choose 1 from：ARS 101 Art Prehistory Through Middle Ages or ARS 102 Art from Renaissance to Present（HU \＆H） | 3 | $\square$ |  | Grade of C |  |
| ENG 101 and 102：First－Year Composition or ENG 107 and 108：English for Foreign Students or ENG 105：Advanced First－Year Composition | 3 | $\square$ |  | Grade of C |  |
| MAT 142：College Mathematics（MA） | 3 | $\square$ |  |  |  |
| TERM TWO： 1630 CREDIT HOURS |  |  |  |  |  |
| Choose 1 from：ART 112 2D Design or ART 115 3D Design | 3 | $\square$ |  | Grade of C | －First－year composition requirement must be completed by end of term 3 <br> －MAT 142 （or higher）（MA）must be completed by end of term 2 <br> －Minimum 3.0 cumulative GPA required in ARA， ARE，ARS，ART courses <br> －Minimum 2.7 cumulative GPA required for portfolio review |
| Choose 1 from：ART 223 Painting I or ART 227 Watercolor I | 3 | $\square$ |  | Grade of C |  |
| Choose one additional course from：ARS 101 Art Prehistory Through Middle Ages or ARS 102 Art from Renaissance to Present （HU \＆H） | 3 | $\square$ |  | Grade of C |  |
| ENG 101 and 102：First－Year Composition or ENG 107 and 108：English for Foreign Students or ENG 105：Advanced First－Year Composition | 3 | $\square$ |  | Grade of C |  |
| Computer／Statistics／Quantitative applications（CS） | 3 | $\square$ |  |  |  |
| TERM THREE： 3145 CREDIT HOURS |  |  |  |  |  |
| Choose 1 additional course from：ART 112 2D Design or ART 115 3D Design | 3 | $\square$ |  | Grade of C | －First－year composition requirement must be completed by end of term 3 <br> －Minimum 3.0 cumulative GPA required in ARA， ARE，ARS，ART courses <br> －Minimum 2.7 cumulative GPA required for portfolio review |
| Choose 1 additional course from：ART 223 Painting I or ART 227 Watercolor I | 3 | $\square$ |  | Grade of C |  |
| Social and Behavioral Science（SB）\＆Global Awareness（G） | 3 | $\square$ |  |  |  |
| Literacy and Critical Inquiry（L） | 3 | $\square$ |  |  |  |
| Natural Science－Quantitative（SQ） | 4 | $\square$ |  |  |  |
| TERM FOUR： 4660 CREDIT HOURS |  |  |  |  |  |
| Choose 1 3D art course from：ART 231 Sculpture I，ART 261 Ceramic Survey，ART 272 Metalworking I：Intro，ART 274 Wood I，ART 276 Fibers I，or ART 294 Special Topics：Intermedia | 3 | $\square$ |  | Grade of C | －Minimum 3.0 cumulative GPA required in ARA， ARE，ARS，ART courses <br> －Minimum 2.7 cumulative GPA required for portfolio review <br> －MILESTONE－Submit portfolio review by March 1 （see http：／／art．asu．edu／undergraduate／admission＿ud．ht $\mathrm{ml})$ <br> －MILESTONE－Completion of successful art portfolio review <br> －MILESTONE－Meet with a Herberger College advisor or faculty member in Painting once portfolio results are received <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 $120^{\text {th }}$ century course． |
| Choose 1 additional 3D or a 2D art course from：ART 201202 Photography I／Lab，ART 204 Photography II，ART 211 Drawing II，ART 214 Life Drawing I，ART 231 Sculpture I，ART 253 Intro to Printmaking ART 261 Ceramic Survey，ART 272 Metalworking I：Intro，ART 274 Wood I，ART 276 Fibers I，or ART 294 Special Topics：Intermedia | 3 | $\square$ |  | Grade of C |  |
| Upper division ARS course（20 ${ }^{\text {th }}$ Century focus）or ARS course（non－western focus） | 3 | $\square$ |  | Grade of C |  |
| Social and Behavioral Science（SB）\＆Cultural Diversity in the US（C） | 3 | $\square$ |  |  |  |
| Natural Science Quantitative（SQ）or General（SG） | 4 | $\square$ |  |  |  |
| TERM FIVE： 6175 CREDIT HOURS |  |  |  |  |  |
| ART 323 Painting II | 3 | 区 |  | Grade of 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 $120^{\text {th }}$ century course． |
| ART 327 Watercolor II | 3 | 区 |  | Grade of C |  |
| Upper division ARS course（20 ${ }^{\text {th }}$ Century focus）or ARS course（non－western focus） | 3 | 凹 |  | Grade of C |  |
| Upper division art elective course：choose from courses with ARA， ARE，ARS or ART prefix | 3 | 区 |  | Grade of C |  |
| Upper division Humanities，Fine Arts，and Design（HU）OR Social and Behavioral Sciences（SB）OR if completed，take Elective | 3 | 区 |  |  |  |


| $\begin{aligned} & \begin{array}{l} \text { Course Subject and Title } \\ \text { (courses in bold/shading are critical) } \end{array} \end{aligned}$ | Hrs． | Upper Division | Transfer Course／Grade | $\begin{aligned} & \text { Minimum Grade if } \\ & \text { Required } \end{aligned}$ | Additional Critical Requirement Notes |
| :---: | :---: | :---: | :---: | :---: | :---: |
| TERM SIX： $76 \mathbf{9 0}$ CREDIT HOURS |  |  |  |  |  |
| ART 423 Painting III | 3 | 区 |  | Grade of 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 $120^{\text {th }}$ century course． |
| Painting Art elective－choose 1 from：ART 423 Painting III，ART 425 Advanced Figure Painting，ART 427 Advanced Water Media，ART 494 Special Topics：Painting，or ART 499 Individualized Study： Painting | 3 | 区 |  | Grade of C |  |
| Upper division art elective course：choose from courses with ARA， ARE，ARS or ART prefix | 3 | 区 |  | Grade of C |  |
| Upper Division ARS course（ $20^{\text {th }}$ Century focus or ARS elective） | 3 | 区 |  | Grade of C |  |
| Elective | 3 | $\square$ |  |  |  |
| TERM SEVEN： 91105 CREDIT HOURS |  |  |  |  |  |
| Painting Art elective－choose 1 from：ART 423 Painting III，ART 425 Advanced Figure Painting，ART 427 Advanced Water Media，ART 494 Special Topics：Painting，or ART 499 Individualized Study： Painting | 3 | 区 |  | Grade of C | －Art elective course cannot be ARA 311，ARS 100 or ARS 300 |
| Painting Art elective－choose 1 from：ART 423 Painting III，ART 425 Advanced Figure Painting，ART 427 Advanced Water Media，ART 494 Special Topics：Painting，or ART 499 Individualized Study： Painting | 3 | 区 |  | Grade of C |  |
| Upper division art elective course：choose from courses with ARA， ARE，ARS or ART prefix | 3 | 区 |  | Grade of C |  |
| Upper division Literacy and Critical Inquiry（L） | 3 | 区 |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| TERM EIGHT： $106 \mathbf{1 2 0}$ CREDIT HOURS |  |  |  |  |  |
| ART 494 Special Topics：Senior Exhibition | 1 | 区 |  | Grade of C | －Art elective course cannot be ARA 311，ARS 100 or ARS 300 |
| Painting Art elective－choose 1 from：ART 423 Painting III，ART 425 Advanced Figure Painting，ART 427 Advanced Water Media，ART 494 Special Topics：Painting，or ART 499 Individualized Study： Painting | 3 | 区 |  | Grade of C |  |
| Upper division Art elective course：choose from courses with ARA， ARE，ARS or ART prefix | 3 | 区 |  | Grade of C |  |
| Art elective course：choose from courses with ARA，ARE，ARS or ART prefix | 2 | $\square$ |  | Grade of C |  |
| Elective | 3 | $\square$ |  |  |  |

## Graduation Requirements Summary：

| Total Hours（120 <br> minimum） | Total Hrs at ASU（30 <br> minimum） | Hrs Resident Credit for Academic <br> 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：

Major Map: Art (Photography) -
Bachelor of Fine Arts (B.F.A.)
Herberger College of the Arts, Tempe Campus
Catalog Year: 2008-2009

|  |  |  | Completed ATP: $\square$ Yes $\square$ No |  | Completed AGEC: $\square$ Yes $\square$ No |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Course Subject and Title (courses in bold/shading are critical) | Hrs. | Upper Division | Transfer Course/Grade | Minimum Grade if Required Required | Additional Critical Requirement Notes |
| TERM ONE: 015 CREDIT HOURS |  |  |  |  |  |
| ASU 101: The ASU Experience | 1 | $\square$ |  |  | - ASU 101 is for freshman ASU 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 <br> - First-year composition requirement must be completed by end of term 3 <br> - MAT 142 (or higher) (MA) must be completed by end of term 2 <br> - ART 201 and 202 must be completed by end of term 2 <br> - Minimum 3.0 cumulative GPA required in ARA, ARE, ARS, ART courses <br> - Minimum 2.7 cumulative GPA required for portfolio review |
| Choose 1 from: ART 111 Drawing I, ART 112 2D Design, ART 113 Color, or ART 115 3D Design | 3 | $\square$ |  | Grade of C |  |
| ART 201 Photography I and ART 202 Photography I Lab | 3/0 | $\square$ |  | Grade of C |  |
| Choose 1 from: ARS 101 Art Prehistory Through Middle Ages or ARS 102 Art from Renaissance to Present (HU \& H) | 3 | $\square$ |  | Grade of C |  |
| ENG 101 or 102: First-Year Composition or ENG 107 or 108: English for Foreign Students or ENG 105: Advanced First-Year Composition | 3 | $\square$ |  | Grade of C |  |
| MAT 142 College Mathematics (MA): | 3 | $\square$ |  |  |  |
| TERM TWO: 1630 CREDIT HOURS |  |  |  |  |  |
| Choose 1 additional course from: ART 111 Drawing I, ART 112 2D Design, ART 113 Color, or ART 115 3D Design | 3 | $\square$ |  | Grade of C | - First-year composition requirement must be completed by end of term 3 <br> - MAT 142 (or higher) (MA) must be completed by end of term 2 <br> - ART 201 and 202 must be completed by end of term 2 <br> - Minimum 3.0 cumulative GPA required in ARA, ARE, ARS, ART courses <br> - Minimum 2.7 cumulative GPA required for portfolio review |
| ART 204 Photography II (if ART 201/202 completed term1) or ART 201 Photography I and ART 202 Photography I Lab | 3 | $\square$ |  | Grade of C |  |
| Choose one additional course from: ARS 101 Art Prehistory Through Middle Ages or ARS 102 Art from Renaissance to Present (HU \& H) | 3 | $\square$ |  | Grade of C |  |
| ENG 101 or 102: First-Year Composition or ENG 107 or 108: English for Foreign Students or ENG 105: Advanced First-Year Composition | 3 | $\square$ |  | Grade of C |  |
| Social \& Behavioral Sciences (SB) AND Cultural Diversity in the US (C) | 3 | $\square$ |  |  |  |
| TERM THREE: 3145 CREDIT HOURS |  |  |  |  |  |
| Choose 1 additional course from: ART 111 Drawing I, ART 112 2D Design, ART 113 Color, or ART 115 3D Design or ART 204 Photography II (if not completed term 2) | 3 | $\square$ |  | Grade of C | - First-year composition requirement must be completed by end of term 3 <br> - Minimum 3.0 cumulative GPA required in ARA, ARE, ARS, ART courses <br> - Minimum 2.7 cumulative GPA required for portfolio review <br> - IF ART 204 completed term 2: <br> - MILESTONE - Submit portfolio review by October 1 (see http://art.asu.edu/undergraduate/admission_u d.html) <br> - MILESTONE - Completion of successful art portfolio review <br> - MILESTONE - Meet with a Herberger College advisor or faculty member in Photography once portfolio results are received |
| Choose 1 additional course from: ART 111 Drawing I, ART 112 2D <br> Design, ART 113 Color, or ART 115 3D Design or ART 204 <br> Photography II (if not completed term 2) | 3 | $\square$ |  | Grade of C |  |
| Natural Science Quantitative (SQ) | 4 | $\square$ |  | Grade of C |  |
| Social and Behavioral Science (SB) \& Global Awareness (G) | 3 | $\square$ |  |  |  |
| Computer/Statistics/Quantitative applications (CS) | 3 | $\square$ |  |  |  |
| TERM FOUR: $46 \mathbf{6 0}$ CREDIT HOURS |  |  |  |  |  |
| Choose 1 3D art course from: ART 231 Sculpture I, ART 261 Ceramic Survey, ART 272 Metalworking I: Intro, ART 274 Wood I, ART 276 Fibers I, or ART 294 Special Topics: Intermedia | 3 | 区 |  | Grade of C | - Minimum 3.0 cumulative GPA required in ARE, ARS, ART courses <br> - Minimum 2.7 cumulative GPA required for portfolio review <br> - IF ART 204 completed term 3: <br> - MILESTONE - Submit portfolio review by March 1 (see http://art.asu.edu/undergraduate/admission_u d.html) <br> - MILESTONE - Completion of successful art portfolio review <br> - MILESTONE - Meet with a Herberger College advisor or faculty member in Photography once portfolio results are received |
| If successful art portfolio review take: ART 304 Advanced Photography; otherwise take ART 200-level Elective from: ART 211 Drawing II, ART 214 Life Drawing I, ART 223 Painting I, ART 227 Watercolor I, ART 231 Sculpture I, ART 253 Intro to Printmaking ART 261 Ceramic Survey, ART 272 Metalworking I: Intro, ART 274 Wood I, ART 276 Fibers I, or ART 294 Special Topics: Intermedia | 3 | $\square$ |  | $\begin{aligned} & \text { Grade of C in ART } \\ & 304 \end{aligned}$ |  |
| ARA 202 Understanding Photographs | 3 | $\square$ |  |  |  |
| Literacy and Critical Inquiry (L) or ARS 250 History of Photography | 3 | $\square$ |  |  |  |
| Natural Science Quantitative (SQ) or General (SG) | 4 | $\square$ |  |  |  |

Major Map：Art（Photography）－
Bachelor of Fine Arts（B．F．A．）
Herberger College of the Arts，Tempe Campus
Catalog Year：2008－2009

| $\begin{aligned} & \hline \begin{array}{l} \text { Course Subject and Title } \\ \text { (courses in bold/shading are critical) } \end{array} \end{aligned}$ | Hrs． | Upper Division | Transfer Course／Grade | Minimum Grade if Required | Additional Critical Requirement Notes |
| :---: | :---: | :---: | :---: | :---: | :---: |
| TERM FIVE： 6175 CREDIT HOURS |  |  |  |  |  |
| Art 308 Digital Photographic Images I or 305 Color | 3 | 区 |  | Grade of C | －Art elective course cannot be ARA 311，ARS 100 or ARS 300 <br> －Students must complete 12 hours of ARS coursework（not from ARS 100 or 300），Must include ARS 250， 9 hours upper division and 1 non－western course． |
| ARS 250 History of Photography or Literacy and Critical Inquiry（L） | 3 | $\square$ |  | Grade of C |  |
| ART 2＊＊Choose 1 additional 2D or 3D art course from：ART 211 Drawing II，ART 214 Life Drawing I，ART 223 Painting I，ART 227 Watercolor I，ART 231 Sculpture I，ART 253 Intro to Printmaking ART 261 Ceramic Survey，ART 272 Metalworking I：Intro，ART 274 Wood I，ART 276 Fibers I，or ART 294 Special Topics：Intermedia or if already completed，take Elective | 3 | $\square$ |  | Grade of C |  |
| Upper division art elective course：choose from courses with ARA， ARE，ARS or ART prefix | 3 | 囚 |  | Grade of C |  |
| Upper division Humanities，Fine Arts，and Design（HU）OR Social and Behavioral Sciences（SB）or if completed，take Elective | 3 | 区 |  |  |  |
| TERM SIX： $76 \mathbf{9 0}$ CREDIT HOURS |  |  |  |  |  |
| ART 305 Color Photography or 308 Digital Photographic Images I | 3 | 区 |  | Grade of C | －Art elective course cannot be ARA 311，ARS 100 or ARS 300 <br> －Students must complete 12 hours of ARS coursework（not from ARS 100 or 300），Must include ARS 250， 9 hours upper division and 1 non－western course． |
| Upper division art elective course：choose from courses with ARA，ARE， ARS or ART prefix | 3 | $\boxtimes$ |  | Grade of C |  |
| Photography art elective－Choose 1 from：401，403，404，407，409，and ART or ARA 494 （Photo） | 3 | 区 |  | Grade of C |  |
| Upper division ARS course（non－Western focus） | 3 | 区 |  | Grade of C |  |
| Elective | 3 | $\square$ |  |  |  |
| TERM SEVEN： 91105 CREDIT HOURS |  |  |  |  |  |
| Photography art elective－Choose 1 from：401，403，404，407，409，and ART or ARA 494 （Photo） | 3 | 区 |  | Grade of C | －Art elective course cannot be ARA 311，ARS 100 or ARS 300 <br> －Students must complete 12 hours of ARS coursework（not from ARS 100 or 300），Must include ARS 250， 9 hours upper division and 1 non－western course． |
| Upper division art elective course：choose from courses with ARA，ARE， ARS or ART prefix | 3 | 区 |  | Grade of C |  |
| Upper division ARS course | 3 | 区 |  | Grade of C |  |
| Upper division Literacy and Critical Inquiry（L） | 3 | 区 |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| TERM EIGHT： $106 \mathbf{1 2 0}$ CREDIT HOURS |  |  |  |  |  |
| ART 494 Special Topics：Senior Exhibition | 1 | 区 |  | Grade of C | －Art elective course cannot be ARA 311，ARS 100 or ARS 300 <br> －Students must complete 12 hours of ARS coursework（not from ARS 100 or 300），Must include ARS 250， 9 hours upper division and 1 non－western course． |
| Photography art elective－Choose 1 from：401，403，404，407，409，and ART or ARA 494 （Photo） | 3 | 区 |  | Grade of C |  |
| Upper division Art elective course：choose from courses with ARA，ARE， ARS or ART prefix | 3 | 区 |  | Grade of C |  |
| Upper division ARS course | 3 | 区 |  | Grade of C |  |
| Elective | 3 | $\square$ |  |  |  |

## Graduation Requirements Summary：

| Total Hours（120 <br> minimum） | Total Hrs at ASU（30 <br> minimum） | Hrs Resident Credit for Academic <br> 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：

| $\circ$ | 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） |
| 0 | Natural Science－Quantitative（SQ） |
| $\circ$ | Natural Science－General（SG） |
| Oral | Studies Awareness Requirements |
| $\circ$ | Cultural Diversity in the US（C） |
| $\circ$ | Global Awareness（G） |
| $\circ$ | Historical Awareness（H） |

－First Year Composition
Additional Notes：

Major Map：Art（Printmaking）－Bachelor of Fine Arts （B．F．A．）<br>Herberger College of the Arts，Tempe Campus<br>Catalog Year：2008－2009

|  |  |  | Completed ATP：$\quad \square$ Yes $\quad \square$ No |  | Completed AGEC：$\square$ Yes $\square$ No |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Course Subject and Title （courses in bold／shading are critical） | Hrs． | Upper <br> Division | Transfer Course／Grade | Minimum Grade if Required | Additional Critical Requirement Notes |
| TERM ONE： 015 CREDIT HOURS |  |  |  |  |  |
| ASU 101：The ASU Experience | 1 | $\square$ |  |  | －ASU 101 is for freshman ASU 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 <br> －First－year composition requirement must be completed by end of term 3 <br> －MAT 142 （or higher）（MA）must be completed by end of term 2 <br> －Minimum 3.0 cumulative GPA required in ARA， ARE，ARS，ART courses <br> －Minimum 2.7 cumulative GPA required for portfolio review |
| Choose 1 from：ART 111 Drawing I，ART 112 2D Design，Art 115 3D Design | 3 | $\square$ |  | Grade of C |  |
| ART 113 Color | 3 | $\square$ |  | Grade of C |  |
| Choose 1 from：ARS 101 Art Prehistory Through Middle Ages or ARS 102 Art from Renaissance to Present（HU \＆H） | 3 | $\square$ |  | Grade of C |  |
| ENG 101 and 102：First－Year Composition or ENG 107 and 108：English for Foreign Students or ENG 105：Advanced First－Year Composition | 3 | $\square$ |  | Grade of C |  |
| MAT 142：College Mathematics（MA） | 3 | $\square$ |  |  |  |
| TERM TWO： 1630 CREDIT HOURS |  |  |  |  |  |
| Choose 1 additional course from：ART 111 Drawing I，ART 112 2D Design，Art 115 3D Design | 3 | $\square$ |  | Grade of C | －First－year composition requirement must be completed by end of term 3 <br> －MAT 142 （or higher）（MA）must be completed by end of term 2 <br> －Minimum 3.0 cumulative GPA required in ARA， ARE，ARS，ART courses <br> －Minimum 2.7 cumulative GPA required for portfolio review |
| Choose 1 additional course from：ART 111 Drawing I，ART 112 2D Design，Art 115 3D Design | 3 | $\square$ |  | Grade of C |  |
| Choose one additional course from：ARS 101 Art Prehistory Through Middle Ages or ARS 102 Art from Renaissance to Present （HU \＆H） | 3 | $\square$ |  | Grade of C |  |
| ENG 101 and 102：First－Year Composition or ENG 107 and 108：English for Foreign Students or ENG 105：Advanced First－Year Composition | 3 | $\square$ |  | Grade of C |  |
| Computer／Statistics／Quantitative applications（CS） | 3 | $\square$ |  |  |  |
| TERM THREE： 3145 CREDIT HOURS |  |  |  |  |  |
| ART 253 Intro to Printmaking | 3 | $\square$ |  | Grade of C | －First－year composition requirement must be completed by end of term 3 <br> －Minimum 3.0 cumulative GPA required in ARA， ARE，ARS，ART courses <br> －Minimum 2.7 cumulative GPA required for portfolio review |
| Choose 1 2D art course from：ART 201／202 Photography I／Lab， ART 204 Photography II，ART 211 Drawing II，ART 214 Life Drawing I，ART 223 Painting I，or ART 227 Watercolor I | 3 | $\square$ |  | Grade of C |  |
| Social and Behavioral Science（SB）\＆Global Awareness（G） | 3 | $\square$ |  |  |  |
| Literacy and Critical Inquiry（L） | 3 | $\square$ |  |  |  |
| Natural Science－Quantitative（SQ） | 4 | $\square$ |  |  |  |
| TERM FOUR： 4660 CREDIT HOURS |  |  |  |  |  |
| Choose 1 3D art course from：ART 231 Sculpture I，ART 261 Ceramic Survey，ART 272 Metalworking I：Intro，ART 274 Wood I，ART 276 Fibers I，or ART 294 Special Topics：Intermedia | 3 | $\square$ |  | Grade of C | －Minimum 3.0 cumulative GPA required in ARA， ARE，ARS，ART courses <br> －Minimum 2.7 cumulative GPA required for portfolio review <br> －MILESTONE－Submit portfolio review by March 1 （see http：／／art．asu．edu／undergraduate／admission＿ud．ht $\mathrm{ml})$ <br> －MILESTONE－Completion of successful art portfolio review <br> －MILESTONE－Meet with a Herberger College advisor or faculty member in Printmaking once portfolio results are received <br> －Students must complete 9 hours of ARS coursework（not from ARS 100 or 300），Must include 6 hours upper division and 1 non－western course． |
| Choose 1 additional 2D or 3D art course from：ART 201／202 Photography I／Lab，ART 204 Photography II，ART 211 Drawing II，ART 214 Life Drawing I，ART 223 Painting I，ART 227 Watercolor I，ART 231 Sculpture I，ART 261 Ceramic Survey， ART 272 Metalworking I：Intro，ART 274 Wood I，ART 276 Fibers I，or ART 294 Special Topics：Intermedia | 3 | $\square$ |  | Grade of C |  |
| ARS course | 3 | $\square$ |  | Grade of C |  |
| Social and Behavioral Science（SB）\＆Cultural Diversity in the US（C） | 3 | $\square$ |  |  |  |
| Natural Science Quantitative（SQ）or General（SG） | 4 | $\square$ |  |  |  |
| TERM FIVE： 6175 CREDIT HOURS |  |  |  |  |  |
| ART 351 Intaglio I | 3 | 区 |  | Grade of 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 and 1 non－western course． |
| ART 352 Lithography I | 3 | 囚 |  | Grade of C |  |
| Upper division ARS course（non－western focus） | 3 | 区 |  | Grade of C |  |
| Upper division art elective course：choose from courses with ARA， ARE，ARS or ART prefix | 3 | 囚 |  | Grade of C |  |
| Upper division Humanities，Fine Arts，and Design（HU）OR Social and Behavioral Sciences（SB）OR if completed，take Elective | 3 | ® |  |  |  |

Major Map：Art（Printmaking）－Bachelor of Fine Arts
（B．F．A．）
Herberger College of the Arts，Tempe Campus
Catalog Year：2008－2009

| 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 SIX： $76 \mathbf{9 0}$ CREDIT HOURS |  |  |  |  |  |
| ART 354 Screen Printing I | 3 | 囚 |  | Grade of 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 and 1 non－western course． |
| Printmaking elective－choose 1 from：ART 355 Photo Process for Printmaking I，ART 451 Advanced Intaglio，ART 452 Advanced Lithography，ART 454 Advanced Screen Printing，ART 455 Advanced Photo Process for Printmaking，ART 456 Fine Printing \＆Bookmaking I，ART 457 Fine Printing \＆Bookmaking II，ART 458 Papermaking， ART 459 Monoprinting，ART 494 Special Topics，or ART 499 Individualized Study | 3 | 囚 |  | Grade of C |  |
| Upper division art elective course：choose from courses with ARA， ARE，ARS or ART prefix | 3 | 区 |  | Grade of C |  |
| Upper division ARS course（non－western focus or ARS elective） | 3 | 区 |  | Grade of C |  |
| Elective | 3 | $\square$ |  |  |  |
| TERM SEVEN： $91 \mathbf{1 0 5}$ CREDIT HOURS |  |  |  |  |  |
| Printmaking elective－choose 1 from：ART 355 Photo Process for Printmaking I，ART 451 Advanced Intaglio，ART 452 Advanced Lithography，ART 454 Advanced Screen Printing，ART 455 Advanced Photo Process for Printmaking，ART 456 Fine Printing \＆Bookmaking I，ART 457 Fine Printing \＆Bookmaking II，ART 458 Papermaking， ART 459 Monoprinting，ART 494 Special Topics，or ART 499 Individualized Study | 3 | 囚 |  | Grade of C | －Art elective course cannot be ARA 311，ARS 100 or ARS 300 |
| Printmaking elective－choose 1 from：ART 355 Photo Process for Printmaking I，ART 451 Advanced Intaglio，ART 452 Advanced Lithography，ART 454 Advanced Screen Printing，ART 455 Advanced Photo Process for Printmaking，ART 456 Fine Printing \＆Bookmaking I，ART 457 Fine Printing \＆Bookmaking II，ART 458 Papermaking， ART 459 Monoprinting，ART 494 Special Topics，or ART 499 Individualized Study | 3 | 区 |  | Grade of C |  |
| Upper division art elective course：choose from courses with ARA， ARE，ARS or ART prefix | 3 | 区 |  | Grade of C |  |
| Upper division Literacy \＆Critical Inquiry（L） | 3 | 区 |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| TERM EIGHT： $106 \mathbf{1 2 0}$ CREDIT HOURS |  |  |  |  |  |
| ART 494 Special Topics：Senior Exhibition | 1 | 区 |  | Grade of C | －Art elective course cannot be ARA 311，ARS 100 or ARS 300 |
| Printmaking elective－choose 1 from：ART 355 Photo Process for Printmaking I，ART 451 Advanced Intaglio，ART 452 Advanced Lithography，ART 454 Advanced Screen Printing，ART 455 Advanced Photo Process for Printmaking，ART 456 Fine Printing \＆Bookmaking I，ART 457 Fine Printing \＆Bookmaking II，ART 458 Papermaking， ART 459 Monoprinting，ART 494 Special Topics，or ART 499 Individualized Study | 3 | 区 |  | Grade of C |  |
| Upper division Art elective course：choose from courses with ARA， ARE，ARS or ART prefix | 3 | 区 |  | Grade of C |  |
| Art elective course：choose from courses with ARA，ARE，ARS or ART prefix | 2 | $\square$ |  | Grade of C |  |
| Elective | 3 | $\square$ |  |  |  |

## Graduation Requirements Summary：

| Total Hours（120 <br> minimum） | Total Hrs at ASU（30 <br> minimum） | Hrs Resident Credit for Academic <br> 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：



Major Map：Art（Sculpture）－Bachelor of Fine Arts（B．F．A．）
Herberger College of The Arts，Tempe Campus
Catalog Year：2008－2009

| Course Subject and Title （courses in bold／shading are critical） | Hrs． | $\begin{aligned} & \hline \text { Upper } \\ & \text { Division } \end{aligned}$ | Transfer Course／Grade | Minimum Grade if Required | Additional Critical Requirement Notes |
| :---: | :---: | :---: | :---: | :---: | :---: |
| TERM SIX： 7690 CREDIT HOURS |  |  |  |  |  |
| ART 332 Sculpture III | 3 | 区 |  | Grade of C | －Art elective course cannot be ARA 311，ARS 100 or ARS 300 |
| Sculpture art elective－choose 1 from：ART 374 Wood II，ART 432 Neon Sculpture，ART 436 Architectural Sculpture，ART 437 Film Animation，ART 438 Experimental Systems in Sculpture，ART 494 Special Topics：Sculpture | 3 | 囚 |  | Grade of C |  |
| Upper division art elective course：choose from courses with ARA， ARE，ARS or ART prefix | 3 | 区 |  | Grade of C |  |
| Upper division Humanities，Fine Arts，and Design（HU）OR Social and Behavioral Sciences（SB）OR if complete，take Elective | 3 | 区 |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| TERM SEVEN： 91105 CREDIT HOURS |  |  |  |  |  |
| ART 431 Special Problems in Sculpture | 3 | 区 |  | Grade of C | －Art elective course cannot be ARA 311，ARS 100 or ARS 300 |
| Sculpture art elective－choose 1 from：ART 374 Wood II，ART 432 Neon Sculpture，ART 436 Architectural Sculpture，ART 437 Film Animation，ART 438 Experimental Systems in Sculpture，ART 494 Special Topics：Sculpture | 3 | 区 |  | Grade of C |  |
| Upper division art elective course：choose from courses with ARA， ARE，ARS or ART prefix | 3 | 区 |  | Grade of C |  |
| Upper division art elective course：choose from courses with ARA， ARE，ARS or ART prefix | 3 | 区 |  | Grade of C |  |
| Elective | 1 | $\square$ |  |  |  |
| TERM EIGHT： $106 \mathbf{1 2 0}$ CREDIT HOURS |  |  |  |  |  |
| ART 494 Special Topics：Senior Exhibition | 1 | 区 |  | Grade of C | －Art elective course cannot be ARA 311，ARS 100 or ARS 300 |
| Sculpture art elective－choose 1 from：ART 374 Wood II，ART 432 Neon Sculpture，ART 436 Architectural Sculpture，ART 437 Film Animation，ART 438 Experimental Systems in Sculpture，ART 494 Special Topics：Sculpture | 3 | 区 |  | Grade of C |  |
| Upper division Art elective course：choose from courses with ARA， ARE，ARS or ART prefix | 3 | 区 |  | Grade of C |  |
| Upper division Art elective course：choose from courses with ARA， ARE，ARS or ART prefix | 3 | 囚 |  | Grade of C |  |
| Elective | 3 | $\square$ |  |  |  |

## Graduation Requirements Summary：

| Total Hours（120 <br> minimum） | Total Hrs at ASU（30 <br> minimum） | Hrs Resident Credit for Academic <br> 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：

## Major Map：Dance－Bachelor of Fine Arts（B．F．A．） Herberger College of The Arts，Tempe Campus Catalog Year：2008－2009

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 spring semester Enrolled Student Interview． These students will take non－major technique classes to help prepare for this interview．
－Enrolled（current）students：Interviews take place August and January．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．

|  |  |  | Completed ATP：$\square$ Yes $\square$ No |  | Completed AGEC：$\square$ Yes $\square$ No |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 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： 015 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> －Completed First Year Composition requirement by the end of semester 3 <br> －Students must complete MAT 142 or higher by the end of semester 2 |
| DAH 194：First－Year Seminar | 2 | $\square$ |  | Grade of C |  |
| DAN 134：Technique and Theory of Modern Dance | 3 | $\square$ |  | Grade of C |  |
| DAN 135：Technique and Theory of Ballet | 2 | $\square$ |  | Grade of C |  |
| DAN 194：Creative Process | 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 | $\square$ |  | Grade of C |  |
| MAT 142：College Mathematics（MA） | 3 | $\square$ |  |  |  |
| TERM TWO： 1630 CREDIT HOURS |  |  |  |  |  |
| DAH 194：First－Year Seminar | 2 | $\square$ |  | Grade of C | －Completed First Year Composition requirement by the end of semester 3 <br> －Students must complete MAT 142 or higher by the end of semester 2 |
| DAN 134：Technique and Theory of Modern Dance | 3 | $\square$ |  | Grade of C |  |
| DAN 135：Technique and Theory of Ballet | 2 | $\square$ |  | Grade of C |  |
| DAN 264：Improvisational Structures | 3 | $\square$ |  | Grade of C |  |
| DAH 201：Dance in World Cultures（HU，G） | 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 | $\square$ |  | Grade of C |  |
| TERM THREE： 3145 CREDIT HOURS |  |  |  |  |  |
| DAH 294：Second－Year Seminar | 2 | $\square$ |  | Grade of C | －Completed First Year Composition requirement by the end of semester 3 |
| DAN 221：Rhythmic Theory for Dance I | 2 | $\square$ |  | Grade of C |  |
| DAN 234：Technique and Theory of Modern Dance | 3 | $\square$ |  | Grade of C |  |
| DAN 235：Technique and Theory of Ballet | 2 | $\square$ |  | Grade of C |  |
| DAN 265：Approaches to Choreography | 3 | $\square$ |  | Grade of C |  |
| BIO 201：Human Anatomy／Physiology I（SG） | 4 | $\square$ |  |  |  |
| TERM FOUR： $46 \mathbf{6 0}$ CREDIT HOURS |  |  |  |  |  |
| DAH 294：Second－Year Seminar | 2 | $\square$ |  | Grade of C |  |
| DAN 222：Rhythmic Theory for Dance II | 2 | $\square$ |  | Grade of C |  |
| DAN 234：Technique and Theory of Modern Dance | 3 | $\square$ |  | Grade of C |  |
| DAN 235：Technique and Theory of Ballet | 2 | $\square$ |  | Grade of C |  |
| DAN 394：Contact Improvisation | 3 | 区 |  | Grade of C |  |
| DAN 352：Dance Education Theory | 3 | 区 |  | Grade of C |  |
| DAH 401：Dance History（HU） | 3 | 区 |  | Grade of C |  |
| TERM FIVE： 6175 CREDIT HOURS |  |  |  |  |  |
| DAH 394：Third－Year Seminar | 2 | 区 |  | Grade of C |  |
| DAN 334：Technique and Theory of Modern Dance | 3 | 囚 |  | Grade of C |  |
| DAN 437：Dance Kinesiology | 3 | 区 |  | Grade of C |  |
| DAN 350：Methods of Teaching Children＇s Dance | 3 | 区 |  | Grade of C |  |
| DAN 371：Dance Theatre | 1 | 区 |  | Grade of C |  |
| Computer／Statistics／Quantitative applications（CS）（recommend DAN 323：Dance，Computers and Multimedia） | 3 | $\square$ |  |  |  |
| TERM SIX： $76 \mathbf{9 0}$ CREDIT HOURS |  |  |  |  |  |
| DAH 394：Third－Year Seminar | 2 | 区 |  | Grade of C |  |
| DAN 334：Technique \＆Theory of Modern Dance | 3 | 区 |  | Grade of C |  |
| DAN 371：Dance Theatre | 1 | 区 |  | Grade of C |  |
| Literacy and Critical Inquiry（L）（Recommend DAH 301 or 302） | 3 | $\square$ |  |  |  |
| Natural Science Quantitative（SQ）or General（SG） | 4 | $\square$ |  |  |  |


| $\begin{aligned} & \hline \text { Course Subject and Title } \\ & \text { (courses in bold/shading are critical) } \end{aligned}$ | Hrs． | Upper Division | Transfer Course／Grade | Minimum Grade if Required | Additional Critical Requirement Notes |
| :---: | :---: | :---: | :---: | :---: | :---: |
| TERM SEVEN： 91105 CREDIT HOURS |  |  |  |  |  |
| DAN 480：Senior Performance in Dance or DAN 496：Special Topics | 2 | 区 |  | Grade of C |  |
| DAN 3＊＊or 4＊＊：Technique \＆Theory | 3 | 囚 |  | Grade of C |  |
| Upper Division Elective | 3 | 区 |  |  |  |
| Social \＆Behavioral Science（SB）AND Cultural Awareness in the US（C）OR Historical Awareness（H） | 3 | $\square$ |  |  |  |
| Upper division Literacy and Critical Inquiry（L）（Recommend DAH 301 or 302） | 3 | 区 |  |  |  |
| TERM EIGHT： 106120 CREDIT HOURS |  |  |  |  |  |
| DAN 371：Dance Theatre | 1 | 区 |  | Grade of C |  |
| DAN 480：Senior Performance in Dance or DAN 496：Special Topics | 2 | ® |  | Grade of C |  |
| Upper Division Elective | 2 | 区 |  |  |  |
| Humanities，Fine Arts \＆Design（HU）（recommend MUS 340： Survey of Music History） | 3 | $\square$ |  |  |  |
| Social \＆Behavioral Science（SB）AND remaining Cultural Awareness in the US（C）OR Historical Awareness（H） | 3 | $\square$ |  |  |  |

## Graduation Requirements Summary：

| Total Hours（120 <br> minimum） | Total Hrs at ASU（30 <br> minimum） | Hrs Resident Credit for Academic <br> 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：

Major Map：Dance（Teacher Education）－<br>Bachelor of Fine Arts（B．F．A．）<br>Herberger College of The Arts，Tempe Campus<br>Catalog Year：2008－2009

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 spring semester Enrolled Student Interview． These students will take non－major technique classes to help prepare for this interview．
－Enrolled（current）students：Interviews take place August and January．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．

|  |  |  | Completed ATP：$\square$ Yes $\square$ No |  | Completed AGEC：$\square$ Yes $\square$ No |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 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： 015 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> －Completed First Year Composition requirement by the end of semester 3 <br> －Students must complete MAT 142 or higher by the end of semester 2 |
| DAH 194：First－Year Seminar | 2 | $\square$ |  | Grade of C |  |
| DAN 134：Technique and Theory of Modern Dance | 3 | $\square$ |  | Grade of C |  |
| DAN 135：Technique and Theory of Ballet | 2 | $\square$ |  | Grade of C |  |
| DAN 194：Creative Process | 3 | $\square$ |  | Grade of C |  |
| ENG 101 or 102：First－Year Composition ENG 105：Advanced First－Year Composition ENG 107 or 108：English for Foreign Students | 3 | $\square$ |  | Grade of C |  |
| MAT 142：College Mathematics（MA） | 3 | $\square$ |  |  |  |
| TERM TWO： 1630 CREDIT HOURS |  |  |  |  |  |
| DAH 194：First－Year Seminar | 2 | $\square$ |  | Grade of C | －Completed First Year Composition requirement by the end of semester 3 <br> －Students must complete MAT 142 or higher by the end of semester 2 <br> －ITC MILESTONE－Submit 1 letter of recommendation，draft of resume，and Freedom from Conviction of Crime Statement |
| DAH 201：Dance in World Cultures（HU，G） | 3 | $\square$ |  | Grade of C |  |
| DAN 134：Technique and Theory of Modern Dance | 3 | $\square$ |  | Grade of C |  |
| DAN 135：Technique and Theory of Ballet | 2 | $\square$ |  | Grade of C |  |
| DAN 264：Improvisational Structures | 3 | $\square$ |  | Grade of C |  |
| ENG 101 or 102：First－Year Composition ENG 105：Advanced First－Year Composition ENG 107 or 108：English for Foreign Students | 3 | $\square$ |  | Grade of C |  |
| TERM THREE： 3145 CREDIT HOURS |  |  |  |  |  |
| DAH 294：Second－Year Seminar | 2 | $\square$ |  | Grade of C | －Completed First Year Composition requirement by the end of semester 3 |
| DAN 221：Rhythmic Theory for Dance I | 2 | $\square$ |  | Grade of C |  |
| DAN 234：Technique and Theory of Modern Dance | 3 | $\square$ |  | Grade of C |  |
| DAN 235：Technique and Theory of Ballet | 2 | $\square$ |  | Grade of C |  |
| DAN 265：Approaches to Choreography | 3 | $\square$ |  | Grade of C |  |
| BIO 201：Human Anatomy／Physiology I（SG） | 4 | $\square$ |  |  |  |
| TERM FOUR： 4660 CREDIT HOURS |  |  |  |  |  |
| DAH 294：Second－Year Seminar | 2 | $\square$ |  | Grade of C | －ITC MILESTONE－Submit $2^{\text {nd }}$ letter of recommendation and final resume <br> －ITC MILESTONE－Complete natural sciences （SQ／SG）general studies course with a grade of C or better by the end of semester 4 |
| DAN 222：Rhythmic Theory for Dance II | 2 | $\square$ |  | Grade of C |  |
| DAN 234：Technique and Theory of Modern Dance | 3 | $\square$ |  | Grade of C |  |
| DAN 235：Technique and Theory of Ballet | 2 | $\square$ |  | Grade of C |  |
| DAN 394：Contact Improvisation | 3 | 区 |  | Grade of C |  |
| DAN 352：Dance Education Theory | 3 | 区 |  | Grade of C |  |
| DAH 401：Dance History（HU） | 3 | 区 |  | Grade of C |  |
| Computer／Statistics／Quantitative applications（CS）（recommend DAN 323：Dance，Computers and Multimedia） | 3 | 区 |  |  |  |
| TERM FIVE： 6175 CREDIT HOURS |  |  |  |  |  |
| DAN 334：Technique and Theory of Modern Dance | 3 | 区 |  | Grade of C | Students may shorten program of study by completing some coursework in the summer． |
| DAN 437：Dance Kinesiology | 3 | 区 |  | Grade of C |  |
| DAN 350：Methods of Teaching Children＇s Dance | 3 | 区 |  | Grade of C |  |
| DAH 394：Third－Year Seminar | 2 | 区 |  | Grade of C |  |
| Humanities，Fine Arts \＆Design（HU）（recommend MUS 340：Survey of Music History）or Social and Behavioral Science（SB）AND remaining Cultural Awareness in the US（C）OR Historical Awareness （H） | 3 | 区 |  |  |  |
| TERM SIX： $76 \mathbf{9 0}$ CREDIT HOURS |  |  |  |  |  |
| DAN 334：Technique and Theory of Modern Dance | 3 | 区 |  | Grade of C | Students may shorten program of study by completing some coursework in the summer． |
| DAN 354：Integrated Approaches to Dance Education | 3 | 区 |  | Grade of C |  |
| DAN 356：Methods of Teaching Contemporary Dance Technique／Composition | 3 | 区 |  | Grade of C |  |
| DAH 394：Third－Year Seminar | 2 | 区 |  | Grade of C |  |
| POS 110：Government \＆Politics（SB） | 3 | $\square$ |  |  |  |
| Natural Science Quantitative（SQ） | 4 | $\square$ |  |  |  |

Major Map：Dance（Teacher Education）－<br>Bachelor of Fine Arts（B．F．A．）<br>Herberger College of The Arts，Tempe Campus<br>Catalog Year：2008－2009

| Course Subject and Title （courses in bold／shading are critical） | Hrs． | $\begin{aligned} & \hline \text { Upper } \\ & \text { Division } \end{aligned}$ | Transfer Course／Grade | Minimum Grade if Required | Additional Critical Requirement Notes |
| :---: | :---: | :---: | :---: | :---: | :---: |
| TERM SEVEN： 91105 CREDIT HOURS |  |  |  |  |  |
| DAN 3＊＊or 4＊＊：Technique | 3 | 区 |  | Grade of C | Students may shorten program of study by completing some coursework in the summer． |
| DAN 371：Dance Theatre | 1 | 区 |  |  |  |
| ITC Literacy－Complete one course from： SPF 301：Culture and Schooling（L）or EDP 303：Human Development（L or SB） | 3 | 区 |  |  |  |
| RDG 301：Literacy in the Content Area | 3 | 囚 |  |  |  |
| SPF 401：Integrating Theory \＆Practice | 1 | 区 |  |  |  |
| SED 496：ITC（Field Experience） | 1 | 区 |  |  |  |
| Social \＆Behavioral Science（SB）AND remaining Cultural Awareness in the US（C）OR Historical Awareness（H） | 3 | $\square$ |  |  |  |
| TERM EIGHT： 106120 CREDIT HOURS |  |  |  |  |  |
| ITC Literacy－Complete remaining course from： SPF 301：Culture and Schooling（L） <br> EDP 303：Human Development（L or SB） | 3 | 区 |  |  | Students may shorten program of study by completing some coursework in the summer． |
| BLE 407：SEI for Secondary Schools | 3 | 区 |  |  |  |
| EDT 300 Computers in Education | 1 | 区 |  |  |  |
| SED 496：ITC（Field Experience） | 1 | 区 |  |  |  |
| TERM NINE |  |  |  |  |  |
| SED 478：Student Teaching | 12 | 区 |  | Grade of C |  |

## Graduation Requirements Summary：

| Total Hours（120 <br> minimum） | Total Hrs at ASU（30 <br> minimum） | Hrs Resident Credit for Academic <br> 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：

Major Map: Film (Film and Media Production) -<br>Bachelor of Arts (B.A.)-includes Pre-Film<br>Herberger College of The Arts, Tempe Campus<br>Catalog Year: 2008-2009



Major Map：Film（Film and Media Production）－ Bachelor of Arts（B．A．）－includes Pre－Film
Herberger College of The Arts，Tempe Campus
Catalog Year：2008－2009

| Course Subject and Title （courses in bold／shading are critical） | Hrs． | $\begin{aligned} & \hline \text { Upper } \\ & \text { Division } \end{aligned}$ | Transfer Course／Grade | $\begin{aligned} & \text { Minimum Grade if } \\ & \text { Required } \\ & \hline \end{aligned}$ | Additional Critical Requirement Notes |
| :---: | :---: | :---: | :---: | :---: | :---: |
| TERM SIX： $76 \mathbf{9 0}$ CREDIT HOURS |  |  |  |  |  |
| THE 403 Independent Film（HU） | 3 | 区 |  | Grade of C | －Minimum 3.0 cumulative GPA required in Theatre and Film courses <br> －Minimum 2.5 cumulative GPA required <br> －FMP 318 completed by the end of semester 6 ． |
| Upper division related elective－choose from film related courses with FMP，THE or THP prefix | 3 | 区 |  | Grade of C |  |
| Upper division related elective－choose from film related courses with FMP，THE or THP prefix | 3 | 区 |  | Grade of C |  |
| Elective | 3 | $\square$ |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| TERM SEVEN： 91105 CREDIT HOURS |  |  |  |  |  |
| FMP 480 Film Production Capstone 1 | 3 | 区 |  | Grade of C | －Minimum 3.0 cumulative GPA required in Theatre and Film courses <br> －Minimum 2.5 cumulative GPA required |
| Upper division related elective－choose from film related courses with FMP，THE or THP prefix | 3 | 区 |  | Grade of C |  |
| Upper division elective | 3 | 囚 |  |  |  |
| Upper division elective | 3 | 区 |  |  |  |
| Elective | 2 | $\square$ |  |  |  |
| TERM EIGHT： 106120 CREDIT HOURS |  |  |  |  |  |
| FMP 481 Film Production Capstone II | 3 | 区 |  | Grade of C | －Minimum 3.0 cumulative GPA required in Theatre and Film courses <br> －Minimum 2.5 cumulative GPA required |
| FMP 417 Business Ethics in Entertainment | 3 | 区 |  | Grade of C |  |
| Humanities，Fine Arts，and Design（HU）OR Social and Behavioral Sciences（SB）—if needed or Elective | 3 | $\square$ |  |  |  |
| Elective | 3 | $\square$ |  |  |  |

## 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（3．0 <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：

Major Map：Music－Bachelor of Arts（B．A．）<br>Herberger College of The Arts，Tempe Campus<br>Catalog Year：2008－2009

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．

|  |  |  | Completed ATP：$\square$ Yes $\square$ No |  | Completed AGEC：$\square$ Yes $\square$ No |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 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： 015 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> －Complete one semester of concert attendance with a grade of＂pass＂－students must complete six semesters <br> －Complete First Year Composition requirement by the end of semester 3 <br> －Complete Math requirement by the end of semester 2 <br> －Students must complete MAT 142 or higher by end of semester 2 |
| MUP 111：Studio Lessons | 2 | $\square$ |  | Grade of C |  |
| MTC 125：Basic Music Theory | 3 | $\square$ |  | Grade of C |  |
| MUP 3＊＊（Ensemble） | 1 | 区 |  | Grade of C |  |
| MUP 131：Class Piano | 1 | $\square$ |  | 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 |  |
| MUP 100：Concert Attendance | 0 | $\square$ |  |  |  |
| 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： 1630 CREDIT HOURS |  |  |  |  |  |
| MHL 140：Music as Culture | 3 | $\square$ |  | Grade of C | －Complete one semester of concert attendance with a grade of＂pass＂－students must complete six semesters <br> －Complete First Year Composition requirement by the end of semester 3 <br> －Complete Math requirement by the end of semester 2 |
| MUP 111：Studio Lessons | 2 | $\square$ |  | Grade of C |  |
| MTC 221：Music Theory： $\mathbf{1 8}^{\text {th }}$ Century | 3 | $\square$ |  | Grade of C |  |
| MUP 3＊＊（Ensemble） | 1 | 区 |  | Grade of C |  |
| MUP 132：Class Piano | 1 | $\square$ |  | Grade of C |  |
| ENG 101 or 102：First－Year Composition ENG 105：Advanced First－Year Composition ENG 107 or 108：English for Foreign Students | 3 | $\square$ |  | Grade of C |  |
| MUP 100：Concert Attendance | 0 | $\square$ |  |  |  |
| Social \＆Behavioral Science（SB）AND Cultural Diversity in the US （C），Global Awareness（G）OR Historical Awareness（H） | 3 | $\square$ |  |  |  |
| TERM THREE： 3145 CREDIT HOURS |  |  |  |  |  |
| MTC 222：Music Theory： $\mathbf{1 9}^{\text {th }}$ Century | 3 | $\square$ |  | Grade of C | －Complete one semester of concert attendance with a grade of＂pass＂－students must complete six semesters <br> －Complete First Year Composition requirement by the end of semester 3 <br> －Complete MUP 131 by end of semester 3 <br> －Second Language：Consult with advisor for approved list <br> －Complete Second Language 101 and 102 by the end of semester 4 |
| MUP 111：Studio Lessons | 2 | $\square$ |  | Grade of C |  |
| MUP 3＊＊（Ensemble） | 1 | 区 |  | Grade of C |  |
| MUP 231：Class Piano | 1 | $\square$ |  | Grade of C |  |
| MUP 100：Concert Attendance | 0 | $\square$ |  |  |  |
| Second Language 101 | 4 | $\square$ |  |  |  |
| Natural Science Quantitative（SQ） | 4 | $\square$ |  |  |  |
| TERM FOUR： $46 \mathbf{6 0}$ CREDIT HOURS |  |  |  |  |  |
| MTC 223：Music Theory：20 ${ }^{\text {th }}$ Century | 3 | $\square$ |  | Grade of C | －Complete one semester of concert attendance with a grade of＂pass＂－students must complete six semesters <br> －Complete Second Language 101 and 102 by the end of semester 4 <br> －Complete MUP 132 by end of semester 4 |
| MUP 111：Studio Lessons | 2 | $\square$ |  | Grade of C |  |
| MUP 3＊＊（Ensemble） | 1 | 区 |  | Grade of C |  |
| MUP 100：Concert Attendance | 0 | $\square$ |  |  |  |
| MUP 232：Class Piano | 1 | $\square$ |  | Grade of C |  |
| Second Language 102 | 4 | $\square$ |  |  |  |
| Natural Science Quantitative（SQ）or General（SG） | 4 | $\square$ |  |  |  |
| TERM FIVE： 6175 CREDIT HOURS |  |  |  |  |  |
| MHL 341：Music History | 3 | 区 |  | Grade of C | －Complete one semester of concert attendance with a grade of＂pass＂－students must complete six semesters <br> －Complete Second Language 201 and 202 by the end of semester 6 <br> －Complete MUP 231 by end of semester 5 <br> － 1 semester of Counterpoint is required．Choose MTC 320 Modal or MTC 321 Tonal and complete by the end of semester 6 |
| MTC 320：Modal Counterpoint or MTC 321：Tonal Counterpoint | 2 | 囚 |  | Grade of C |  |
| MUP 100：Concert Attendance | 0 | $\square$ |  |  |  |
| MHL 201：Mac Literacy for Musicians（CS） | 3 | $\square$ |  |  |  |
| Literacy and Critical Inquiry（L） | 3 | $\square$ |  |  |  |
| Second Language 201 or General Elective | 4 | $\square$ |  |  |  |

Major Map：Music－Bachelor of Arts（B．A．）
Herberger College of The Arts，Tempe Campus
Catalog Year：2008－2009

| 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 SIX： 7690 CREDIT HOURS |  |  |  |  |  |
| MHL 342 Music History II | 3 | 囚 |  | Grade of C | －Complete one semester of concert attendance with a grade of＂pass＂－students must complete six semesters <br> －Complete Second Language 201 and 202 by the end of semester 6 <br> －Complete MUP 232 by end of semester 6 <br> － 1 semester of Counterpoint is required．Choose MTC 320 Modal or MTC 321 Tonal and complete by the end of semester 6 |
| MTC 320：Modal Counterpoint or MTC 321：Tonal Counterpoint | 2 | 区 |  | Grade of C |  |
| MUP 100：Concert Attendance | 0 | $\square$ |  |  |  |
| Humanities，Fine Arts \＆Design（HU）AND Cultural Diversity in the US（C），Global Awareness（G）OR Historical Awareness（H） | 3 | $\square$ |  |  |  |
| Upper division Literacy and Critical Inquiry（L）（Recommend MHL course with Literacy designation） | 3 | 囚 |  |  |  |
| Second Language 202 or General Elective | 4 | $\square$ |  |  |  |
| TERM SEVEN： 91105 CREDIT HOURS |  |  |  |  |  |
| MUP 100：Concert Attendance | 0 | $\square$ |  |  | －Complete one semester of concert attendance with a grade of＂pass＂－if six semesters not completed |
| MTC 422：Musical Acoustics | 3 | 区 |  |  |  |
| Upper division MHL or MTC Elective | 3 | 区 |  |  |  |
| Upper division MHL or MTC Elective | 3 | 区 |  |  |  |
| Upper division MHL，MTC，MUP Elective | 3 | 区 |  |  |  |
| Humanities，Fine Arts \＆Design（HU） | 3 | 区 |  |  |  |
| TERM EIGHT： $106 \mathbf{1 2 0}$ CREDIT HOURS |  |  |  |  |  |
| MUP 100：Concert Attendance | 0 | $\square$ |  |  | －Complete one semester of concert attendance with a grade of＂pass＂－if six semesters not completed |
| MHL 3＊＊or 4＊＊History（Not required if you took upper division MHL course with Literacy designation in term 6） | 0－3 | 囚 |  |  |  |
| Upper division MHL or MTC Elective | 3 | 囚 |  |  |  |
| Upper division MHL，MTC，MUP Elective | 3 | 区 |  |  |  |
| Upper division MHL，MTC，MUP Elective | 3 | 囚 |  |  |  |
| Upper division Humanities，Fine Arts \＆Design（HU）or Social \＆Behavioral Science（SB） | 3 | 囚 |  |  |  |

## Graduation Requirements Summary：

| Total Hours（120 <br> minimum） | Total Hrs at ASU（30 <br> minimum） | Hrs Resident Credit for Academic <br> 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：

Major Map：Music Education（Choral－General）－ Bachelor of Music（B．Mus．）<br>Herberger College of The Arts，Tempe Campus<br>Catalog Year：2008－2009

Prior to semester 1：
 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．
 who do not take the diagnostic will register for MUP 131 and may take the diagnostic during the week before school starts．

|  |  |  | Completed ATP：$\square$ Yes $\square$ No |  | Completed AGEC：$\square$ Yes $\square$ No |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 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： 015 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> －Complete one semester of concert attendance with a grade of＂pass＂－students must complete six semesters <br> －Complete First Year Composition requirement by the end of semester 3 <br> －Students must complete MAT 142 or higher by the end of semester 2 |
| MHL 140：Music as Culture | 3 | $\square$ |  | Grade of C |  |
| MUP 111：Studio Lessons | 2 | $\square$ |  | Grade of C |  |
| MTC 125：Basic Music Theory | 3 | $\square$ |  | Grade of C |  |
| MUP 131：Class Piano or MUP 133：Voice | 1 | $\square$ |  | Grade of C |  |
| MUP 3＊＊（Ensemble） | 1 | 区 |  | 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 |  |
| MUP 100：Concert Attendance | 0 | $\square$ |  |  |  |
| MAT 142：College Mathematics（MA） | 3 | $\square$ |  | Grade of C |  |
| TERM TWO： 1630 CREDIT HOURS |  |  |  |  |  |
| MUE 110：Introduction to Music Education | 1 | $\square$ |  | Grade of C | －Complete one semester of concert attendance with a grade of＂pass＂－students must complete six semesters <br> －Complete First Year Composition requirement by the end of semester 3 <br> －Students must complete MAT 142 or higher by the end of semester 2 <br> －ITC MILESTONE－Complete natural sciences （SQ／SG）general studies course with a grade of C or better by the end of semester 4 <br> －ITC MILESTONE－Submit 1 letter of recommendation，draft of resume，and Freedom from Conviction of Crime Statement |
| MUP 111：Studio Lessons | 2 | $\square$ |  | Grade of C |  |
| MUP 132：Class Piano or MUP 134：Voice | 1 | $\square$ |  | Grade of C |  |
| MTC 221：Music Theory： $\mathbf{1 8}^{\text {th }}$ Century | 3 | $\square$ |  | Grade of C |  |
| MUP 3＊＊（Ensemble） | 1 | 区 |  | Grade of C |  |
| Natural Science Quantitative（SQ） | 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 |  |
| MUP 100：Concert Attendance | 0 | $\square$ |  |  |  |
| Humanities，Fine Arts \＆Design（HU）AND Cultural Diversity in the US（C），Global Awareness（G）OR Historical Awareness（H） | 3 | $\square$ |  |  |  |
| TERM THREE： 3145 CREDIT HOURS |  |  |  |  |  |
| MHL 341：Music History I | 3 | 囚 |  | Grade of C | －Complete one semester of concert attendance with a grade of＂pass＂－students must complete six semesters <br> －Complete First Year Composition requirement by the end of semester 3 <br> －MILESTONE－All Music Education students must audition with Music Education faculty during this semester |
| MUE 161：Introduction to Music Therapy | 2 | $\square$ |  | Grade of C |  |
| MTC 222：Music Theory： $\mathbf{1 9}^{\text {th }}$ Century | 3 | $\square$ |  | Grade of C |  |
| MUP 111：Studio Lessons | 2 | $\square$ |  | Grade of C |  |
| MUP 231：Class Piano or MUP 233：Voice | 1 | $\square$ |  | Grade of C |  |
| MUP 3＊＊（Ensemble） | 1 | 区 |  | Grade of C |  |
| Natural Science Quantitative（SQ）or General（SG） | 4 | $\square$ |  | Grade of C |  |
| MUP 100：Concert Attendance | 0 | $\square$ |  |  |  |
| TERM FOUR： $46 \mathbf{6 0}$ CREDIT HOURS |  |  |  |  |  |
| MHL 342：Music History II | 3 | 区 |  | Grade of C | －Complete one semester of concert attendance with a grade of＂pass＂－students must complete six semesters <br> －MILESTONE：All music education students must successfully complete the milestone for the Initial Teacher Certification（ITC）program this semester <br> －ITC MILESTONE－Submit $2^{\text {nd }}$ letter of recommendation and final resume by the end of fourth semester． <br> －ITC MILESTONE－Complete natural sciences （SQ／SG）general studies course with a grade of C or better by the end of semester 4 <br> －POS 110 or HST 109 recommended to complete ITC constitution requirement，or speak with advisor about other options． |
| MTC 223：Music Theory：20 ${ }^{\text {th }}$ Century | 3 | $\square$ |  | Grade of C |  |
| MUP 111：Studio Lessons | 2 | $\square$ |  | Grade of C |  |
| MUP 209：Beginning Choral Conducting | 1 | $\square$ |  | Grade of C |  |
| MUP 232：Class Piano or MUP 234：Voice | 1 | $\square$ |  | Grade of C |  |
| MUP 3＊＊（Ensemble） | 1 | 区 |  | Grade of C |  |
| MUP 100：Concert Attendance | 0 | $\square$ |  |  |  |
| MHL 201：Mac Literacy for Musicians（CS） | 3 | $\square$ |  | Grade of C |  |
| Social \＆Behavioral Science（SB）AND Cultural Diversity in the US （C），Global Awareness（G）OR Historical Awareness（H）； Recommended：POS 110 or HST 109 | 3 | $\square$ |  |  |  |

Major Map：Music Education（Choral－General）－<br>Bachelor of Music（B．Mus．）<br>Herberger College of The Arts，Tempe Campus<br>Catalog Year：2008－2009

| 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 FIVE： 6175 CREDIT HOURS |  |  |  |  |  |
| EDP 303：Human Development（L） | 3 | 区 |  | Grade of C | －Complete one semester of concert attendance with a grade of＂pass＂－students must complete six semesters |
| MUE 313：Elementary Music Methods or MUE 315：General Music in Secondary Schools | $\begin{gathered} 3 \text { or } \\ 2 \\ \hline \end{gathered}$ | 区 |  | Grade of B |  |
| MUP 301：Class Piano or MUP 321：Voice | 1 | 区 |  | Grade of C |  |
| MUP 311：Studio Lessons | 2 | 囚 |  | Grade of C |  |
| MUP 339：Choral Conducting | 2 | 区 |  | Grade of C |  |
| MUP 3＊＊（Ensemble） | 1 | 区 |  | Grade of C |  |
| SED 496：Field Experience | 1 | 区 |  | Grade of C |  |
| SPF 401：Integrating Theory and Practice | 1 | 区 |  | Grade of C |  |
| MUP 100：Concert Attendance | 0 | $\square$ |  |  |  |
| MUP 311：Studio Lessons | 2 | 区 |  | Grade of C |  |
| Humanities，Fine Arts \＆Design（HU）AND Cultural Diversity in the US（C），Global Awareness（G）OR Historical Awareness（H） | 3 | $\square$ |  |  |  |
| TERM SIX： $76 \mathbf{9 0}$ CREDIT HOURS |  |  |  |  |  |
| MUE 480：Choral Methods | 3 | 区 |  | Grade of B | －Complete one semester of concert attendance with a grade of＂pass＂－students must complete six semesters <br> －SPF 301 must be completed with a grade of C or better before enrollment in SED 478 <br> －POS 110 or HST 109 recommended to complete ITC constitution requirement，or speak with advisor about other options． |
| MUP 100：Concert Attendance | 0 | $\square$ |  |  |  |
| MUP 302：Advanced Class Piano or MUP 321：Studio Instruction | 1 | 区 |  | Grade of C |  |
| MUP 311：Studio Instruction | 2 | 区 |  | Grade of C |  |
| MUP 3＊＊（Ensemble） | 1 | 区 |  | Grade of C |  |
| Upper division Music elective（MUP 481 or 482 recommended） | 3 | 区 |  | Grade of C |  |
| Social \＆Behavioral Science（SB）AND Cultural Diversity in the US （C），Global Awareness（G）OR Historical Awareness（H） Recommended：POS 110 or HST 109 | 3 | $\square$ |  |  |  |
| SED 496：Field Experience | 1 | 区 |  |  |  |
| SPF 301：Culture \＆Schooling（L） | 3 | 区 |  | Grade of C |  |
| TERM SEVEN： 91105 CREDIT HOURS |  |  |  |  |  |
| BLE 407：SEI for Secondary Students | 3 | 区 |  | Grade of C |  |
| MUE 313：Elementary Music Methods or MUE 315：General Music in Secondary Schools | $\begin{gathered} \hline 3 \text { or } \\ 2 \\ \hline \end{gathered}$ | 区 |  | Grade of B |  |
| MUP 311：Studio Instruction | 2 | 囚 |  | Grade of C |  |
| MUP 3＊＊（Ensemble） | 1 | 区 |  | Grade of C |  |
| SED 496：Field Experience | 1 | 区 |  |  |  |
| Upper division Music Elective（MUP 481 or 482 recommended） | 3 | 区 |  | Grade of C |  |
| MUP 3＊＊（Ensemble） | 1 | 区 |  | Grade of C |  |
| MUP 495：Performance | 0 | 区 |  | Grade of C |  |
| Upper division Humanities，Fine Arts \＆Design（HU）or Social \＆Behavioral Science（SB）；Recommend POS 417 | 3 | 区 |  |  |  |
| TERM EIGHT： $106 \mathbf{1 2 0}$ CREDIT HOURS |  |  |  |  |  |
| MUP 311：Studio Instruction | 2 | 区 |  | Grade of C | －Take the AEPA Test in Semester 8 （necessary for teacher certification）． |
| SED 478：Student Teaching in Secondary Schools | 12 | 区 |  |  |  |

## Graduation Requirements Summary：

| Total Hours（120 <br> minimum） | Total Hrs at ASU（30 <br> minimum） | Hrs Resident Credit for Academic <br> 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

## Additional Notes：

－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） |
| $\circ$ | 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：Music Education（Instrumental）－<br>Bachelor of Music（B．Mus．）<br>Herberger College of The Arts，Tempe Campus<br>Catalog Year：2008－2009

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．
 who do not take the diagnostic will register for MUP 131 and may take the diagnostic during the week before school starts．

|  |  |  | Completed ATP：$\square$ Yes $\quad \square$ No |  | Completed AGEC：$\square$ Yes $\square$ No |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 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： 015 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> －Complete one semester of concert attendance with a grade of＂pass＂－students must complete six semesters <br> －Complete First Year Composition requirement by the end of semester 3 <br> －Students must complete MAT 142 or higher by the end of semester 2 <br> －Methods Class：see Additional Notes <br> －POS 110 or HST 109 recommended to complete ITC constitution requirement，or speak with advisor about other options． |
| MTC 125：Basic Music Theory | 3 | $\square$ |  | Grade of C |  |
| MUP 111：Studio Lessons | 2 | $\square$ |  | Grade of C |  |
| MUP 361：Marching Band（Ensemble） | 1 | 区 |  | Grade of C |  |
| MUE Methods Class | 1 | 区 |  | 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 |  |
| MUP 100：Concert Attendance | 0 | $\square$ |  |  |  |
| MUP 131：Class Piano | 1 | $\square$ |  | Grade of C |  |
| MAT 142：College Mathematics（MA） | 3 | $\square$ |  | Grade of C |  |
| Social \＆Behavioral Science（SB）AND Cultural Diversity in the US （C），Global Awareness（G）OR Historical Awareness（H）； Recommended：POS 110 or HST 109 | 3 | $\square$ |  |  |  |
| TERM TWO： 1630 CREDIT HOURS |  |  |  |  |  |
| MHL 140：Music History | 3 | $\square$ |  | Grade of C | －Complete one semester of concert attendance with a grade of＂pass＂－students must complete six semesters <br> －Complete First Year Composition requirement by the end of semester 3 <br> －Students must complete MAT 142 or higher by the end of semester 2 <br> －Methods Class：see Additional Notes <br> －ITC MILESTONE－Submit 1 letter of recommendation，draft of resume，and Freedom from Conviction of Crime Statement |
| MTC 221：Music Theory： $\mathbf{1 8}^{\text {th }}$ Century | 3 | $\square$ |  | Grade of C |  |
| MUE 110：Introduction to Music Education | 1 | $\square$ |  | Grade of C |  |
| MUP 111：Studio Lessons | 2 | $\square$ |  | Grade of C |  |
| MUP 3＊＊（Ensemble） | 1 | 区 |  | Grade of C |  |
| MUE Methods Class | 1 | 区 |  | Grade of C |  |
| MUE Methods Class | 1 | 区 |  | Grade of C |  |
| MUP 100：Concert Attendance | 0 | $\square$ |  |  |  |
| MUP 132：Class Piano | 1 | $\square$ |  | 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 |  |
| TERM THREE： 3145 CREDIT HOURS |  |  |  |  |  |
| MHL 341：Music History I | 3 | 区 |  | Grade of C | －Complete one semester of concert attendance with a grade of＂pass＂－students must complete six semesters <br> －Complete First Year Composition requirement by the end of semester 3 <br> －Methods Class：see Additional Notes <br> －ITC MILESTONE－Complete natural sciences （SQ／SG）general studies course with a grade of C or better by the end of forth semester．MILESTONE－ All music education students must audition with music education faculty during semester 3 <br> －MUP 131 by end of semester 3 |
| MTC 222：Music Theory： 19 $^{\text {th }}$ Century | 3 | $\square$ |  | Grade of C |  |
| MUP 111：Studio Lessons | 2 | $\square$ |  | Grade of C |  |
| MUP 133：Class Voice | 1 | $\square$ |  | Grade of C |  |
| MUP 361：Marching Band（Ensemble） | 1 | 区 |  | Grade of C |  |
| MUE Methods Class | 1 | 区 |  | Grade of C |  |
| Natural Science Quantitative（SQ） | 4 | $\square$ |  | Grade of C |  |
| MHL 201：Mac Literacy for Musicians（CS） | 3 | $\square$ |  | Grade of C |  |
| MUP 100：Concert Attendance | 0 | $\square$ |  |  |  |
| TERM FOUR： $46 \mathbf{6 0}$ CREDIT HOURS |  |  |  |  |  |
| MHL 342：Music History II | 3 | 囚 |  | Grade of C | －Methods Class：see Additional Notes <br> －Complete one semester of concert attendance with a grade of＂pass＂－students must complete six semesters <br> －MILESTONE：All music education students must successfully complete the milestone for the Initial Teacher Certification（ITC）program this semester <br> －ITC MILESTONE－Submit $2^{\text {nd }}$ letter of recommendation and final resume by the end of fourth semester． <br> －MUP 132 by end of semester 4 <br> －Prior to taking MUE 481，students must have taken one brass，woodwind，percussion，and a string methods course；See additional notes below． |
| MTC 223：Music Theory：20 ${ }^{\text {th }}$ Century | 3 | $\square$ |  | Grade of C |  |
| MUE 161：Introduction to Music Therapy | 2 | $\square$ |  | Grade of C |  |
| MUP 111：Studio Lessons | 2 | $\square$ |  | Grade of C |  |
| MUP 379：Small Ensemble | 1 | 区 |  | Grade of C |  |
| MUP 3＊＊（Ensemble） | 1 | 区 |  | Grade of C |  |
| MUE Methods Class | 1 | 囚 |  | Grade of C |  |
| MUE Methods Class | 1 | 囚 |  | Grade of C |  |
| MUE Methods Class | 1 | 区 |  | Grade of C |  |
| MUP 100：Concert Attendance | 0 | $\square$ |  |  |  |
| Humanities，Fine Arts \＆Design（HU）AND Cultural Diversity in the US（C），Global Awareness（G）OR Historical Awareness（H） | 3 | $\square$ |  |  |  |

Major Map：Music Education（Instrumental）－
Bachelor of Music（B．Mus．）
Herberger College of The Arts，Tempe Campus
Catalog Year：2008－2009

| Course Subject and Title （courses in bold／shading are critical） | Hrs． | $\begin{aligned} & \hline \text { Upper } \\ & \text { Division } \\ & \hline \end{aligned}$ | Transfer Course／Grade | Minimum Grade if Required | Additional Critical Tracking Notes |
| :---: | :---: | :---: | :---: | :---: | :---: |
| TERM FIVE： 6175 CREDIT HOURS |  |  |  |  |  |
| MUE 481：Instrumental Music Practicum／Methods（pre－requisite for MUE 482） | 5 | 区 |  | Grade of B | －Complete 12 hours of upper division coursework by end of semester 5 <br> －SPF 301 must be completed with a grade of C or better before registering for SED 478：Student Teaching <br> －Prior to taking MUE 481 ，students must have taken one brass，woodwind，percussion，and a string methods course；See additional notes below． |
| MUP 210：Beginning Instrumental Conducting | 1 | $\square$ |  | Grade of C |  |
| MUP 311：Studio Lessons | 2 | 区 |  | Grade of C |  |
| MUP 3＊＊（Ensemble） | 1 | 区 |  | Grade of C |  |
| SED 496：Field Experience | 1 | 囚 |  | Grade of C |  |
| SPF 301：Culture and Schooling（L） | 3 | 区 |  | Grade of C |  |
| SPF 401：Integrating Theory and Practice | 1 | 区 |  | Grade of C |  |
| MUP 100：Concert Attendance | 0 | $\square$ |  |  |  |
| Natural Science Quantitative（SG）or General（SQ） | 4 | $\square$ |  | Grade of C |  |
| TERM SIX： $76 \mathbf{9 0}$ CREDIT HOURS |  |  |  |  |  |
| EDP 303：Human Development（L） | 3 | 区 |  |  | －Complete one semester of concert attendance with a grade of＂pass＂－students must complete six semesters |
| MUE 482：Instrumental Practicum／Methods | 5 | 区 |  | Grade of B |  |
| MUP 100：Concert Attendance | 0 | $\square$ |  |  |  |
| MUP 340：Instrumental Conducting | 2 | 区 |  | Grade of C |  |
| MUP 311：Studio Instruction | 2 | 区 |  | Grade of C |  |
| MUP 3＊＊（Ensemble） | 1 | 区 |  | Grade of C |  |
| SED 496：Field Experience | 1 | 区 |  |  |  |
| Humanities，Fine Arts \＆Design（HU） | 3 | $\square$ |  |  |  |
| TERM SEVEN： 91105 CREDIT HOURS |  |  |  |  |  |
| BLE 407：SEI for Secondary Students | 3 | 区 |  |  | －POS 110 or HST 109 recommended to complete ITC constitution requirement，or speak with advisor about other options． |
| MUP 311：Studio Instruction | 2 | 区 |  | Grade of C |  |
| MUP 3＊＊（Ensemble） | 1 | 区 |  | Grade of C |  |
| MUP 495：Performance | 0 | $\square$ |  |  |  |
| SED 496：Field Experience | 1 | 区 |  |  |  |
|  | 2 | 区 |  | Grade of B |  |
| Social \＆Behavioral Science（SB）AND Cultural Diversity in the US （C），Global Awareness（G）OR Historical Awareness（H）； Recommended：POS 110 or HST 109 | 3 | $\square$ |  |  |  |
| Upper division Humanities，Fine Arts \＆Design（HU）or Social Behavioral \＆Science（SB）；Recommended：POS 417 | 3 | 区 |  |  |  |
| TERM EIGHT： $106 \mathbf{1 2 0}$ CREDIT HOURS |  |  |  |  |  |
| MUP 311：Studio Instruction | 2 | 区 |  | Grade of C | －Take the AEPA Test in Semester 8 （necessary for teacher certification）． |
| SED 478：Student Teaching in Secondary Schools | 12 | 区 |  |  |  |

## Graduation Requirements Summary：

| Total Hours（120 <br> minimum） | Total Hrs at ASU（30 <br> minimum） | Hrs Resident Credit for Academic <br> 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

Students must complete the following Methods Courses：
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 336：Educational Methods for Percussion
MUE 337：Educational Methods for Flute
MUE 338：Educational Methods for Double Reed Instruments
Additional Notes：

Major Map: Music Education (String) -<br>Bachelor of Music (B.Mus.)<br>Herberger College of The Arts, Tempe Campus<br>Catalog Year: 2008-2009

Prior to semester 1:
 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.
 who do not take the diagnostic will register for MUP 131 and may take the diagnostic during the week before school starts.


Major Map：Music Education（String）－
Bachelor of Music（B．Mus．）
Herberger College of The Arts，Tempe Campus
Catalog Year：2008－2009

| Course Subject and Title （courses in bold／shading are critical） | Hrs． | Upper Division | Transfer Course／Grade | $\begin{aligned} & \text { Minimum Grade if } \\ & \text { Required } \\ & \hline \end{aligned}$ | Additional Critical Requirement Notes |
| :---: | :---: | :---: | :---: | :---: | :---: |
| TERM FIVE： 6175 CREDIT HOURS |  |  |  |  |  |
| MUE 485：String Practicum／Methods | 5 | 区 |  | Grade of B | －Complete one semester of concert attendance with a grade of＂pass＂－students must complete six semesters <br> －Must complete SPF 301 with a grade of C or better before registering for SED 478：Student Teaching <br> －POS 110 or HST 109 recommended to complete ITC constitution requirement，or speak with advisor about other options． |
| MUP 121：Studio Instruction | 1 | $\square$ |  | Grade of C |  |
| MUP 210：Beginning Instrumental Conducting | 1 | $\square$ |  | Grade of C |  |
| MUP 311：Studio Lessons | 2 | 区 |  | Grade of C |  |
| MUP 3＊＊（Ensemble） | 1 | 区 |  | Grade of C |  |
| SED 496：Field Experience | 1 | 区 |  | Grade of C |  |
| SPF 301：Culture and Schooling（L） | 3 | 区 |  | Grade of C |  |
| SPF 401：Integrating Theory and Practice | 1 | 区 |  | Grade of C |  |
| MUP 100：Concert Attendance | 0 | $\square$ |  |  |  |
| Social \＆Behavioral Science（SB）AND Cultural Diversity in the US （C），Global Awareness（G）OR Historical Awareness（H）； Recommended：POS 110 or HST 109 | 3 | $\square$ |  |  |  |
| TERM SIX： $76 \mathbf{9 0}$ CREDIT HOURS |  |  |  |  |  |
| EDP 303：Human Development（L） | 3 | 区 |  |  | －Complete one semester of concert attendance with a grade of＂pass＂－students must complete six semesters |
| MUE 482：Instrumental Practicum／Methods | 5 | 区 |  | Grade of B |  |
| MUP 100：Concert Attendance | 0 | $\square$ |  |  |  |
| MUP 340：Instrumental Conducting | 2 | 区 |  | Grade of C |  |
| MUP 311：Studio Instruction | 2 | 区 |  | Grade of C |  |
| MUP 3＊＊（Ensemble） | 1 | 区 |  | Grade of C |  |
| SED 496：Field Experience | 1 | 囚 |  |  |  |
| Humanities，Fine Arts \＆Design（HU）AND Cultural Diversity in the US（C），Global Awareness（G）OR Historical Awareness（H） | 3 | $\square$ |  |  |  |
| TERM SEVEN： 91105 CREDIT HOURS |  |  |  |  |  |
| BLE 407：SEI for Secondary Students | 3 | 区 |  | Grade of C | －POS 110 or HST 109 recommended to complete ITC constitution requirement，or speak with advisor about other options． |
| MUE 315：General Music in Secondary Schools | 2 | 区 |  | Grade of B |  |
| MUP 311：Studio Instruction | 2 | 区 |  | Grade of C |  |
| MUP 340：Instrumental Conducting | 2 | 区 |  | Grade of C |  |
| MUP 3＊＊（Ensemble） | 1 | 区 |  | Grade of C |  |
| MUP 3＊＊（Ensemble） | 1 | 区 |  | Grade of C |  |
| MUP 495：Performance | 0 | $\square$ |  |  |  |
| SED 496：Field Experience | 1 | 区 |  |  |  |
| Social \＆Behavioral Science（SB）AND Cultural Diversity in the US （C），Global Awareness（G）OR Historical Awareness（H）； Recommended：POS 110 or HST 109 | 3 | $\square$ |  |  |  |
| Upper division Humanities，Fine Arts \＆Design（HU）or Social \＆Behavioral Sciences（SB）；Recommend POS 417 | 3 | 区 |  |  |  |
| TERM EIGHT： $106 \mathbf{1 2 0}$ CREDIT HOURS |  |  |  |  |  |
| MUP 311：Studio Instruction | 2 | 区 |  | Grade of C | －Take the AEPA Test in Semester 8 （necessary for teacher certification）． |
| SED 478：Student Teaching in Secondary Schools | 12 | 囚 |  |  |  |

## Graduation Requirements Summary

| Total Hours（120 <br> minimum） | Total Hrs at ASU（30 <br> minimum） | Hrs Resident Credit for Academic <br> 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

Students must complete the following Methods Courses： 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 336：Educational Methods for Percussion
MUE 337：Educational Methods for Flute
MUE 338：Educational Methods for Double Reed Instruments

## Additional Notes：

Major Map：Music Therapy－Bachelor of Music（B．Mus．）<br>Herberger College of the Arts，Tempe Campus<br>Catalog Year：2008－2009

Prior to semester 1：
 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．
 who do not take the diagnostic will register for MUP 131 and may take the diagnostic during the week before school starts．

|  |  |  | Completed ATP：$\square$ Yes $\quad \square$ No |  | Completed AGEC：$\square$ Yes $\square$ No |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Course Subject and Title （courses in bold／shading are critical） | Hrs． | $\begin{aligned} & \hline \text { Upper } \\ & \text { Division } \end{aligned}$ | Transfer Course／Grade | Minimum Grade if Required | Additional Critical Requirement Notes |
| TERM ONE： 015 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> －Complete one semester of concert attendance with a grade of＂pass＂－students must complete six semesters <br> －Complete First Year Composition requirement by the end of semester 3 <br> －MUE 335 Educational Methods for Guitar completed by the end of semester 3 |
| MUE 161：Introduction to Music Therapy | 2 | $\square$ |  | Grade of C |  |
| MUP 111：Studio Lessons | 2 | $\square$ |  | Grade of C |  |
| MUP 3＊＊（Ensemble） | 1 | 区 |  | Grade of C |  |
| MUE 335：Educational Methods for Guitar | 1 | $\square$ |  | Grade of C |  |
| MUP 100：Concert Attendance | 0 | $\square$ |  |  |  |
| MUP 131：Class Piano | 1 | $\square$ |  | Grade of C |  |
| MTC 125：Basic Music Theory | 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 | $\square$ |  | Grade of C |  |
| MAT 142：College Mathematics（MA）or MAT 119：Finite Mathematics（MA） | 3 | $\square$ |  | Grade of C |  |
| TERM TWO： 1630 CREDIT HOURS |  |  |  |  |  |
| MUP 111：Studio Lessons | 2 | $\square$ |  | Grade of C | －Complete one semester of concert attendance with a grade of＂pass＂－students must complete six semesters <br> －Complete First Year Composition requirement by the end of semester 3 <br> －Complete PGS 101 in semester 2 －required for music therapy certification |
| MUP 3＊＊（Large Ensemble） | 1 | 区 |  | Grade of C |  |
| MHL 140：Music as Culture | 3 | $\square$ |  | Grade of C |  |
| PGS 101：Introduction to Psychology（SB） | 3 | $\square$ |  | Grade of C |  |
| MTC 221：Music Theory： $18{ }^{\text {th }}$ Century | 3 | $\square$ |  | Grade of C |  |
| MUE 394：Special Topics：Educational Methods for Percussion for Music Therapy Students | 1 | 区 |  | Grade of C |  |
| MUP 100：Concert Attendance | 0 | $\square$ |  |  |  |
| MUP 132：Class Piano | 1 | $\square$ |  | 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 |  |
| TERM THREE： 3145 CREDIT HOURS |  |  |  |  |  |
| MHL 341：Music History I | 3 | 区 |  | Grade of C | －Complete First Year Composition requirement by the end of semester 3 <br> －Complete one semester of concert attendance with a grade of＂pass＂－students must complete six semesters <br> －Complete SOC 101 in semester 3 －required for music therapy certification <br> －MUE 335 Educational Methods for Guitar completed by the end of semester 3 <br> －MTC 125 completed by the end of semester 3 <br> －MUP 131 completed by the end of semester 3 <br> －Only 1 semester |
| MUE 211：Music in Recreation | 2 | $\square$ |  | Grade of C |  |
| MUE 261：Music Therapy as Behavioral Science | 2 | $\square$ |  | Grade of C |  |
| MUP 111：Studio Lessons | 2 | $\square$ |  | Grade of C |  |
| MUP 209：Beginning Choral Conducting MUP 210：Beginning Instrumental Conducting | 1 | $\square$ |  | Grade of C |  |
| MUP 3＊＊（Ensemble） | 1 | 区 |  |  |  |
| MUP 100：Concert Attendance | 0 | $\square$ |  |  |  |
| MUP 231：Class Piano | 1 | $\square$ |  | Grade of C |  |
| MTC 222：Music Theory： $19^{\text {th }}$ Century | 3 | $\square$ |  | Grade of C |  |
| SOC 101：Introductory Sociology（SB） | 3 | $\square$ |  |  |  |
| TERM FOUR： $46 \mathbf{6 0}$ CREDIT HOURS |  |  |  |  |  |
| MHL 342：Music History II | 3 | 区 |  | Grade of C | －Complete one semester of concert attendance wit a grade of＂pass＂－students must complete six semesters <br> －MTC 221 completed by the end of semester 4 <br> －MUP 132 completed by the end of semester 4 <br> －MUE 394：Percussion Methods by the end of semester 4. <br> －Students must pass a jury in semester 4 to reach MUP 311. |
| MUP 111：Studio Lessons | 2 | $\square$ |  | Grade of C |  |
| MUP 209：Beginning Choral Conducting（If you did not take it in semester 3） | 2 | $\square$ |  | Grade of C |  |
| MUP 3＊＊（Ensemble） | 1 | 区 |  | Grade of C |  |
| PSY 230：Introduction to Statistics（CS）or STP 226：Elements of Statistics（CS） | 3 | $\square$ |  | Grade of C |  |
| MTC 223：Music Theory： $20^{\text {th }}$ Century | 3 | $\square$ |  | Grade of C |  |
| MUP 100：Concert Attendance | 0 | $\square$ |  |  |  |
| MUP 232：Class Piano | 2 | $\square$ |  | Grade of C |  |
| Natural Science Quantitative（SQ） | 4 | $\square$ |  |  |  |

Major Map：Music Therapy－Bachelor of Music（B．Mus．）
Herberger College of the Arts，Tempe Campus
Catalog Year：2008－2009

| Course Subject and Title （courses in bold／shading are critical） | Hrs． | $\begin{aligned} & \hline \text { Upper } \\ & \text { Division } \end{aligned}$ | Transfer Course／Grade | Minimum Grade if Required | Additional Critical Requirement Notes |
| :---: | :---: | :---: | :---: | :---: | :---: |
| TERM FIVE： 6175 CREDIT HOURS |  |  |  |  |  |
| MUE 313：Elementary Music Methods | 3 | 囚 |  | Grade of C | －Complete one semester of concert attendance with a grade of＂pass＂－students must complete six semesters <br> －MTC 222 completed by the end of semester 5 ． <br> －MUP 231 completed by the end of semester 5 ． <br> － 4 hours of MUP 311 are required．Students may substitute performance classes for this requirement such as：MUP 117，217，235，236， 237，301，302，317，3XX Large Ensemble，387， 417， 440 （at least 2 hours must be upper division）． |
| MUE 361：Music Therapy Theory \＆Practice in Psychopathology | 2 | 区 |  | Grade of C |  |
| MUE 384：Therapy Preclinical I | 1 | 区 |  | Grade of C |  |
| MUP 133：Studio Lessons | 1 | $\square$ |  | Grade of C |  |
| MUP 311：Studio Instruction | 2 | ® |  | Grade of C |  |
| MUP 3＊＊（Ensemble） | 1 | 区 |  | Grade of C |  |
| MUP 100：Concert Attendance | 0 | $\square$ |  |  |  |
| CDE 232：Human Development（SB） | 3 | $\square$ |  |  |  |
| Humanities，Fine Arts \＆Design（HU）AND Global Awareness（G） OR Historical Awareness（H） | 3 | $\square$ |  |  |  |
| TERM SIX： 7690 CREDIT HOURS |  |  |  |  |  |
| MUE 362：Music Therapy Techniques | 3 | 区 |  |  | －Complete one semester of concert attendance with a grade of＂pass＂－students must complete six semesters <br> －MTC 223 completed by the end of semester 6 ． <br> －MUP 232 completed by the end of semester 6 ． <br> －MUP 209 or 210 by the end of semester 6. <br> － 4 hours of MUP 311 required．Students may substitute performance classes for this requirement such as：MUP $117,217,235,236,237,301,302$ ， 317，3XX Large Ensemble，387，417， 440 （at least 2 hours must be upper division）． |
| MUE 381：Music Therapy Research（L） | 3 | 区 |  |  |  |
| MUE 385：Therapy Preclinical II | 1 | 区 |  |  |  |
| MUE 389：Repertoire for Music Therapy | 3 | 区 |  |  |  |
| MUP 100：Concert Attendance | 0 | $\square$ |  |  |  |
| MUP 134：Class Voice | 1 | $\square$ |  |  |  |
| MUP 311：Studio Instruction | 2 | 区 |  |  |  |
| MUP 3＊＊（Ensemble） | 1 | 区 |  |  |  |
| SPE 222：Orientation to Education of Exceptional Children（SB，C） | 3 | $\square$ |  |  |  |
| TERM SEVEN： 91105 CREDIT HOURS |  |  |  |  |  |
| BIO 201：Human Physiology \＆Anatomy（SG） | 4 | $\square$ |  |  |  |
| MUE 386：Therapy Preclinical III | 1 | 区 |  |  |  |
| MUE 441：Psychology of Music | 3 | 区 |  |  |  |
| MUE 475：Group Process and Music Therapy | 1 | 区 |  |  |  |
| Literacy and Critical Inquiry（L） | 3 | $\square$ |  |  |  |
| TERM EIGHT： $106 \mathbf{1 2 0}$ CREDIT HOURS |  |  |  |  |  |
| DAN＊＊＊ | 3 | $\square$ |  |  | 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． |
| MHL 201：Mac Literacy for Musicians（CS） | 3 | $\square$ |  |  |  |
| MUE 387：Therapy Preclinical IV | 1 | $\square$ |  |  |  |
| MUE 476：Internship in Music Therapy | 1 | 区 |  |  |  |
| PGS 466：Abnormal Psychology（SB） | 3 | 区 |  |  |  |
| Humanities，Fine Arts \＆Design（HU）AND Global Awareness（G） OR Historical Awareness（H） | 3 | $\square$ |  |  |  |

## Graduation Requirements Summary：

| Total Hours（128 <br> minimum） | Total Hrs at ASU（30 <br> minimum） | Hrs Resident Credit for Academic <br> 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

## Major Map：Performance（Collaborative Piano）－ Bachelor of Music（B．Mus．） <br> Herberger College of The Arts，Tempe Campus <br> Catalog Year：2008－2009

Prior to semester 1：
 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．

|  |  |  | Completed ATP：$\square$ Yes $\square$ No |  | Completed AGEC：$\square$ Yes $\square$ No |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Course Subject and Title （courses in bold／shading are critical） | Hrs． | $\begin{aligned} & \hline \text { Upper } \\ & \text { Division } \end{aligned}$ | Transfer Course／Grade | Minimum Grade if Required | Additional Critical Requirement Notes |
| TERM ONE： 015 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> －Complete one semester of concert attendance with a grade of＂pass＂－students must complete six semesters <br> －Complete First Year Composition requirement by the end of semester 3 <br> －Complete Math requirement by the end of semester 2 |
| MUP 127：Studio Instruction | 4 | $\square$ |  | Grade of C |  |
| MUP 379：Chamber Music Ensembles | 1 | 区 |  | Grade of C |  |
| MUP 3＊＊（Ensemble） | 1 | 区 |  | Grade of C |  |
| MUP 100：Concert Attendance | 0 | $\square$ |  |  |  |
| MTC 125：Basic Music Theory | 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 | $\square$ |  | Grade of C |  |
| MAT 142：College Mathematics（MA） | 3 | $\square$ |  |  |  |
| TERM TWO： 1630 CREDIT HOURS |  |  |  |  |  |
| MHL 140：Music as Culture | 3 | $\square$ |  | Grade of C | －Complete one semester of concert attendance with a grade of＂pass＂－students must complete six semesters <br> －Complete First Year Composition requirement by the end of semester 3 <br> －Complete Math requirement by the end of semester 2 |
| MUP 127：Studio Instruction | 4 | $\square$ |  | Grade of C |  |
| MUP 379：Chamber Music Ensembles | 1 | 区 |  | Grade of C |  |
| MUP 3＊＊（Ensemble） | 1 | 区 |  | Grade of C |  |
| MUP 100：Concert Attendance | 0 | $\square$ |  |  |  |
| MTC 221：Music Theory： $18^{\text {th }}$ Century | 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 | $\square$ |  | Grade of C |  |
| TERM THREE： 3145 CREDIT HOURS |  |  |  |  |  |
| MUP 127：Studio Instruction | 4 | $\square$ |  | Grade of C | －Complete one semester of concert attendance with a grade of＂pass＂－students must complete six semesters <br> －Complete First Year Composition requirement by the end of semester 3 <br> －Complete MTC 125 by end of term 3 |
| MUP 250：Diction for Singers（Diction and Repertoire） | 1 | $\square$ |  | Grade of C |  |
| MUP 379：Two－Piano Ensemble | 1 | $\boxed{\square}$ |  | Grade of C |  |
| MUP 100：Concert Attendance | 0 | $\square$ |  |  |  |
| Computer／Statistics／Quantitative applications（CS）， MHL 201：Mac Literacy for Musicians | 3 | $\square$ |  | Grade of C |  |
| MTC 222：Music Theory： $19^{\text {th }}$ Century | 3 | $\square$ |  | Grade of C |  |
| Natural Science Quantitative（SQ） | 4 | $\square$ |  |  |  |
| TERM FOUR： 4660 CREDIT HOURS |  |  |  |  |  |
| MUP 127：Studio Instruction | 4 | $\square$ |  | Grade of C | －Complete one semester of concert attendance with a grade of＂pass＂－students must complete six semesters <br> －Complete MTC 221 by end of term 4 |
| MUP 100：Concert Attendance | 0 | $\square$ |  |  |  |
| MTC 223：Music Theory： $20^{\text {th }}$ Century | 3 | $\square$ |  | Grade of C |  |
| Social \＆Behavioral Science（SB）AND Cultural Diversity in the US （C），Global Awareness（G）OR Historical Awareness（H） | 4 | $\square$ |  |  |  |
| Natural Science Quantitative（SQ）or General（SG） | 4 | $\square$ |  |  |  |
| TERM FIVE： 6175 CREDIT HOURS |  |  |  |  |  |
| MHL 341：Music History | 3 | 区 |  | Grade of C | －Complete one semester of concert attendance with a grade of＂pass＂－students must complete six semesters <br> －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 |
| MUP 209：Beginning Choral Conducting or MUP 210：Beginning Instrumental Conducting | 1 | $\square$ |  | Grade of C |  |
| MUP 311：Studio Instruction | 2 | 区 |  | Grade of C |  |
| MUP 337：Studio Instruction：Collaborative Piano | 2 | $\boxtimes$ |  | Grade of C |  |
| MUP 388：Piano Accompanying | 1 | $\boxtimes$ |  | Grade of C |  |
| MUP 100：Concert Attendance | 0 | $\square$ |  |  |  |
| MUP 495：Performance | 0 | $\square$ |  |  |  |
| Social \＆Behavioral Science（SB）AND Cultural Diversity in the US （C），Global Awareness（G）OR Historical Awareness（H） | 3 | $\square$ |  |  |  |
| Humanities，Fine Arts \＆Design（HU）AND Cultural Diversity in the US（C），Global Awareness（G）OR Historical Awareness（H） | 3 | $\square$ |  |  |  |

Major Map：Performance（Collaborative Piano）－ Bachelor of Music（B．Mus．）<br>Herberger College of The Arts，Tempe Campus<br>Catalog Year：2008－2009

| Course Subject and Title （courses in bold／shading are critical） | Hrs． | Upper Division | Transfer Course／Grade | $\begin{aligned} & \text { Minimum Grade if } \\ & \text { Required } \end{aligned}$ | Additional Critical Requirement Notes |
| :---: | :---: | :---: | :---: | :---: | :---: |
| TERM SIX： $76 \mathbf{9 0}$ CREDIT HOURS |  |  |  |  |  |
| MHL 342：Music History II | 3 | 囚 |  | Grade of C | －Complete one semester of concert attendance with a grade of＂pass＂－students must complete six semesters <br> －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 |
| MUP 100：Concert Attendance | 0 | $\square$ |  |  |  |
| MUP 311：Studio Instruction | 2 | 区 |  | Grade of C |  |
| MUP 337：Studio Instruction：Collaborative Piano | 2 | 区 |  | Grade of C |  |
| MUP 388：Piano Accompanying | 1 | 区 |  | Grade of C |  |
| MUP 495：Performance | 0 | $\square$ |  |  |  |
| MUP 451 （Diction and Repertoire）Piano Chamber Music | 2 | 区 |  | Grade of C |  |
| Upper division Humanities，Fine Arts \＆Design（HU）or Social \＆Behavioral Science（SB） | 3 | 区 |  |  |  |
| Literacy and Critical Inquiry（L） | 3 | $\square$ |  |  |  |
| TERM SEVEN： 91105 CREDIT HOURS |  |  |  |  |  |
| MTC 428：Advanced Form and Analysis | 3 | 区 |  | Grade of C | －Complete one semester of concert attendance with a grade of＂pass＂－if six semesters not completed |
| MUP 311：Studio Instruction | 2 | 区 |  | Grade of C |  |
| MUP 337：Studio Instruction：Collaborative Piano | 2 | 区 |  | Grade of C |  |
| MUP 388：Piano Accompanying | 1 | 区 |  | Grade of C |  |
| MUP 496：Performance | 0 | $\square$ |  |  |  |
| MUP 453 （Diction and Repertoire）Song Literature | 2 | 区 |  | Grade of C |  |
| Humanities，Fine Arts \＆Design（HU）AND Cultural Diversity in the US（C），Global Awareness（G）OR Historical Awareness（H） | 3 | $\square$ |  |  |  |
| Upper division Literacy and Critical Inquiry（L）（Recommend MHL with Literacy designation） | 3 | 区 |  |  |  |
| TERM EIGHT： $106 \mathbf{1 2 0}$ CREDIT HOURS |  |  |  |  |  |
| MUP 311：Studio Instruction | 2 | 区 |  | Grade of C | －Complete one semester of concert attendance with a grade of＂pass＂－if six semesters not completed |
| MUP 337：Studio Instruction：Collaborative Piano | 2 | 区 |  | Grade of C |  |
| MUP 388：Piano Accompanying | 1 | 区 |  | Grade of C |  |
| MUP 487：Collaborative Piano | 1 | 区 |  | Grade of C |  |
| MUP 496：Performance | 0 | $\square$ |  |  |  |
| MUP 454 （Diction and Repertoire）Song Literature | 2 | 区 |  | Grade of C |  |
| MHL 3＊＊or 4＊＊History（Recommend MHL with Literacy designation） | 3 | ® |  | Grade of C |  |
| Music Elective（cannot be MUS prefix；required if you did not take MHL 201） | 0－3 | $\square$ |  | Grade of C |  |
| Elective（required if upper division literacy was MHL course） | 0－3 | $\square$ |  |  |  |

## Graduation Requirements Summary：

| Total Hours（120 <br> minimum） | Total Hrs at ASU（30 <br> minimum） | Hrs Resident Credit for Academic <br> 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：

Major Map：Performance（Guitar）－<br>Bachelor of Music（B．Mus．）<br>Herberger College of the Arts，Tempe Campus<br>Catalog Year：2008－2009

Prior to semester 1：
 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．
 who do not take the diagnostic will register for MUP 131 and may take the diagnostic during the week before school starts．

|  |  |  | Completed ATP：$\square$ Yes $\square$ No |  | Completed AGEC：$\square$ Yes $\square$ No |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Course Subject and Title （courses in bold／shading are critical） | Hrs． | Upper <br> Division | Transfer Course／Grade | Minimum Grade if Required | Additional Critical Requirement Notes |
| TERM ONE： 015 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> －Complete one semester of concert attendance with a grade of＂pass＂－students must complete six semesters <br> －Complete First Year Composition requirement by the end of semester 3 <br> －Complete Math requirement by the end of semester 2 |
| MUP 127：Studio Instruction | 4 | $\square$ |  | Grade of C |  |
| MUP 379：Guitar Ensembles | 1 | 区 |  | Grade of C |  |
| MUP 100：Concert Attendance | 0 | $\square$ |  |  |  |
| MUP 131：Class Piano | 1 | $\square$ |  | Grade of C |  |
| MTC 125：Basic Music Theory | 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 | $\square$ |  | Grade of C |  |
| MAT 142：College Mathematics（MA） | 3 | $\square$ |  |  |  |
| TERM TWO： 1630 CREDIT HOURS |  |  |  |  |  |
| MHL 140：Music as Culture | 3 | $\square$ |  | Grade of C | －Complete one semester of concert attendance with a grade of＂pass＂－students must complete six semesters <br> －Complete First Year Composition requirement by the end of semester 3 <br> －Complete Math requirement by the end of semester 2 |
| MUP 127：Studio Instruction | 4 | $\square$ |  | Grade of C |  |
| MUP 379：Chamber Music Ensembles | 1 | 区 |  | Grade of C |  |
| MUP 100：Concert Attendance | 0 | $\square$ |  |  |  |
| MUP 132：Class Piano | 1 | $\square$ |  | Grade of C |  |
| MTC 221：Music Theory： $18{ }^{\text {th }}$ Century | 3 | $\square$ |  | Grade of C |  |
| ENG 101 or 102：First－Year Composition ENG 105：Advanced First－Year Composition ENG 107 or 108：English for Foreign Students | 3 | $\square$ |  | Grade of C |  |
| TERM THREE： 3145 CREDIT HOURS |  |  |  |  |  |
| MUP 127：Studio Instruction | 4 | $\square$ |  | Grade of C | －Complete one semester of concert attendance with a grade of＂pass＂－students must complete six semesters <br> －Completed First Year Composition requirement by the end of semester 3 <br> －Complete MTC 125 by end of semester 3 <br> －Complete MUP 131 by end of semester 3 |
| MUP 379：Chamber Music Ensembles | 1 | 区 |  | Grade of C |  |
| Computer／Statistics／Quantitative applications（CS）－MHL 201：Mac Literacy for Musicians Recommended | 3 | $\square$ |  | Grade of C |  |
| MUP 100：Concert Attendance | 0 | $\square$ |  |  |  |
| MUP 231：Class Piano | 1 | $\square$ |  | Grade of C |  |
| MTC 222：Music Theory： $19^{\text {th }}$ Century | 3 | $\square$ |  | Grade of C |  |
| Social \＆Behavioral Science（SB）AND Cultural Diversity in the US （C），Global Awareness（G）OR Historical Awareness（H） | 3 | $\square$ |  |  |  |
| TERM FOUR： 4660 CREDIT HOURS |  |  |  |  |  |
| MUP 127：Studio Instruction | 4 | $\square$ |  | Grade of C | －Complete 12 hours of upper division coursework be end of semester 5 <br> －Complete one semester of concert attendance with a grade of＂pass＂－students must complete six semesters <br> －Complete MTC 221 by end of semester 4 <br> －Complete MUP 132 by end of semester 4 |
| MUP 379：Chamber Music Ensemble | 1 | 区 |  | Grade of C |  |
| MUP 100：Concert Attendance | 0 | $\square$ |  |  |  |
| MUP 232：Class Piano | 1 | $\square$ |  | Grade of C |  |
| MTC 223：Music Theory： $20{ }^{\text {th }}$ Century | 3 | $\square$ |  | Grade of C |  |
| 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 Diversity in the US （C），Global Awareness（G）OR Historical Awareness（H） | 3 | $\square$ |  |  |  |
| TERM FIVE： 6175 CREDIT HOURS |  |  |  |  |  |
| MHL 341：Music History | 3 | 区 |  | Grade of C | －Complete one semester of concert attendance with a grade of＂pass＂－students must complete six semesters <br> － 1 semester of Counterpoint required．Complete either MTC 320 Modal Counterpoint or MTC 321 Tonal Counterpoint to satisfy requirement． <br> －Complete MTC 222 by end of semester 5 <br> －Complete MUP 232 by end of semester 5 |
| MUP 210：Beginning Instrumental Conducting | 1 | $\square$ |  | Grade of C |  |
| MUP 327：Studio Instruction | 4 | 区 |  | Grade of C |  |
| MUP＊＊＊（Ensemble） | 1 | 囚 |  | Grade of C |  |
| MTC 320：Modal Counterpoint or MTC 321：Tonal Counterpoint | 2 | 区 |  | Grade of C |  |
| MUP 100：Concert Attendance | 0 | $\square$ |  |  |  |
| Natural Science Quantitative（SQ） | 4 | $\square$ |  |  |  |


| Course Subject and Title （courses in bold／shading are critical） | Hrs． | $\begin{aligned} & \hline \text { Upper } \\ & \text { Division } \\ & \hline \end{aligned}$ | Transfer Course／Grade | $\begin{aligned} & \text { Minimum Grade if } \\ & \text { Required } \\ & \hline \end{aligned}$ | Additional Critical Requirement Notes |
| :---: | :---: | :---: | :---: | :---: | :---: |
| TERM SIX： 7690 CREDIT HOURS |  |  |  |  |  |
| MTC 320：Modal Counterpoint or MTC 321：Tonal Counterpoint | 2 | 凹 |  | Grade of C | －Complete one semester of concert attendance with a grade of＂pass＂－students must complete six semesters <br> － 1 semester of Counterpoint required．Complete either MTC 320 Modal Counterpoint or MTC 321 Tonal Counterpoint to satisfy requirement． <br> －Complete MTC 223 by end of semester 6 <br> －Complete MUP 232 by end of semester 6 |
| MHL 342：Music History II | 3 | 区 |  | Grade of C |  |
| MUP 100：Concert Attendance | 0 | $\square$ |  |  |  |
| MUP 327：Studio Instruction | 4 | 区 |  | Grade of C |  |
| MUP 495：Performance | 0 | $\square$ |  |  |  |
| MUP＊＊＊（Ensemble） | 1 | 区 |  | Grade of C |  |
| Natural Science Quantitative（SQ）or Science General（SG） | 4 | $\square$ |  |  |  |
| Literacy and Critical Inquiry（L） | 3 | $\square$ |  |  |  |
| TERM SEVEN： 91105 CREDIT HOURS |  |  |  |  |  |
| MUP 327：Studio Instruction | 4 | 区 |  | Grade of C |  |
| MUP 451：Repertoire | 2 | 区 |  | Grade of C |  |
| MUP＊＊＊（Ensemble） | 1 | 区 |  | Grade of C |  |
| Music Elective（cannot be MUS prefix；if didn＇t take MHL 201） | 1－3 | 区 |  | Grade of C |  |
| Upper division Literacy and Critical Inquiry（L）（Recommend MHL with Literacy designation） | 3 | 区 |  |  |  |
| Humanities，Fine Arts \＆Design（HU） | 3 | $\square$ |  |  |  |
| TERM EIGHT： 106120 CREDIT HOURS |  |  |  |  |  |
| MUP 327：Studio Instruction | 4 | 区 |  | Grade of C |  |
| MUP 481：Performance Pedagogy and Materials | 2 | 区 |  | Grade of C |  |
| MUP 496：Performance | 0 | $\square$ |  |  |  |
| MUP＊＊＊（Ensemble） | 1 | 囚 |  | Grade of C |  |
| MHL 3＊＊or 4＊＊History（If not already completed with a MHL with Literacy designation） | 3 | 区 |  | Grade of C |  |
| Music Elective（cannot be MUS prefix；required if you don＇t take MHL 201） | 0－3 | 囚 |  | Grade of C |  |
| Upper division Humanities，Fine Arts \＆Design（HU）or Social \＆Behavioral Sciences（SB） | 3 | 囚 |  |  |  |

## Graduation Requirements Summary：

| Total Hours（120 <br> minimum） | Total Hrs at ASU（30 <br> minimum） | Hrs Resident Credit for Academic <br> 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：

Major Map：Performance（Jazz）－<br>Bachelor of Music（B．Mus．）<br>Herberger College of The Arts，Tempe Campus<br>Catalog Year：2008－2009

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．

|  |  |  | Completed ATP：$\square$ Yes $\quad \square$ No |  | Completed AGEC：$\square$ Yes $\square$ No |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 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： 015 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> －Complete one semester of concert attendance with a grade of＂pass＂－students must complete six semesters <br> －Complete First Year Composition requirement by the end of semester 3 <br> －Complete Math requirement by the end of semester 2 |
| MUP 111：Studio Instruction | 2 | $\square$ |  | Grade of C |  |
| MUP 117：Jazz Improvisation | 1 | $\square$ |  | Grade of C |  |
| MUP 379：Jazz Studio | 1 | 区 |  | Grade of C |  |
| MUP 379：Ensemble | 1 | 区 |  | Grade of C |  |
| MUP 100：Concert Attendance | 0 | $\square$ |  |  |  |
| MUP 131：Class Piano | 1 | $\square$ |  | Grade of C |  |
| MTC 125：Basic Music Theory | 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 | $\square$ |  | Grade of C |  |
| MAT 142：College Mathematics（MA） | 3 | $\square$ |  |  |  |
| TERM TWO： 1630 CREDIT HOURS |  |  |  |  |  |
| MHL 140：Music as Culture | 3 | $\square$ |  | Grade of C | －Complete one semester of concert attendance with a grade of＂pass＂－students must complete six semesters <br> －Completed First Year Composition requirement by the end of semester 3 <br> －Complete Math requirement by the end of semester 2 |
| MUP 111：Studio Instruction | 2 | $\square$ |  | Grade of C |  |
| MUP 117：Jazz Improvisation | 1 | $\square$ |  | Grade of C |  |
| MUP 379：Jazz Studio | 1 | 区 |  |  |  |
| MUP 379：Ensemble | 1 | 区 |  | Grade of C |  |
| MUP 100：Concert Attendance | 0 | $\square$ |  |  |  |
| MUP 132：Class Piano | 1 | $\square$ |  | Grade of C |  |
| MTC 221：Music Theory： $18^{\text {th }}$ Century | 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 | $\square$ |  | Grade of C |  |
| TERM THREE： 3145 CREDIT HOURS |  |  |  |  |  |
| MUP 111：Studio Instruction | 2 | $\square$ |  | Grade of C | －Complete one semester of concert attendance with a grade of＂pass＂－students must complete six semesters <br> －Complete First Year Composition requirement by the end of semester 3 <br> －Complete MTC 125 by end of semester 3 <br> －Complete MUP 131 by end of semester 3 |
| MUP 217：Jazz Improvisation | 2 | $\square$ |  | Grade of C |  |
| MUP 379：Jazz Studio | 1 | 区 |  | Grade of C |  |
| MUP 379：Ensembles | 1 | 区 |  | Grade of C |  |
| MUP 100：Concert Attendance | 0 | $\square$ |  |  |  |
| MUP 235：Jazz Piano | 1 | $\square$ |  | Grade of C |  |
| MTC 222：Music Theory： $1{ }^{\text {th }}$ Century | 3 | $\square$ |  | Grade of C |  |
| Humanities，Fine Arts \＆Design（HU）AND Cultural Diversity in the US（C），Global Awareness（G）OR Historical Awareness（H） | 3 | $\square$ |  |  |  |
| Science Quantitative（SQ） | 4 | $\square$ |  |  |  |
| TERM FOUR： $46 \mathbf{6 0}$ CREDIT HOURS |  |  |  |  |  |
| MUP 111：Studio Instruction | 2 | $\square$ |  | Grade of C | －Complete 12 hours of upper division coursework be end of semester 5 <br> －Complete one semester of concert attendance with a grade of＂pass＂－students must complete six semesters <br> －Complete MTC 221 by end of semester 4 <br> －Complete MUP 132 by end of semester 4 |
| MUP 217：Jazz Improvisation | 2 | $\square$ |  | Grade of C |  |
| MUP 379：Jazz Studio | 1 | 区 |  | Grade of C |  |
| MUP 379：Ensembles | 1 | 区 |  | Grade of C |  |
| MUP 100：Concert Attendance | 0 | $\square$ |  |  |  |
| MUP 236：Jazz Piano | 1 | $\square$ |  | Grade of C |  |
| MTC 223：Music Theory： $20^{\text {th }}$ Century | 3 | $\square$ |  | Grade of C |  |
| Science Quantitative（SQ）or General（SG） | 4 | $\square$ |  |  |  |
| Social \＆Behavioral Science（SB）AND Cultural Diversity in the US （C），Global Awareness（G）OR Historical Awareness（H） | 3 | $\square$ |  |  |  |

Major Map：Performance（Jazz）－<br>Bachelor of Music（B．Mus．）<br>Herberger College of The Arts，Tempe Campus<br>Catalog Year：2008－2009

| 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 FIVE： 6175 CREDIT HOURS |  |  |  |  |  |
| MHL 341：Music History | 3 | 囚 |  | Grade of C | －Complete 12 hours of upper division coursework be end of semester 5 <br> －Complete MTC 222 by end of semester 5 <br> －Complete MUP 235 by end of semester 5 |
| MTC 315：Modern Arranging | 2 | 区 |  | Grade of C |  |
| MUP 210：Beginning Instrumental Conducting | 1 | $\square$ |  | Grade of C |  |
| MUP 311：Studio Instruction | 2 | 区 |  | Grade of C |  |
| MUP 319：Recording Studio Techniques | 2 | 区 |  | Grade of C |  |
| MUP 379：Jazz Studio | 1 | 区 |  | Grade of C |  |
| MUP 379：Ensembles | 1 | 囚 |  | Grade of C |  |
| MUP 100：Concert Attendance | 0 | $\square$ |  |  |  |
| Computer／Statistics／Quantitative applications（CS）－MHL 201：Mac Literacy for Musicians Recommended | 3 | $\square$ |  | Grade of C |  |
| TERM SIX： $76 \mathbf{9 0}$ CREDIT HOURS |  |  |  |  |  |
| MHL 342：Music History II | 3 | 区 |  | Grade of C | －Complete one semester of concert attendance with a grade of＂pass＂－students must complete six semesters <br> －Complete MTC 223 by end of semester 6 <br> －Complete MUP 236 by end of semester 6 |
| MTC 316：Modern Arranging | 2 | 区 |  | Grade of C |  |
| MUP 100：Concert Attendance | 0 | $\square$ |  |  |  |
| MUP 311：Studio Instruction | 2 | 区 |  | Grade of C |  |
| MUP 379：Ensembles | 1 | 区 |  | Grade of C |  |
| MUP 495：Performance | 0 | $\square$ |  |  |  |
| Social \＆Behavioral Science（SB） | 3 | $\square$ |  |  |  |
| Literacy and Critical Inquiry（L） | 3 | $\square$ |  |  |  |
| TERM SEVEN： 91105 CREDIT HOURS |  |  |  |  |  |
| MTC 440：Jazz Theory \＆Ear Training | 2 | 区 |  | Grade of C |  |
| MUP 311：Studio Instruction | 2 | 区 |  | Grade of C |  |
| MUP 317：Jazz Improvisation | 2 | 区 |  | Grade of C |  |
| MUP 386：Jazz Ensemble | 1 | 区 |  | Grade of C |  |
| MHL 3＊＊or 4＊＊（Recommend MHL with Literacy designation） | 3 | 区 |  | Grade of C |  |
| Music Elective（cannot be MUS prefix；required if you did not take MHL 201） | 0－2 | $\square$ |  | Grade of C |  |
| UD Humanities or Social Behavioral Science（C，G，H） | 3 | 区 |  |  |  |
| TERM EIGHT： $106 \mathbf{1 2 0}$ CREDIT HOURS |  |  |  |  |  |
| MTC 441：Jazz Composition | 2 | 区 |  | Grade of C |  |
| MUP 311：Studio Instruction | 2 | 区 |  | Grade of C |  |
| MUP 317：Jazz Improvisation | 2 | 区 |  | Grade of C |  |
| MUP 386：Jazz Ensemble | 1 | 区 |  | Grade of C |  |
| MUP 495：Performance | 0 | $\square$ |  |  |  |
| Upper division Literacy and Critical Inquiry（L）（Recommend MHL with Literacy designation） | 3 | 区 |  |  |  |
| Humanities，Fine Arts \＆Design（HU） | 3 | $\square$ |  |  |  |
| Elective（if upper division literacy was MHL course） | 0－3 | $\square$ |  |  |  |

## Graduation Requirements Summary：

| Total Hours（120 <br> minimum） | Total Hrs at ASU（30 <br> minimum） | Hrs Resident Credit for Academic <br> 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：

Major Map: Performance (Keyboard)<br>Bachelor of Music (B.Mus.)<br>Herberger College of The Arts, Tempe Campus<br>Catalog Year: 2008-2009

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.


Major Map：Performance（Keyboard）－<br>Bachelor of Music（B．Mus．）<br>Herberger College of The Arts，Tempe Campus<br>Catalog Year：2008－2009

| 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 SIX： 7690 CREDIT HOURS |  |  |  |  |  |
| MUP 209：Beginning Choral Conducting or MUP 210：Beginning Instrumental Conducting | 0－1 | 区 |  | Grade of C | －Complete one semester of concert attendance with a grade of＂pass＂－if six semesters not completed <br> －Complete MTC 223 by end of semester 6 <br> －Complete 1 semester of conducting by end of semester 6 （may choose MUP 209 or MUP 210） |
| MUP 379：Chamber Ensemble | 1 | 区 |  | Grade of C |  |
| MHL 342：Music History II | 3 | 区 |  | Grade of C |  |
| MUP 100：Concert Attendance | 0 | $\square$ |  |  |  |
| MUP 327：Studio Instruction | 4 | 区 |  |  |  |
| MUP 495：Performance | 0 | ® |  |  |  |
| Upper division Humanities，Fine Arts \＆Design（HU）or Social \＆Behavioral Sciences（SB） | 3 | 区 |  |  |  |
| Social \＆Behavioral Sciences（SB） | 3 | $\square$ |  |  |  |
| TERM SEVEN： 91105 CREDIT HOURS |  |  |  |  |  |
| MHL 440：Music Since 1900 （Upper Division Literacy and Critical Inquiry） | 3 | 区 |  |  | －Complete one semester of concert attendance with a grade of＂pass＂－if six semesters not completed |
| MUP 327：Studio Instruction | 4 | 区 |  |  |  |
| MUP 440：Keyboard Harmony | 1 | 区 |  |  |  |
| MUP 451：Repertoire | 2 | 区 |  |  |  |
| MUP 487：Collaborative Piano | 1 | 区 |  |  |  |
| MUP 496：Performance | 0 | 区 |  |  |  |
| MTC 425：Studies in $20{ }^{\text {th }}$ Century Theory | 3 | $\square$ |  |  |  |
| Elective | 2 | 区 |  |  |  |
| TERM EIGHT： $106 \mathbf{1 2 0}$ CREDIT HOURS |  |  |  |  |  |
| MUP 327：Studio Instruction | 4 | 区 |  |  | －Complete one semester of concert attendance with a grade of＂pass＂－if six semesters not completed |
| MUP 481：Performance Pedagogy \＆Materials or MUP 482：Piano Pedagogy | 2 | 区 |  |  |  |
| MUP 487：Collaborative Piano | 1 | 区 |  |  |  |
| MUP 496：Performance | 0 | 区 |  |  |  |
| MHL 3＊＊or 4＊＊History： | 3 | 区 |  |  |  |
| Music Elective（cannot be MUS prefix） | 2 | 区 |  |  |  |

## Graduation Requirements Summary：

| Total Hours（120 <br> minimum） | Total Hrs at ASU（30 <br> minimum） | Hrs Resident Credit for Academic <br> 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：

Major Map: Performance (Music Theatre) -<br>Bachelor of Music (B.Mus.)<br>Herberger College of The Arts, Tempe Campus<br>Catalog Year: 2008-2009

Prior to semester 1:
 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.
 who do not take the diagnostic will register for MUP 131 and may take the diagnostic during the week before school starts.


Major Map：Performance（Music Theatre）－<br>Bachelor of Music（B．Mus．）<br>Herberger College of The Arts，Tempe Campus<br>Catalog Year：2008－2009

| Course Subject and Title （courses in bold／shading are critical） | Hrs． | $\begin{aligned} & \hline \text { Upper } \\ & \text { Division } \\ & \hline \end{aligned}$ | Transfer Course／Grade | $\begin{aligned} & \text { Minimum Grade if } \\ & \text { Required } \\ & \hline \end{aligned}$ | Additional Critical Requirement Notes |
| :---: | :---: | :---: | :---: | :---: | :---: |
| TERM FIVE： 6175 CREDIT HOURS |  |  |  |  |  |
| DAN＊＊＊ | 2 | $\square$ |  | Grade of C | －Complete one semester of concert attendance with a grade of＂pass＂－students must complete six semesters <br> －Complete MTC 222 by end of semester 5 <br> －Complete MUP 231 by end of semester 5 <br> －＊1 semester of MUP 209 required．Complete by semester 6 |
| MHL 341：Music History | 3 | 区 |  | Grade of C |  |
| MUP 209：Beginning Choral Conducting＊ | 1＊ | 区 |  | Grade of C |  |
| MUP 311：Studio Lessons | 2 | 区 |  | Grade of C |  |
| MUP 371：Music Theatre：Workshops | 1 | 区 |  | Grade of C |  |
| MUP 373：Music Theatre：Performance | 1 | 区 |  | Grade of C |  |
| MUP 100：Concert Attendance | 0 | $\square$ |  |  |  |
| Natural Science Quantitative（SQ） | 4 | $\square$ |  |  |  |
| Humanities，Fine Arts \＆Design（HU）AND Cultural Diversity in the US（C），Global Awareness（G）OR Historical Awareness（H） | 3 | $\square$ |  |  |  |
| TERM SIX： $76 \mathbf{9 0}$ CREDIT HOURS |  |  |  |  |  |
| MUP 209：Beginning Choral Conducting＊ | （1） | $\square$ |  | Grade of C | －Complete one semester of concert attendance with a grade of＂pass＂－students must complete six semesters <br> －Complete MTC 223 by end of semester 6 <br> －＊1 semester of MUP 209 required．Complete by semester 6 |
| MHL 342：Music History | 3 | 区 |  | Grade of C |  |
| MUP 100：Concert Attendance | 0 | $\square$ |  |  |  |
| MUP 311：Studio Instruction | 2 | 区 |  | Grade of C |  |
| MUP 371：Music Theatre：Workshops | 1 | 区 |  | Grade of C |  |
| MUP 373：Music Theatre：Performance | 1 | 区 |  | Grade of C |  |
| DAN ${ }^{* * *}$ | 2 | $\square$ |  | Grade of C |  |
| Natural Science Quantitative（SQ）or Science General（SG） | 4 | $\square$ |  |  |  |
| TERM SEVEN： 91105 CREDIT HOURS |  |  |  |  |  |
| DAN 494：Special Topics | 3 | $\boxtimes$ |  | Grade of C |  |
| MUP 311：Studio Instruction | 2 | 区 |  | Grade of C |  |
| MUP 371：Music Theatre：Workshops | 1 | 区 |  | Grade of C |  |
| MUP 373：Music Theatre：Performance | 1 | 区 |  | Grade of C |  |
| Humanities，Fine Arts \＆Design（HU）AND Cultural Diversity in the US（C），Global Awareness（G）OR Historical Awareness（H） | 3 | $\square$ |  |  |  |
| Upper division Literacy and Critical Inquiry（L） | 3 | 区 |  |  |  |
| TERM EIGHT： 106120 CREDIT HOURS |  |  |  |  |  |
| MUP 311：Studio Instruction | 2 | 区 |  | Grade of C |  |
| MUP 371：Music Theatre：Workshops | 1 | 区 |  | Grade of C |  |
| MUP 373：Music Theatre：Performance | 1 | 区 |  | Grade of C |  |
| MUP 451：Repertoire（Broadway Musicals） | 1 | 区 |  | Grade of C |  |
| Upper division Humanities（HU）（THE 322 recommended）or Social Behavioral Science（SB） | 3 | 区 |  |  |  |
| Social \＆Behavioral Science（SB） | 3 | $\square$ |  |  |  |

## Graduation Requirements Summary：

| Total Hours（120 <br> minimum） | Total Hrs at ASU（30 <br> minimum） | Hrs Resident Credit for Academic <br> 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：

## Major Map：Performance（Orchestral Instrument）－ Bachelor of Music（B．Mus．） <br> Herberger College of The Arts，Tempe Campus <br> Catalog Year：2008－2009

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．

|  |  |  | Completed ATP：$\square$ Yes $\square$ No |  | Completed AGEC：$\square$ Yes $\square$ No |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 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： 015 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> －Complete one semester of concert attendance with a grade of＂pass＂－students must complete six semesters <br> －Complete First Year Composition requirement by the end of semester 3 <br> －Complete Math requirement by the end of semester 2 |
| MUP 127：Studio Instruction | 4 | $\square$ |  | Grade of C |  |
| MUP 3＊＊（Ensemble） | 1 | 区 |  | Grade of C |  |
| MUP 100：Concert Attendance | 0 | $\square$ |  |  |  |
| MUP 131：Class Piano | 1 | $\square$ |  | Grade of C |  |
| MTC 125：Basic Music Theory | 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 | $\square$ |  | Grade of C |  |
| MAT 142：College Mathematics（MA） | 3 | $\square$ |  |  |  |
| TERM TWO： 1630 CREDIT HOURS |  |  |  |  |  |
| MHL 140：Music as Culture | 3 | $\square$ |  | Grade of C | －Complete one semester of concert attendance with a grade of＂pass＂－students must complete six semesters <br> －Complete First Year Composition requirement by the end of semester 3 <br> －Complete Math requirement by the end of semester 2 |
| MUP 127：Studio Instruction | 4 | $\square$ |  | Grade of C |  |
| MUP 3＊＊（Ensemble） | 1 | 区 |  | Grade of C |  |
| MUP 100：Concert Attendance | 0 | $\square$ |  |  |  |
| MUP 132：Class Piano | 1 | $\square$ |  | Grade of C |  |
| MTC 221：Music Theory： $18{ }^{\text {th }}$ Century | 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 | $\square$ |  | Grade of C |  |
| TERM THREE： 3145 CREDIT HOURS |  |  |  |  |  |
| MUP 127：Studio Instruction | 4 | $\square$ |  | Grade of C | －Complete one semester of concert attendance with a grade of＂pass＂－students must complete six semesters <br> －Complete First Year Composition requirement by the end of semester 3 <br> －Complete MTC 125 by end of semester 3 <br> －Complete MUP 131 by end of semester 3 |
| MUP 3＊＊（Ensemble） | 1 | 区 |  | Grade of C |  |
| MUP 100：Concert Attendance | 0 | $\square$ |  |  |  |
| MUP 231：Class Piano | 1 | $\square$ |  | Grade of C |  |
| MTC 222：Music Theory： $19^{\text {th }}$ Century | 3 | $\square$ |  | Grade of C |  |
| Humanities，Fine Arts \＆Design（HU）AND Cultural Diversity in the US（C），Global Awareness（G）OR Historical Awareness（H） | 3 | $\square$ |  |  |  |
| Natural Science Quantitative（SQ） | 4 | $\square$ |  |  |  |
| TERM FOUR： $46 \mathbf{6 0}$ CREDIT HOURS |  |  |  |  |  |
| MUP 127：Studio Instruction | 4 | $\square$ |  | Grade of C | －Complete one semester of concert attendance with a grade of＂pass＂－students must complete six semesters <br> －Complete MTC 221 by end of semester 4 <br> －Complete MUP 132 by end of semester 4 |
| MUP 3＊＊（Ensemble） | 1 | 区 |  | Grade of C |  |
| MUP 100：Concert Attendance | 0 | $\square$ |  |  |  |
| MUP 232：Class Piano | 1 | $\square$ |  | Grade of C |  |
| MTC 223：Music Theory： $20^{\text {th }}$ Century | 3 | $\square$ |  | Grade of C |  |
| Social \＆Behavioral Science（SB）AND Cultural Diversity in the US （C），Global Awareness（G）OR Historical Awareness（H） | 3 | $\square$ |  |  |  |
| Natural Science Quantitative（SQ）or General（SG） | 4 | $\square$ |  |  |  |
| TERM FIVE： 6175 CREDIT HOURS |  |  |  |  |  |
| MHL 341：Music History | 3 | 囚 |  | Grade of C | －Complete one semester of concert attendance with a grade of＂pass＂－students must complete six semesters <br> －Complete MTC 222 by end of semester 5 <br> －Complete MUP 231 by end of semester 5 |
| MUP 210：Beginning Instrumental Conducting | 1 | $\square$ |  | Grade of C |  |
| MUP 327：Studio Instruction | 4 | 区 |  | Grade of C |  |
| MUP 379：Chamber Music Ensemble | 1 | 区 |  | Grade of C |  |
| MUP 3＊＊（Ensemble） | 1 | 区 |  | Grade of C |  |
| MUP 100：Concert Attendance | 0 | $\square$ |  |  |  |
| Computer／Statistics／Quantitative applications（CS）－MHL 201：Mac Literacy for Musicians Recommended | 3 | $\square$ |  | Grade of C |  |
| Social \＆Behavioral Science（SB）AND Cultural Diversity in the US （C），Global Awareness（G）OR Historical Awareness（H） | 3 | $\square$ |  |  |  |

Major Map：Performance（Orchestral Instrument）－ Bachelor of Music（B．Mus．）<br>Herberger College of The Arts，Tempe Campus<br>Catalog Year：2008－2009

| $\begin{aligned} & \begin{array}{l} \text { Course Subject and Title } \\ \text { (courses in bold/shading are critical) } \end{array} \end{aligned}$ | Hrs． | Upper Division | Transfer Course／Grade | $\begin{aligned} & \text { Minimum Grade if } \\ & \text { Required } \end{aligned}$ | Additional Critical Requirement Notes |
| :---: | :---: | :---: | :---: | :---: | :---: |
| TERM SIX： $76 \mathbf{9 0}$ CREDIT HOURS |  |  |  |  |  |
| MHL 342：Music History II | 3 | 区 |  | Grade of C | －Complete MTC 223 by end of semester 6 <br> －Complete MUP 232 by end of semester 6 |
| MUP 100：Concert Attendance | 0 | $\square$ |  |  |  |
| MUP 327：Studio Instruction | 4 | 区 |  | Grade of C |  |
| MUP 340：Instrumental Conducting | 2 | 区 |  | Grade of C |  |
| MUP 379：Chamber Music Ensemble | 1 | 区 |  | Grade of C |  |
| MUP 495：Performance | 0 | $\square$ |  |  |  |
| MUP 3＊＊（Ensemble） | 1 | $\square$ |  | Grade of C |  |
| Literacy and Critical Inquiry（L） | 3 | $\square$ |  |  |  |
| TERM SEVEN： 91105 CREDIT HOURS |  |  |  |  |  |
| MUP 327：Studio Instruction | 4 | 区 |  | Grade of C | －Complete one semester of concert attendance with a grade of＂pass＂－if six semesters not completed |
| MUP 379：Chamber Music Ensemble | 1 | 区 |  | Grade of C |  |
| MUP 451：Repertoire | 2 | 区 |  | Grade of C |  |
| MUP 3＊＊（Ensemble） | 1 | 区 |  | Grade of C |  |
| Upper division Humanities，Fine Arts \＆Design（HU）or Social \＆Behavioral Sciences（SB） | 3 | 区 |  |  |  |
| Humanities，Fine Arts \＆Design（HU） | 3 | $\square$ |  |  |  |
| TERM EIGHT： $106 \mathbf{1 2 0}$ CREDIT HOURS |  |  |  |  |  |
| MHL 3＊＊or 4＊＊History（Recommend MHL with Literacy designation） | 3 | 区 |  | Grade of C | －Complete one semester of concert attendance with a grade of＂pass＂－if six semesters not completed |
| MUP 327：Studio Instruction | 4 | 区 |  | Grade of C |  |
| MUP 379：Chamber Music Ensemble | 1 | 区 |  | Grade of C |  |
| MUP 481：Performance Pedagogy and Materials | 2 | 区 |  | Grade of C |  |
| MUP 496：Performance | 0 | $\square$ |  |  |  |
| MUP＊＊＊（Ensemble） | 1 | 区 |  | Grade of C |  |
| Upper division Literacy and Critical Inquiry（L）（Recommend MHL with Literacy designation） | 3 | 区 |  |  |  |
| Elective（necessary if upper division literacy is MHL course） | 0－2 | $\square$ |  |  |  |

## Graduation Requirements Summary：

| Total Hours（120 <br> minimum） | Total Hrs at ASU（30 <br> minimum） | Hrs Resident Credit for Academic <br> 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：

Major Map：Performance（Voice）－<br>Bachelor of Music（B．Mus．）<br>Herberger College of The Arts，Tempe Campus<br>Catalog Year：2008－2009

Prior to semester 1：
 or voice）before pursuing a major in the School of Music
 testing information．
 who do not take the diagnostic will register for MUP 131 and may take the diagnostic during the week before school starts．

|  |  |  | Completed ATP：$\square$ Yes $\square$ No |  | Completed AGEC：$\square$ Yes $\square$ No |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 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： 015 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> －Complete one semester of concert attendance with a grade of＂pass＂－students must complete six semesters <br> －Complete First Year Composition requirement by the end of semester 3 <br> －Complete Math requirement by the end of semester 2 |
| MHL 140：Music as Culture | 3 | $\square$ |  | Grade of C |  |
| MUP 127：Studio Instruction | 4 | $\square$ |  | Grade of C |  |
| MUP 352：Chamber Singers OR MUP 353：Symphonic Chorale | 1 | 区 |  | Grade of C |  |
| MUP 100：Concert Attendance | 0 | $\square$ |  |  |  |
| MUP 131：Class Piano | 1 | $\square$ |  | Grade of C |  |
| MTC 125：Basic Music Theory | 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 | $\square$ |  | Grade of C |  |
| MAT 142：College Mathematics（MA） | 3 | $\square$ |  |  |  |
| TERM TWO： 1630 CREDIT HOURS |  |  |  |  |  |
| MUP 127：Studio Instruction | 4 | $\square$ |  | Grade of C | －Complete one semester of concert attendance with a grade of＂pass＂－students must complete six semesters <br> －Complete First Year Composition requirement by the end of semester 3 <br> －Students must complete MAT 142 or higher by the end of semester 2 <br> －Complete 12 hours of upper division coursework by end of semester 5 <br> －Second language diction：French，German or Italian <br> －All performance voice students must complete a second language 101，including one semester of French 101，German 101 or Italian 101. |
| MUP 352：Chamber Singers OR MUP 353：Symphonic Chorale | 1 | 区 |  | Grade of C |  |
| Second Language 101 | 4 | $\square$ |  | Grade of C |  |
| MUP 100：Concert Attendance | 0 | $\square$ |  |  |  |
| MUP 132：Class Piano | 1 | $\square$ |  | Grade of C |  |
| MUP 250：Foreign Language Diction | 1 | $\square$ |  | Grade of C |  |
| MTC 221：Music Theory： $18^{\text {th }}$ Century | 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 | $\square$ |  | Grade of C |  |
| TERM THREE： 3145 CREDIT HOURS |  |  |  |  |  |
| MUP 127：Studio Instruction | 4 | $\square$ |  |  | －Complete one semester of concert attendance with a grade of＂pass＂－students must complete six semesters <br> －Complete First Year Composition requirement by the end of semester 3 <br> －Second language diction：French，German or Italian <br> －All performance voice students must complete a one semester of French 101，German 101 and Italian 101，and one semester of 102 in the language of their choice <br> －Complete MTC 125 by end of semester 3 <br> －Complete MUP 131 by end of semester 3 |
| MUP 352：Chamber Singers OR MUP 353：Symphonic Chorale | 1 | $\square$ |  | Grade of C |  |
| Second Language 101 | 4 | $\square$ |  | Grade of C |  |
| MUP 100：Concert Attendance | 0 | $\square$ |  |  |  |
| MUP 231：Class Piano | 1 | $\square$ |  | Grade of C |  |
| MUP 250：Foreign Language Diction | 1 | $\square$ |  | Grade of C |  |
| MTC 222：Music Theory： $19^{\text {th }}$ Century | 3 | $\square$ |  | Grade of C |  |
| Computer／Statistics／Quantitative applications（CS）－MHL 201：Mac Literacy for Musicians Recommended | 3 | $\square$ |  | Grade of C |  |
| TERM FOUR： $46 \mathbf{6 0}$ CREDIT HOURS |  |  |  |  |  |
| MUP 127：Studio Instruction | 4 | $\square$ |  | Grade of C | －Second language diction：French，German or Italian <br> －All performance voice students must complete a one semester of French 101，German 101 and Italian 101，and one semester of 102 in the language of their choice <br> －Complete one semester of concert attendance with a grade of＂pass＂－students must complete six semesters <br> －Complete MTC 221 by end of semester 4 <br> －Complete MUP 132 by end of semester 4 |
| MUP 352：Chamber Singers OR MUP 353：Symphonic Chorale | 1 | 区 |  | Grade of C |  |
| Second Language 101 | 4 | $\square$ |  | Grade of C |  |
| MUP 100：Concert Attendance | 0 | $\square$ |  |  |  |
| MUP 232：Class Piano | 1 | $\square$ |  | Grade of C |  |
| MUP 250：Foreign Language Diction | 1 | $\square$ |  | Grade of C |  |
| MTC 223：Music Theory： $20^{\text {th }}$ Century | 3 | $\square$ |  | Grade of C |  |
| Social \＆Behavioral Science（SB）AND Cultural Diversity in the US （C），Global Awareness（G）OR Historical Awareness（H） | 3 | $\square$ |  |  |  |

Major Map：Performance（Voice）－<br>Bachelor of Music（B．Mus．）<br>Herberger College of The Arts，Tempe Campus<br>Catalog Year：2008－2009

| Course Subject and Title （courses in bold／shading are critical） | Hrs． | Upper <br> Division | Transfer Course／Grade | Minimum Grade if Required | Additional Critical Requirement Notes |
| :---: | :---: | :---: | :---: | :---: | :---: |
| TERM FIVE： 6175 CREDIT HOURS |  |  |  |  |  |
| MHL 341：Music History | 3 | 区 |  | Grade of C | －Complete Second Language 101 and 102 by the end of semester 6 <br> －Complete one semester of concert attendance with a grade of＂pass＂－students must complete six semesters <br> －All performance voice students must complete a one semester of French 101，German 101 and Italian 101，and one semester of 102 in the language of their choice <br> －Complete MTC 222 by end of semester 5 <br> －Complete MUP 131 by end of semester 5 |
| MUP 209：Beginning Choral Conducting | 1 | $\square$ |  | Grade of C |  |
| MUP 327：Studio Instruction | 4 | 区 |  | Grade of C |  |
| MUP 3＊＊（Ensemble） | 1 | 区 |  | Grade of C |  |
| MUP 4＊＊（Repertoire／Pedagogy） | 2 | 区 |  | Grade of C |  |
| MUP 100：Concert Attendance | 0 | $\square$ |  |  |  |
| Second Language 102 | 4 | $\square$ |  |  |  |
| Humanities，Fine Arts \＆Design（HU）AND Cultural Diversity in the US（C），Global Awareness（G）OR Historical Awareness（H） | 3 | $\square$ |  |  |  |
| TERM SIX： $76 \mathbf{9 0}$ CREDIT HOURS |  |  |  |  |  |
| MUP 209：Beginning Choral Conducting | 1 | $\square$ |  | Grade of C | －Complete Second Language 101 and 102 by the end of semester 6 <br> －Complete one semester of concert attendance with a grade of＂pass＂－students must complete six semesters <br> －Complete MTC 223 by end of semester 6 <br> －Complete MUP 132 by end of semester 6 |
| MHL 342：Music History | 3 | 区 |  | Grade of C |  |
| MUP 100：Concert Attendance | 0 | $\square$ |  |  |  |
| MUP 327：Studio Instruction | 4 | 区 |  | Grade of C |  |
| MUP 495：Performance | 0 | 区 |  |  |  |
| MUP 3＊＊（Ensemble） | 1 | 区 |  | Grade of C |  |
| MUP 4＊＊（Repertoire／Pedagogy） | 2 | 区 |  | Grade of C |  |
| Natural Science Quantitative（SQ） | 4 | $\square$ |  |  |  |
| Humanities，Fine Arts \＆Design（HU） | 3 | $\square$ |  |  |  |
| TERM SEVEN： 91105 CREDIT HOURS |  |  |  |  |  |
| MUP 327：Studio Instruction | 4 | 区 |  | Grade of C |  |
| MUP 3＊＊（Ensemble） | 1 | 区 |  | Grade of C |  |
| MUP 4＊＊（Repertoire／Pedagogy） | 2 | 区 |  | Grade of C |  |
| MUP 3＊＊or 4＊＊Elective | 1 | $\square$ |  | Grade of C |  |
| Literacy and Critical Inquiry（L） | 3 | $\square$ |  |  |  |
| Natural Science Quantitative（SQ）or General（SG） | 4 | $\square$ |  |  |  |
| TERM EIGHT： $106 \mathbf{1 2 0}$ CREDIT HOURS |  |  |  |  |  |
| MHL 3＊＊or 4＊＊History（Recommend MHL with Literacy designation） | 3 | 区 |  | Grade of C |  |
| MUP 327：Studio Instruction | 4 | 区 |  | Grade of C |  |
| MUP 3＊＊（Ensemble） | 1 | 区 |  | Grade of C |  |
| MUP 496：Performance | 0 | 区 |  |  |  |
| Upper division Humanities，Fine Arts \＆Design（HU）or Social \＆Behavioral Sciences（SB） | 3 | $\triangle$ |  |  |  |
| Social \＆Behavioral Science（SB）AND Cultural Diversity in the US （C），Global Awareness（G）OR Historical Awareness（H） | 3 | $\square$ |  |  |  |
| Upper Division Literacy and Critical Inquiry（if not already completed with MHL with Literacy designation） | 0－3 | 区 |  |  |  |

## Graduation Requirements Summary：

| Total Hours（120 <br> minimum） | Total Hrs at ASU（30 <br> minimum） | Hrs Resident Credit for Academic <br> 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：

Depending on level of second language proficiency，this degree may require more than 120 hours．

Major Map: Theatre - Bachelor of Arts (B.A.) includes Pre-Theatre<br>Herberger College of The Arts, Tempe Campus<br>Catalog Year: 2008-2009

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.

|  |  |  | Completed ATP: $\square$ Yes $\quad \square$ No |  | Completed AGEC: $\square$ Yes $\square$ No |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 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: 015 CREDIT HOURS |  |  |  |  |  |
| ASU 101: The ASU Experience | 1 | $\square$ |  |  | - ASU 101 is for freshman ASU 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 <br> - MAT 142 (or higher) (MA) must be completed by end of term 2 <br> - First-year composition requirement must be completed by end of term 3 <br> - THP 102, 201, and 213 or 214 must be completed by end of term 4 <br> - MILESTONE - Students who did not complete the Undergraduate Theatre Interview prior to enrollment must complete this requirement by the end of this term <br> BA Theatre additional requirements: <br> - Minimum 2.5 cumulative GPA in Theatre or Film courses <br> - Minimum 2.0 cumulative GPA <br> BA Theatre (Acting) or BA Theatre (Design \& Production) additional requirements: <br> - Minimum 3.0 cumulative GPA in Theatre or Film courses <br> - Minimum 2.5 cumulative GPA |
| THE 125 Orientation to Theatre \& Film | 1 | $\square$ |  | Grade of B- |  |
| Complete at least 1 (if not all) of the following courses (all three must be completed by end of term 4) <br> THP 102 Acting I: Fundamentals* | 3 | $\square$ |  | *Students wishing to pursue Acting concentration, minimum grade of B required in THP 102; all others minimum grade of C required |  |
| THP 201 Theatre Production Crew, and/or | 1 | $\square$ |  | Grade of C |  |
| THP 213 Intro to Technical Theatre or THP 214 Intro to Costuming | 4/4 | $\square$ |  | Grade of C |  |
| ENG 101 or 102: First-Year Composition or ENG 107 or 108: English for Foreign Students or ENG 105: Advanced First-Year Composition | 3 | $\square$ |  | Grade of C |  |
| Complete 1 course from: <br> MAT 142 College Mathematics (MA) or Social \& Behavioral Science (SB) | 3 | $\square$ |  |  |  |
| TERM TWO: 16 30 CREDIT HOURS |  |  |  |  |  |
| If not already completed, complete at least 1 of the following courses (all three must be completed by end of term 4): <br> THP 102 Acting I: Fundamentals* | 3 | $\square$ |  | *Students wishing to pursue Acting concentration, minimum grade of B required in THP 102; all others minimum grade of C required | - MAT 142 (or higher) (MA) must be completed by end of term 2 <br> - First-year composition requirement must be completed by end of term 3 <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 or THP 277 Acting: Intro to Voice <br> - \#Theatre (Design \& Production) prospective students must complete THP 213 \& 214 <br> BA Theatre additional requirements: <br> - Minimum 2.5 cumulative GPA in Theatre or Film courses <br> - Minimum 2.0 cumulative GPA <br> BA Theatre (Acting) additional requirements: <br> - Minimum 3.0 cumulative GPA in Theatre or Film courses <br> - Minimum 2.5 cumulative GPA <br> BA Theatre (Design \& Production) additional requirements: <br> - Minimum 3.0 cumulative GPA in Theatre or Film courses <br> - Minimum 2.5 cumulative GPA <br> - MILESTONE - BA Theatre students wanting to pursue the Design \& Production concentration must successfully pass an additional interview and portfolio review at the end of term two provided they have completed THP 213 and 214. |
| THP 201 Theatre Production Crew, and/or | 1 | $\square$ |  | Grade of C |  |
| THP 213 Intro to Technical Theatre or THP 214 Intro to Costuming | 4/4 | $\square$ |  | Grade of C |  |
| If THP 102, 201 and 213/214 are completed then complete Related elective | 3 | $\square$ |  | Grade of C |  |
| ENG 101 or 102: First-Year Composition or ENG 107 or 108: English for Foreign Students or ENG 105: Advanced First-Year Composition | 3 | $\square$ |  | Grade of C |  |
| Natural Science-Quantitative (SQ) | 4 | $\square$ |  |  |  |
| Complete remaining course from: MAT 142 College Mathematics (MA) or Social \& Behavioral Science (SB) | 3 | $\square$ |  |  |  |
| Elective | 3 | $\square$ |  |  |  |

Major Map：Theatre－Bachelor of Arts（B．A．）

includes Pre－Theatre
Herberger College of The Arts，Tempe Campus
Catalog Year：2008－2009

| 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 THREE： 3145 CREDIT HOURS |  |  |  |  |  |
| If not completed already complete remaining courses from：THP 102＊， 201 and 213 or 214 | 1－4 | $\square$ |  | ＊Students wishing to pursue Acting concentration， minimum grade of B－required in THP 102；all others minimum grade of C required | －First Year Composition Completed <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 or THP 277 Acting：Intro to Voice <br> BA Theatre additional requirements： <br> －Minimum 2.5 cumulative GPA in Theatre or Film courses <br> －Minimum 2.0 cumulative GPA <br> BA Theatre（Acting）additional requirements： <br> －Minimum 3.0 cumulative GPA in Theatre or Film courses <br> －Minimum 2.5 cumulative GPA <br> BA Theatre（Design \＆Production）additional requirements： <br> －Minimum 3.0 cumulative GPA in Theatre or Film courses <br> －Minimum 2.5 cumulative GPA |
| THE 220 Principles of Dramatic Analysis（L or HU） | 3 | $\square$ |  | Grade of C |  |
| \＃Related elective from courses with FMP，THE or THP prefix | 3 | $\square$ |  | Grade of C |  |
| Computer／Statistics／Quantitative applications（CS） | 3 | $\square$ |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| TERM FOUR： $46 \mathbf{6 0}$ CREDIT HOURS |  |  |  |  |  |
| If not completed already complete remaining courses from：THP 102＊， 201 and 213 or 214 | 1－4 | $\square$ |  | ＊Students wishing to pursue Acting concentration， minimum grade of B－required in THP 102；all others minimum grade of C required | －THP 102，201，and 213 or 214 must be completed by end of term 4 <br> －\＃Theatre（Acting）prospective students must complete THP 202 Acting II：Scene Study <br> BA Theatre（Acting）additional requirements： <br> －Minimum 3.0 cumulative GPA in Theatre or Film courses <br> －Minimum 2.5 cumulative GPA <br> －MILESTONE－BA Theatre students wanting to pursue the Acting concentration must successfully pass an additional interview and audition at the end of term four． <br> BA Theatre（Design \＆Production）additional requirements： <br> －Minimum 3.0 cumulative GPA in Theatre or Film courses <br> －Minimum 2.5 cumulative GPA |
| THP 218 The Director＇s Vision | 3 | $\square$ |  | Grade of C |  |
| THP 301 Theatre Production | 1 | 区 |  | Grade of C |  |
| \＃Related elective from courses with FMP，THE or THP prefix | 3 | $\square$ |  |  |  |
| Natural Science（SG or SQ） | 4 | $\square$ |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
|  |  |  |  |  |  |
| Major Map and Critical Requirements for students continuing in the BA in Theatre |  |  |  |  |  |
| TERM FIVE： 6175 CREDIT HOURS |  |  |  |  |  |
| THE 320 History of the Theatre I（HU，H） | 3 | 区 |  | Grade of C | －Minimum 2.5 cumulative GPA required in Theatre （THE，THP，FMP）courses <br> －Minimum 2.0 cumulative GPA required |
| THP 313 Fundamentals of Design | 3 | 区 |  | Grade of C |  |
| Upper division related elective from courses with FMP，THE or THP prefix | 3 | 区 |  | Grade of C |  |
| Upper division Literacy and Critical Inquiry（L） | 3 | 区 |  |  |  |
| Social and Behavioral Science（SB）and Cultural Diversity in the US （C） | 3 | $\square$ |  |  |  |
| TERM SIX： 7690 CREDIT HOURS |  |  |  |  |  |
| THE／THP course－Dramatic Literature focus | 3 | 区 |  | Grade of C | －Minimum 2.5 cumulative GPA required in Theatre （THE，THP，FMP）courses <br> －Minimum 2.0 cumulative GPA required |
| THE 321 History of the Theatre II（HU，H） | 3 | ® |  | Grade of C |  |
| Upper division related elective from courses with FMP，THE or THP prefix | 3 | 区 |  | Grade of C |  |
| Humanities，Fine Arts，and Design（HU）OR Social and Behavioral Sciences（SB）AND Global Awareness（G） | 3 | $\square$ |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| TERM SEVEN： 91105 CREDIT HOURS |  |  |  |  |  |
| THE 440 Experimental Theatre \＆Performance | 3 | 区 |  | Grade of C | －Minimum 2.5 cumulative GPA required in Theatre （THE，THP，FMP）courses <br> －Minimum 2.0 cumulative GPA required |
| Upper division related elective from courses with FMP，THE or THP prefix | 3 | 区 |  | Grade of C |  |
| Upper division related elective from courses with FMP，THE or THP prefix | 3 | 区 |  | Grade of C |  |
| Elective | 3 | $\square$ |  |  |  |
| Elective | 3 | $\square$ |  |  |  |


| Course Subject and Title <br> (courses in bold/shading are critical) | Hrs. | Upper <br> Division | Transfer <br> Course/Grade | Minimum Grade if <br> Required | Additional Critical Requirement Notes |
| :--- | :---: | :---: | :---: | :--- | :--- | :--- |
| TERM EIGHT: 106 120 CREDIT HOURS | 3 | $\boxed{y y y y y}$ |  |  |  |

## 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

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.

Students follow major map and critical requirements for BA Theatre for Terms 1-4 until submission of successful audition/interview/portfolio review.


Major Map：Theatre（Acting）－Bachelor of Arts（B．A．）
Herberger College of The Arts，Tempe Campus
Catalog Year：2008－2009

| Course Subject and Title （courses in bold／shading are critical） | Hrs． | $\begin{aligned} & \hline \text { Upper } \\ & \text { Division } \end{aligned}$ | Transfer Course／Grade | Minimum Grade if Required | Additional Critical Requirements Notes |
| :---: | :---: | :---: | :---: | :---: | :---: |
| TERM THREE： 3145 CREDIT HOURS |  |  |  |  |  |
| If not completed already，complete remaining courses from：THP 102＊， 201 and 213 or 214 |  | $\square$ |  | ＊Students wishing to pursue Acting concentration， minimum grade of B－ required in THP 102； all others minimum grade of C required | －First Year Composition Completed <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 or THP 277 Acting：Intro to Voice required <br> BA Theatre additional requirements： <br> －Minimum 2.5 cumulative GPA in Theatre or Film courses <br> －Minimum 2.0 cumulative GPA <br> BA Theatre（Acting）additional requirements： <br> －Minimum 3.0 cumulative GPA in Theatre or Film courses <br> －Minimum 2.5 cumulative GPA <br> BA Theatre（Design \＆Production）additional requirements： <br> －Minimum 3.0 cumulative GPA in Theatre or Film courses <br> －Minimum 2.5 cumulative GPA |
| THE 220 Principles of Dramatic Analysis（L or HU） | 3 | $\square$ |  | Grade of C |  |
| Complete remaining course from（both must be completed by end of term 3）： <br> THP 272 Acting：Intro to Movement <br> THP 277 Acting：Intro to Voice | 3 | $\square$ |  | Grade of B－ |  |
| Computer／Statistics／Quantitative applications（CS） | 3 | $\square$ |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| TERM FOUR： 4660 CREDIT HOURS |  |  |  |  |  |
| If not completed already completed remaining courses from： THP 102＊， 201 and 213／214 |  | $\square$ |  | ＊Students wishing to pursue Acting concentration， minimum grade of B － required in THP 102； all others minimum grade of C required | －THP 102，201，and 213 or 214 must be completed by end of term 4 <br> －\＃Theatre（Acting）prospective students must complete THP 202 Acting II：Scene Study <br> BA Theatre（Acting）additional requirements： <br> －Minimum 3.0 cumulative GPA in Theatre or Film courses <br> －Minimum 2.5 cumulative GPA <br> －MILESTONE－BA Theatre students wanting to pursue the Acting concentration must successfully pass an additional interview and audition at the end of term four． <br> BA Theatre（Design \＆Production）additional requirements： <br> －Minimum 3.0 cumulative GPA in Theatre or Film courses <br> －Minimum 2.5 cumulative GPA |
| THP 218 The Director＇s Vision | 3 | $\square$ |  | Grade of C |  |
| THP 301 Theatre Production | 1 | 区 |  | Grade of C |  |
| THP 202 Acting II：Scene Study | 3 | $\square$ |  | Grade of B－ |  |
| Natural Science（SG or SQ） | 4 | $\square$ |  |  |  |
| Social and Behavioral Science AND Cultural Diversity in the US awareness（C）OR Global Awareness（G） | 3 | $\square$ |  |  |  |
|  |  |  |  |  |  |
| Major map and critical requirements for students who passed additional interview and portfolio review for admission to Acting concentration．TERM FIVE： 6175 CREDIT HOURS |  |  |  |  |  |
| THE 320 History of the Theatre I（HU，H） | 3 | 区 |  | Grade of C | －Minimum 3.0 cumulative GPA required in Theatre or Film courses <br> －Minimum 2.5 cumulative GPA required |
| THP 313 Fundamentals of Design | 3 | 区 |  | Grade of C |  |
| THP 302 Acting III：Advanced Techniques | 3 | 区 |  | Grade of C |  |
| Upper division Literacy and Critical Inquiry（L） | 3 | 区 |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| TERM SIX： $76 \mathbf{9 0}$ CREDIT HOURS |  |  |  |  |  |
| THE／THP course－Dramatic Literature focus | 3 | $\square$ |  | Grade of C | －Minimum 3.0 cumulative GPA required in Theatre or Film courses <br> －Minimum 2.5 cumulative GPA required |
| THE 321 History of the Theatre II（HU，H） | 3 | $\square$ |  | Grade of C |  |
| Upper division Acting Elective with THP prefix | 3 | 区 |  | Grade of C |  |
| Upper division Acting Elective with THP prefix | 3 | 区 |  | Grade of C |  |
| Elective | 3 | $\square$ |  |  |  |
| TERM SEVEN： 91105 CREDIT HOURS |  |  |  |  |  |
| THE 440 Experimental Theatre \＆Performance | 3 | $\square$ |  | Grade of C | －Minimum 3.0 cumulative GPA required in Theatre or Film courses <br> －Minimum 2.5 cumulative GPA required |
| Upper division Acting Elective with THP prefix | 3 | $\square$ |  | Grade of C |  |
| Upper division elective | 3 | 区 |  |  |  |
| Upper division elective | 3 | 区 |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| TERM EIGHT： 106120 CREDIT HOURS |  |  |  |  |  |
| THP 428 Theatre and the Future | 3 | $\square$ |  | Grade of C | －Minimum 3.0 cumulative GPA required in Theatre or Film courses <br> －Minimum 2.5 cumulative GPA required |
| THP 489 Acting：Audition Techniques \＆Career Development | 3 | 区 |  | Grade of C |  |
| Upper division elective | 3 | 区 |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| Elective | 3 | $\square$ |  |  |  |

Major Map: Theatre (Acting)- Bachelor of Arts (B.A.)
Herberger College of The Arts, Tempe Campus
Catalog Year: 2008-2009

## 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

Major Map: Theatre (Design \& Production) -<br>Bachelor of Arts (B.A.)<br>Herberger College of The Arts, Tempe Campus Catalog Year: 2008-2009

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.


Major Map：Theatre（Design \＆Production）－<br>Bachelor of Arts（B．A．）<br>Herberger College of The Arts，Tempe Campus Catalog Year：2008－2009

| Course Subject and Title （courses in bold／shading are critical） | Hrs． | Upper Division | Transfer Course／Grade | Minimum Grade if Required | Additional Critical Requirements Notes |
| :---: | :---: | :---: | :---: | :---: | :---: |
| TERM FOUR： 4660 CREDIT HOURS |  |  |  |  |  |
| THP 218 The Director＇s Vision | 3 | $\square$ |  | Grade of C | －THP 102,201 must be completed by end of term 4 <br> －Minimum 3.0 cumulative GPA in Theatre or Film courses <br> －Minimum 2.5 cumulative GPA |
| THP 301 Theatre Production | 1 |  |  | Grade of C |  |
| Natural Science Quantitative（SQ）or General（SG） | 4 | $\square$ |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| TERM FIVE： 6175 CREDIT HOURS |  |  |  |  |  |
| THE 320 History of the Theatre I（HU，H） | 3 | 区 |  | Grade of C | －Minimum 3.0 cumulative GPA in Theatre or Film courses <br> －Minimum 2.5 cumulative GPA |
| Choose 1 from：THP 317 Stage Management，THP 340 Scene Design，THP 345 Lighting Design，THP 350 Sound Design，THP 430 Costume Design，THP 442 Drawing，or THP 494 Special Topics：＊Design and Production＊ | 3 | 区 |  | Grade of C |  |
| Upper division concentration elective course with THE or THP prefix | 3 | 区 |  | Grade of C |  |
| THP 401 Theatre Practicum | 1－2 | 区 |  | Grade of C |  |
| Upper division Literacy and Critical Inquiry（L） | 3 | 区 |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| TERM SIX： $76 \mathbf{9 0}$ CREDIT HOURS |  |  |  |  |  |
| THE／THP course－Dramatic Literature focus | 3 | 区 |  | Grade of C | －Minimum 3.0 cumulative GPA in Theatre or Film courses <br> －Minimum 2.5 cumulative GPA |
| THE 321 History of the Theatre II（HU，H） | 3 | 区 |  | Grade of C |  |
| THP 401 Theatre Practicum | 1－2 | 囚 |  | Grade of C |  |
| Choose 1 additional course from：THP 317 Stage Management， THP 340 Scene Design，THP 345 Lighting Design，THP 350 Sound Design，THP 430 Costume Design，THP 442 Drawing，or THP 494 Special Topics：＊Design and Production＊ | 3 | 区 |  | Grade of C |  |
| Upper division concentration elective course with THE or THP prefix | 3 | 区 |  | Grade of C |  |
| Elective | 3 | $\square$ |  |  |  |
| TERM SEVEN： 91105 CREDIT HOURS |  |  |  |  |  |
| THE 440 Experimental Theatre \＆Performance | 3 | 区 |  | Grade of C | －Minimum 3.0 cumulative GPA in Theatre or Film courses <br> －Minimum 2.5 cumulative GPA |
| Choose 1 additional course from：THP 317 Stage Management， THP 340 Scene Design，THP 345 Lighting Design，THP 350 Sound Design，THP 430 Costume Design，THP 442 Drawing，or THP 494 Special Topics：＊Design and Production＊ | 3 | 区 |  | Grade of C |  |
| Upper division concentration elective course with THE or THP prefix | 3 | 区 |  | Grade of C |  |
| Upper division concentration elective course with THE or THP prefix OR Upper division elective | 3 | 囚 |  | Grade of C |  |
| Elective | 3 | $\square$ |  |  |  |
| TERM EIGHT： 106120 CREDIT HOURS |  |  |  |  |  |
| THP 428 Theatre and the Future | 3 | 区 |  | Grade of C | －Minimum 3.0 cumulative GPA in Theatre or Film courses <br> －Minimum 2.5 cumulative GPA |
| Choose 1 additional course from：THP 317 Stage Management， THP 340 Scene Design，THP 345 Lighting Design，THP 350 Sound Design，THP 430 Costume Design，THP 442 Drawing，or THP 494 Special Topics：＊Design and Production＊ | 3 | 区 |  | Grade of C |  |
| Concentration elective course with THE or THP prefix OR Elective | 3 | $\square$ |  | Grade of C |  |
| Concentration elective course with THE or THP prefix OR Elective | 3 | $\square$ |  | Grade of C |  |

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

Major Map: Theory \& Composition (Composition) -<br>Bachelor of Music (B.Mus.)<br>Herberger College of The Arts, Tempe Campus<br>Catalog Year: 2008-2009

Prior to semester 1:
 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.
 who do not take the diagnostic will register for MUP 131 and may take the diagnostic during the week before school starts.


Major Map：Theory \＆Composition（Composition）－
Bachelor of Music（B．Mus．）
Herberger College of The Arts，Tempe Campus
Catalog Year：2008－2009

| Course Subject and Title （courses in bold／shading are critical） | Hrs． | $\begin{aligned} & \hline \text { Upper } \\ & \text { Division } \\ & \hline \end{aligned}$ | Transfer Course／Grade | Minimum Grade if Required | Additional Critical Tracking Notes |
| :---: | :---: | :---: | :---: | :---: | :---: |
| TERM FIVE： 6175 CREDIT HOURS |  |  |  |  |  |
| MHL 341：Music History | 3 | 区 |  | Grade of C | －Complete 12 hours of upper division coursework be end of semester 5 <br> －Complete one semester of concert attendance with a grade of＂pass＂－students must complete six semesters <br> －Complete MUP 231 by end of semester 5 |
| MTC 323：Composition | 2 | 区 |  | Grade of C |  |
| MTC 436：Electronic Studio Techniques I | 2 | 区 |  | Grade of C |  |
| MUP 209：Beginning Choral Conducting or MUP 210：Beginning Instrumental Conducting | 1 | $\square$ |  | Grade of C |  |
| MUP 3＊＊：Ensemble | 1 | 区 |  | Grade of C |  |
| MUP＊＊＊：Studio Instruction | 1／2 | $\square$ |  | Grade of C |  |
| MUP 100：Concert Attendance | 0 | $\square$ |  |  |  |
| MTC $3^{* *}$ or 4＊＊（Elective） | 2 | $\square$ |  |  |  |
| Humanities，Fine Arts \＆Design（HU）AND Cultural Diversity in the US（C），Global Awareness（G）OR Historical Awareness（H） | 3 | $\square$ |  |  |  |
| TERM SIX： $76 \mathbf{9 0}$ CREDIT HOURS |  |  |  |  |  |
| MUP 209：Beginning Choral Conducting | 1 | $\square$ |  | Grade of C | －Complete one semester of concert attendance with a grade of＂pass＂－students must complete six semesters <br> －Complete MUP 232 by end of semester 6 |
| MHL 342：Music History II | 3 | 区 |  |  |  |
| MTC 323：Composition | 2 | 区 |  |  |  |
| MTC 433：Orchestration | 2 | 区 |  |  |  |
| MUP 100：Concert Attendance | 0 | $\square$ |  |  |  |
| MUP 3＊＊：Ensemble | 1 | 区 |  |  |  |
| MUP＊＊＊：Studio Instruction | 1／2 | 区 |  |  |  |
| Literacy and Critical Inquiry（L） | 3 | $\square$ |  |  |  |
| Social \＆Behavioral Science（SB）AND Cultural Diversity in the US （C），Global Awareness（G）OR Historical Awareness（H） | 3 | $\square$ |  |  |  |
| TERM SEVEN： 91105 CREDIT HOURS |  |  |  |  |  |
| MTC 323：Composition | 3 | 区 |  |  | －Complete one semester of concert attendance with a grade of＂pass＂－if six semesters not completed |
| MHL 3＊＊or 4＊＊（Recommend MHL with literacy designation） | 3 | 囚 |  |  |  |
| Upper division MTC Elective | 3 | 区 |  |  |  |
| Upper division Music Elective | 3 | 区 |  |  |  |
| Upper division Literacy and Critical Inquiry（L）（Recommend MHL with literacy designation） | 3 | 区 |  |  |  |
| TERM EIGHT： $106 \mathbf{1 2 0}$ CREDIT HOURS |  |  |  |  |  |
| MTC 323：Composition | 2 | 区 |  |  | －Complete one semester of concert attendance with a grade of＂pass＂－if six semesters not completed |
| MUP 495：Performance | 0 | $\boxtimes$ |  |  |  |
| UD MTC Elective | 3 | 区 |  |  |  |
| UD Music Elective | 3 | 区 |  |  |  |
| Humanities，Fine Arts \＆Design（HU） | 3 | $\square$ |  |  |  |
| Upper division Humanities，Fine Arts \＆Design（HU）or Social \＆Behavioral Science（SB） | 3 | 区 |  |  |  |
| Elective（if upper division literacy is MHL course） | 0－1 | $\square$ |  |  |  |

## Graduation Requirements Summary：

| Total Hours（120 <br> minimum） | Total Hrs at ASU（30 <br> minimum） | Hrs Resident Credit for Academic <br> 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：

Major Map: Theory \& Composition (Theory) -<br>Bachelor of Music (B.Mus.)<br>Herberger College of The Arts, Tempe Campus<br>Catalog Year: 2008-2009

Prior to semester 1:
 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.
 who do not take the diagnostic will register for MUP 131 and may take the diagnostic during the week before school starts.


Major Map：Theory \＆Composition（Theory）－
Bachelor of Music（B．Mus．）
Herberger College of The Arts，Tempe Campus
Catalog Year：2008－2009

| Course Subject and Title （courses in bold／shading are critical） | Hrs． | $\begin{aligned} & \hline \text { Upper } \\ & \text { Division } \\ & \hline \end{aligned}$ | Transfer Course／Grade | Minimum Grade if Required | Additional Critical Requirement Notes |
| :---: | :---: | :---: | :---: | :---: | :---: |
| TERM FIVE： 6175 CREDIT HOURS |  |  |  |  |  |
| MHL 341：Music History | 3 | 囚 |  | Grade of C | －Complete MUP 231 by end of semester 5 |
| MTC 422：Musical Acoustics | 3 | 区 |  | Grade of C |  |
| MUP 209：Beginning Choral Conducting or MUP 210：Beginning Instrumental Conducting | 1 | $\square$ |  | Grade of C |  |
| MUP 3＊＊：Ensemble | 1 | $\square$ |  | Grade of C |  |
| MUP＊＊＊：Studio Instruction | 1／2 | $\square$ |  | Grade of C |  |
| MUP 100 Concert Attendance | 0 | $\square$ |  |  |  |
| MTC 3＊＊or 4＊＊（Elective） | 2 | 区 |  |  |  |
| Natural Science Quantitative（SQ）or General（SG） | 4 | $\square$ |  |  |  |
| TERM SIX： $76 \mathbf{9 0}$ CREDIT HOURS |  |  |  |  |  |
| MUP 209：Beginning Choral Conducting | 1 | $\square$ |  | Grade of C | －Complete MUP 232 by end of semester 6 |
| MHL 342：Music History II | 3 | 区 |  |  |  |
| MTC 428：Advanced Form and Analysis | 3 | 区 |  |  |  |
| MTC 3＊＊or 4＊＊Elective | 2 | 区 |  |  |  |
| MUP 100 Concert Attendance | 0 | $\square$ |  |  |  |
| MUP 3＊＊：Ensemble | 1 | 区 |  |  |  |
| MUP＊＊＊：Studio Instruction or Methods | 1／2 | 区 |  |  |  |
| Literacy and Critical Inquiry（L） | 3 | $\square$ |  |  |  |
| TERM SEVEN： 91105 CREDIT HOURS |  |  |  |  |  |
| MTC 323：Composition | 2 | 区 |  |  |  |
| MTC 425：Studies in $20{ }^{\text {th }}$ Century Theory | 3 | 区 |  |  |  |
| Upper division MTC Elective | 2 | 区 |  |  |  |
| Upper division MTC Elective | 2 | 区 |  |  |  |
| MUP 3＊＊：Ensemble | 1 | 区 |  |  |  |
| MUP＊＊＊：Studio Instruction or Methods | 1 | 区 |  |  |  |
| Upper division Literacy and Critical Inquiry（L）（Recommend MHL with Literacy designation） | 3 | 区 |  |  |  |
| TERM EIGHT： $106 \mathbf{1 2 0}$ CREDIT HOURS |  |  |  |  |  |
| MHL 3＊＊or 4＊＊（Recommend MHL with Literacy designation） | 3 | 区 |  |  | －Complete one semester of concert attendance with a grade of＂pass＂－if six semesters not completed |
| MTC 496：Theory Project | 3 | 区 |  |  |  |
| Upper division MTC Elective | 2 | 区 |  |  |  |
| Upper division Music Elective | 2 | 区 |  |  |  |
| MUP 3＊＊：Ensemble | 1 | $\square$ |  |  |  |
| MUP＊＊＊：Studio Instruction or Methods | 1 | 区 |  |  |  |
| Upper division Humanities，Fine Arts \＆Design（HU）or Social \＆Behavioral Science（SB） | 3 | 区 |  |  |  |
| Elective（if upper division literacy is MHL course） | 0－1 | $\square$ |  |  |  |

## Graduation Requirements Summary：

| Total Hours（120 <br> minimum） | Total Hrs at ASU（30 <br> minimum） | Hrs Resident Credit for Academic <br> 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：

Major Map: Accountancy - Bachelor of Science (B.S.)
W. P. Carey School of Business, Tempe Campus

Catalog Year: 2008-2009


Major Map: Accountancy - Bachelor of Science (B.S.)
W. P. Carey School of Business, Tempe Campus

Catalog Year: 2008-2009

Graduation Requirements Summary:

| Total Hours (120) | Total Hrs at ASU (30) | Hrs Resident Credit for Academic Recognition (56) | Transfer UD <br> Bus. Hrs <br> (9 Max.) | $\begin{aligned} & \hline \text { Overall GPA } \\ & \text { (2.000 Min.) } \end{aligned}$ | $\begin{aligned} & \hline \text { BUS GPA } \\ & \text { (2.000 Min.) } \end{aligned}$ | $\begin{aligned} & \hline \text { Major GPA } \\ & \text { (2.000 Min.) } \end{aligned}$ | C Min. Req. | Total UD Hrs (51) | Total Comm. College Hrs. (64 Max) | Total Comm. Coll. Bus. Hrs. (30 Max) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |

## 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:

Major Map：Business（Communication）－
Bachelor of Arts（B．A．）
W．P．Carey School of Business，Tempe Campus
Catalog Year：2008－2009

|  |  |  | Completed ATP：$\square$ Yes $\square$ No |  | Completed AGEC：$\square$ Yes $\square$ No |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 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： 015 CREDIT HOURS |  |  |  |  |  |
| ASU 101：The ASU Experience | 1 | $\square$ |  |  | －ASU 101 is for ASU freshman students only Not required of transfer 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 term in the program． <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 |
| CIS 105：Computer Applications \＆Information Technology（CS） | 3 | $\square$ |  | Grade of C |  |
| MAT 210：Brief Calculus（MA）or MAT 270：Calculus with Analytic Geometry I | $\begin{gathered} 3 / \\ 4 \\ \hline \end{gathered}$ | $\square$ |  | Grade of C |  |
| 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 |  |
| PGS course（SB） | 3 | $\square$ |  |  |  |
| Humanities，Fine Arts \＆Design（HU） | 3 | $\square$ |  |  |  |
| TERM TWO： 1630 CREDIT HOURS |  |  |  |  |  |
| 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 | $\square$ |  | Grade of C |  |
| COM 100：Introduction to Human Communication | 3 | $\square$ |  | Grade of C |  |
| 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 |  |
| SOC course（SB） | 3 | $\square$ |  |  |  |
| TERM THREE： 3145 CREDIT HOURS |  |  |  |  |  |
| Complete 1 course from： <br> ECN 211：Macroeconomic Principles（SB） <br> ECN 212：Microeconomic Principles（SB） | 3 | $\square$ |  | Grade of C | －Completed First－Year Composition requirement |
| ACC 231：Uses in Accounting Information I | 3 | $\square$ |  | Grade of C |  |
| COM 230：Small Group Communication | 3 | $\square$ |  | Grade of C |  |
| Historical Awareness（H） | 3 | $\square$ |  |  |  |
| Natural Science Quantitative（SQ） | 4 | $\square$ |  |  |  |
| TERM FOUR： $46 \mathbf{6 0}$ CREDIT HOURS |  |  |  |  |  |
| ECN 221：Business Statistics（CS） | 3 | $\square$ |  | Grade of C |  |
| ACC 241：Uses of Accounting Information II | 3 | $\square$ |  | Grade of C |  |
| COM 250：Introduction to Organizational Communication | 3 | $\square$ |  | Grade of C |  |
| Literacy \＆Critical Inquiry（L） | 3 | $\square$ |  |  |  |
| Natural Science Quantitative（SQ）or General（SG） | 4 | $\square$ |  |  |  |
| TERM FIVE： 6175 CREDIT HOURS |  |  |  |  |  |
| SCM 300：Global Supply Operations | 3 | 区 |  | Grade of C |  |
| MKT 300：Principles of Marketing | 3 | 区 |  | Grade of C |  |
| COM 259：Communication in Business and the Professions | 3 | $\square$ |  | Grade of C |  |
| ENG 302：Business Writing（L）or ENG 301：Writing for Professions（L） | 3 | 区 |  |  |  |
| WPC 301：Business Form | 1 | 区 |  | Grade of C |  |
| TERM SIX： 7690 CREDIT HOURS |  |  |  |  |  |
| MGT 300：Organizational Management and Leadership | 3 | 区 |  | Grade of C |  |
| COM 312：Communication，Conflict，and Negotiation | 3 | 区 |  | Grade of C |  |
| COM 400：Communication in Professions（HU，C） | 3 | 区 |  | Grade of C |  |
| Upper division General Education Elective | 3 | 区 |  |  |  |
| Upper division General Education Elective | 3 | 区 |  |  |  |
| TERM SEVEN： 91105 CREDIT HOURS |  |  |  |  |  |
| FIN 300：Fundamentals of Finance | 3 | 区 |  | Grade of C |  |
| COM 430：Leadership in Group Communication | 3 | 囚 |  | Grade of C |  |
| International Business Course（G） | 3 | 区 |  | Grade of C |  |
| Upper division General Education Elective | 3 | 囚 |  |  |  |
| Upper division General Education Elective | 3 | 区 |  |  |  |
| TERM EIGHT： 106120 CREDIT HOURS |  |  |  |  |  |
| COM 453：Communication Training and Development | 3 | 区 |  | Grade of C |  |
| LES 305：Legal，Ethical and Regulatory Issues in Business | 3 | 囚 |  | Grade of C |  |
| Upper division General Education Elective | 3 | 区 |  |  |  |
| Upper division General Elective | 3 | 区 |  |  |  |
| General Elective | 2 | $\square$ |  |  |  |

Major Map: Business (Communication) Bachelor of Arts (B.A.)
W. P. Carey School of Business, Tempe Campus

Catalog Year: 2008-2009

## Graduation Requirements Summary:

| Total Hours (120) | $\begin{aligned} & \text { Total Hrs at } \\ & \text { ASU (30) } \end{aligned}$ | Hrs Resident Credit for Academic Recognition (56) | $\begin{aligned} & \text { Transfer UD } \\ & \text { Bus. Hrs } \\ & \text { (9 max) } \end{aligned}$ | $\begin{aligned} & \hline \text { Overall GPA } \\ & \text { (2.000 Min.) } \end{aligned}$ | $\begin{aligned} & \hline \text { BUS GPA } \\ & \text { (2.000 Min.) } \end{aligned}$ | $\begin{aligned} & \hline \text { Major GPA } \\ & \text { (2.000 Min.) } \end{aligned}$ | C Min. Req. | $\begin{aligned} & \text { Total UD Hrs } \\ & \text { (51) } \end{aligned}$ | Total Comm. College Hrs. (64 Max) | Total Comm. Coll. Bus. Hrs. (30 Max) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |

## 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:

Major Map: Business (Sustainability) -<br>Bachelor of Arts (B.A.)<br>W. P. Carey School of Business, Tempe Campus<br>Catalog Year: 2008-2009



Graduation Requirements Summary:

| Total Hours (120) <br> (120) | Total Hrs at ASU (30) | Hrs Resident Credit for Academic Recognition (56) | Transfer UD <br> Bus. Hrs <br> (9 max) | $\begin{aligned} & \hline \text { Overall GPA } \\ & \text { (2.000 Min.) } \end{aligned}$ | $\begin{aligned} & \hline \text { BUS GPA } \\ & \text { (2.000 Min.) } \end{aligned}$ | $\begin{aligned} & \hline \text { Major GPA } \\ & \text { (2.000 Min.) } \end{aligned}$ | C Min. Req. | Total UD Hrs (51) | Total Comm. College Hrs. (64 Max) | Total Comm. Coll. Bus. Hrs. (30 Max) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |

Approved Upper-Division 300-level SOS Courses for the BA in Business (Sustainability )
(400-level courses approved; 300-level courses to be submitted November 2007)

- SOS 320 Society and Sustainability
- SOS 321 Policy, Planning 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


## 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:

Major Map: Business (Tourism) - Bachelor of Arts (B.A.)
W. P. Carey School of Business, Tempe Campus

Catalog Year: 2008-2009


Major Map: Business (Tourism) - Bachelor of Arts (B.A.)
W. P. Carey School of Business, Tempe Campus

Catalog Year: 2008-2009

## Graduation Requirements Summary:

| Total Hours (120) | Total Hrs at ASU (30) | Hrs Resident Credit for Academic Recognition (56) | Transfer UD <br> Bus. Hrs <br> (9 max) | $\begin{aligned} & \text { Overall GPA } \\ & (2.000 \mathrm{Min}) \end{aligned}$ | $\begin{aligned} & \text { BUS GPA } \\ & \text { (2.000 Min.) } \end{aligned}$ | $\begin{aligned} & \text { Major GPA } \\ & \text { (2.000 Min.) } \end{aligned}$ | C Min. Req. | Total UD Hrs (51) | Total Comm. College Hrs. (64 Max) | Total Comm. Coll. Bus. Hrs. (30 Max) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |

## 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:

Major Map: Business (Urban Policy) -
Bachelor of Arts (B.A.)
W. P. Carey School of Business, Tempe Campus

Catalog Year: 2008-2009


Major Map: Business (Urban Policy) -
Bachelor of Arts (B.A.)
W. P. Carey School of Business, Tempe Campus

Catalog Year: 2008-2009

## Graduation Requirements Summary:

| Total Hours (120) | Total Hrs at ASU (30) | Hrs Resident Credit for Academic Recognition (56) | $\begin{aligned} & \text { Transfer UD } \\ & \text { Bus. Hrs } \\ & \text { (9 max) } \end{aligned}$ | $\begin{aligned} & \hline \text { Overall GPA } \\ & \text { (2.000 Min.) } \end{aligned}$ | $\begin{aligned} & \text { BUS GPA } \\ & \text { (2.000 Min.) } \end{aligned}$ | $\begin{aligned} & \text { Major GPA } \\ & \text { (2.000 Min.) } \end{aligned}$ | C Min. Req. | Total UD Hrs (51) | Total Comm. College Hrs. (64 Max) | Total Comm. Coll. Bus. Hrs. (30 Max) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |

## 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:

Major Map：Computer Information Systems－ Bachelor of Science（B．S．）

W．P．Carey School of Business，Tempe Campus
Catalog Year：2008－2009

|  |  |  | Completed ATP：$\square$ Yes $\square$ No |  | Completed AGEC：$\square$ Yes $\square$ No |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 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： 015 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 |
| MAT 210：Brief Calculus（MA）OR <br> MAT 270：Calculus with Analytic Geometry I | 3／4 | $\square$ |  | Grade of C |  |
| CIS 105：Computer Applications \＆Information Technology（CS） | 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 | $\square$ |  | Grade of C |  |
| Humanities，Fine Arts \＆Design（HU）： | 3 | $\square$ |  |  |  |
| PGS course（SB）： | 3 | $\square$ |  |  |  |
| TERM TWO： 1630 CREDIT HOURS |  |  |  |  |  |
| ACC 231：Uses of Accounting Information I | 3 | $\square$ |  | Grade of C |  |
| 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： 3145 CREDIT HOURS |  |  |  |  |  |
| ACC 241：Uses of Accounting Information II | 3 | $\square$ |  | Grade of C | －Complete First Year Composition requirement： ENG 101 \＆ 102 OR ENG 107 \＆ 108 or 105 |
| ECN 221：Business Statistics（CS） | 3 | $\square$ |  | Grade of C |  |
| Complete 1 course from： <br> ECN 211：Macroeconomic Principles（SB） <br> ECN 212：Microeconomic Principles（SB） | 3 | $\square$ |  | Grade of C |  |
| Natural Science Quantitative（SQ）or General（SG）： | 4 | $\square$ |  |  |  |
| 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 | $\square$ |  |  |  |
| TERM FOUR： 4660 CREDIT HOURS |  |  |  |  |  |
| CSE 182：Applied Problem Solving with C\＃．Net | 3 | $\square$ |  | Grade of C |  |
| CIS 235：Introduction to Information Systems | 3 | $\square$ |  | Grade of C |  |
| SCM 300：Global Supply Operations | 3 | 区 |  | Grade of C |  |
| Historical Awareness（H）： | 3 | $\square$ |  |  |  |
| Cultural Diversity in the U．S．（C）： | 3 | $\square$ |  |  |  |
| TERM FIVE： 6175 CREDIT HOURS |  |  |  |  |  |
| ACC 444：Enterprise Process Analysis | 3 | 区 |  | Grade of C |  |
| CIS 340：Object Oriented Modeling and Programming | 3 | 区 |  | Grade of C |  |
| FIN 300：Fundamentals of Finance | 3 | 囚 |  | Grade of C |  |
| ENG 302：Business Writing（L） | 3 | 区 |  |  |  |
| WPC 301：Business Forum | 1 | $\triangle$ |  | Grade of C |  |
| Upper division Humanities，Fine Arts \＆Design（HU）： | 3 | 区 |  |  |  |
| TERM SIX： $76 \mathbf{9 0}$ CREDIT HOURS |  |  |  |  |  |
| CIS 360：Business Database Concepts | 3 | 区 |  | Grade of C |  |
| CIS 430 ：Networks and Distributed Systems | 3 | 区 |  | Grade of C |  |
| LES 305：Legal，Ethical，and Regulatory Issues in Business | 3 | 区 |  | Grade of C |  |
| MKT 300：Marketing and Business Performance | 3 | 区 |  | Grade of C |  |
| Natural Science Quantitative（SQ）： | 4 | $\square$ |  |  |  |
| TERM SEVEN： 91105 CREDIT HOURS |  |  |  |  |  |
| CIS 425：Electronic Commerce Strategy | 3 | 区 |  | Grade of C |  |
| MGT 300 ：Organization and Management Leadership | 3 | 区 |  | Grade of C |  |
| Upper division General Education Elective： | 3 | 区 |  |  |  |
| Upper division General Education Elective： | 3 | 区 |  |  |  |
| Elective： | 2 | $\square$ |  |  |  |
| TERM EIGHT： 106120 CREDIT HOURS |  |  |  |  |  |
| CIS 440：Systems Design and Electronic Commerce（L） | 3 | 区 |  | Grade of C |  |
| International Business Course（G）： | 3 | 区 |  | Grade of C |  |
| Upper division General Education Elective： | 3 | 区 |  |  |  |
| Elective： | 3 | $\square$ |  |  |  |

Major Map: Computer Information Systems -
Bachelor of Science (B.S.)
W. P. Carey School of Business, Tempe Campus

Catalog Year: 2008-2009

Graduation Requirements Summary:

| Total Hours <br> $(120)$ | Total Hrs at <br> ASU (30) | Hrs Resident <br> Credit for <br> Academic <br> Recognition <br> $(56)$ | Transfer UD <br> Bus. Hrs <br> (9 Max.) | Overall GPA <br> $(2.000$ Min. $)$ | BUS GPA <br> $(2.000$ Min. $)$ | Major GPA <br> $(2.000$ Min. $)$ | C Min. 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:
- 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:

Major Map：Economics－Bachelor of Science（B．S．）
W．P．Carey School of Business，Tempe campus
Catalog Year：2008－2009

|  |  |  | Completed ATP：$\square$ Yes $\square$ No |  | Completed AGEC：$\square$ Yes $\square$ No |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 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： 015 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 |
| MAT 210：Brief Calculus（MA）OR <br> MAT 270：Calculus with Analytic Geometry I | 3／4 | $\square$ |  | Grade of C | An SAT，ACT，Accuplacer，or TOEFL score determines placement into first－year composition courses |
| CIS 105：Computer Applications and Information Technology （CS） | 3 | $\square$ |  | Grade of C | －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 |  |
| Humanities，Fine Arts \＆Design（HU） | 3 | $\square$ |  |  |  |
| PGS course（SB） | 3 | $\square$ |  |  |  |
| TERM TWO： 1630 CREDIT HOURS |  |  |  |  |  |
| ACC 231：Uses of Accounting Information I | 3 | $\square$ |  | Grade of C |  |
| 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 | 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： 3145 CREDIT HOURS |  |  |  |  |  |
| ACC 241：Uses of Accounting Information II | 3 | $\square$ |  | Grade of C | Complete First Year Composition requirement： |
| Complete 1 course from： <br> ECN 211：Macroeconomic Principles（SB） <br> ECN 212：Microeconomic Principles（SB） | 3 | $\square$ |  | Grade of C | ENG 101 \＆ 102 OR ENG 107 \＆ 108 or 105 |
| 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： $46 \mathbf{6 0}$ CREDIT HOURS |  |  |  |  |  |
| ECN 3＊＊or ECN 4＊＊（SB）： | 3 | 囚 |  | Grade of C |  |
| SCM 300：Global Supply Operations | 3 | 区 |  | Grade of C |  |
| Cultural Diversity（C） | 3 | $\square$ |  |  |  |
| Historical Awareness（H） | 3 | $\square$ |  |  |  |
| Science Quantitative（SQ）or Science General（SG） | 4 | $\square$ |  |  |  |
| TERM FIVE： 6175 CREDIT HOURS |  |  |  |  |  |
| ECN 314：Intermediate Microeconomic Theory | 3 | 区 |  | Grade of C |  |
| Upper Division elective | 3 | 区 |  |  |  |
| ENG 302：Business Writing（L） | 3 | 囚 |  |  |  |
| FIN 300：Fundamentals of Finance | 3 | 区 |  | Grade of C |  |
| WPC 301：Business Forum | 1 | 区 |  | Grade of C |  |
| Upper division Humanities，Fine Arts \＆Design（HU） | 3 | 区 |  |  |  |
| TERM SIX： $76 \mathbf{9 0}$ CREDIT HOURS |  |  |  |  |  |
| ECN 313：Intermediate Macroeconomic Theory | 3 | 囚 |  | Grade of C | －ECN 313 and ECN 314 completed |
| ECN 4＊＊ | 3 | 区 |  | Grade of C | Minimum of two 300／400 level economic courses completed |
| MKT 300：Marketing and Business Performance | 3 | 区 |  | Grade of C |  |
| MGT 300：Organization and Management Leadership | 3 | 区 |  | Grade of C |  |
| General Education Elective | 3 | $\square$ |  |  |  |
| TERM SEVEN： 91105 CREDIT HOURS |  |  |  |  |  |
| ECN 306：Survey of International Economics（G）OR <br> ECN 360：Economic Development（G）OR <br> ECN 436：International Trade Theory（G）OR <br> ECN 438：International Monetary Economics（G） | 3 | 囚 |  | Grade of C |  |
| ECN 410：Applied Business Forecasting OR ECN 425：Introduction to Econometrics | 3 | 区 |  | Grade of C |  |
| ECN 4＊＊ | 3 | 区 |  | Grade of C |  |
| Les 305：Legal，Ethical，and Regulatory Issues in Business | 3 | 区 |  | Grade of C |  |
| Upper division Elective | 2 | 区 |  |  |  |

Major Map: Economics - Bachelor of Science (B.S.)
W. P. Carey School of Business, Tempe campus

Catalog Year: 2008-2009

| Course Subject and Title <br> (courses in bold/shading are critical) | Hrs. | Upper <br> Division | Transfer <br> Course/Grade | Minimum Grade if <br> Required | Additional Critical Requirement Notes |
| :--- | :---: | :--- | :--- | :--- | :--- | :--- |
| TERM EIGHT: 106 120 CREDIT HOURS |  |  |  |  |  |
| ECN 475: Capstone in Economics (L) OR |  |  |  | Grade of C |  |

## Graduation Requirements Summary:

| Total Hours (120) | Total Hrs at ASU (30) ASU (30) | Hrs Resident Credit for Academic Recognition (56) | Transfer UD Bus. Hrs (9 Max.) | $\begin{aligned} & \hline \text { Overall GPA } \\ & \text { (2.000 Min.) } \end{aligned}$ | $\begin{aligned} & \hline \text { BUS GPA } \\ & \text { (2.000 Min.) } \end{aligned}$ | $\begin{aligned} & \text { Major GPA } \\ & \text { (2.000 Min.) } \end{aligned}$ | C Min. Req. | Total UD Hrs (51) | Total Comm. College Hrs. (64 Max) | Total Comm. Coll. Bus. Hrs. (30 Max) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |

## 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:

Major Map：Finance－Bachelor of Science（B．S．）
W．P．Carey School of Business，Tempe campus
Catalog Year：2008－2009

|  |  |  | Completed ATP：$\square$ Yes $\square$ No |  | Completed AGEC：$\square$ Yes $\square$ No |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Course Subject and Title （courses in bold／shading are critical） | Hrs． | Upper Division | Transfer Course／Grade | $\begin{aligned} & \text { Minimum Grade if } \\ & \text { Required } \end{aligned}$ |  |
| TERM ONE： 015 CREDIT HOURS |  |  |  |  |  |
| ASU 101：The ASU Experience | 1 | $\square$ |  |  | 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 <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 | 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 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 | $\square$ |  |  |  |
| PGS course（SB） | 3 | $\square$ |  |  |  |
| TERM TWO： 1630 CREDIT HOURS |  |  |  |  |  |
| ACC 231：Uses of Accounting Information I | 3 | $\square$ |  | Grade of C |  |
| 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 | 3／4 | $\square$ |  | Grade of C |  |
| ENG 102：First－Year Composition OR ENG 108：English for Foreign Students OR ENG 105：Advanced First－Year Composition | 3 | $\square$ |  | Grade of C |  |
| SOC course（SB） | 3 | $\square$ |  |  |  |
| TERM THREE： 3145 CREDIT HOURS |  |  |  |  |  |
| ACC 241：Uses of Accounting Information II | 3 | $\square$ |  | Grade of C | －Complete First Year Composition requirement： <br> ENG 101 \＆ 102 OR ENG 107 \＆ 108 or 105 |
| Complete 1 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 |  |  |  |  |  |
| Natural Science Quantitative（SQ） | 4 | $\square$ |  |  |  |
| TERM FOUR： 4660 CREDIT HOURS |  |  |  |  |  |
| FIN 302：Managerial Finance | 3 | 区 |  | Grade of C |  |
| SCM 300：Global Supply Operations | 3 | 区 |  | Grade of C |  |
| Cultural Diversity（C） | 3 | $\square$ |  |  |  |
| Historical Awareness（H） | 3 | $\square$ |  |  |  |
| Natural Science Quantitative（SQ）or General（SG） | 4 | $\square$ |  |  |  |
| TERM FIVE： 6175 CREDIT HOURS |  |  |  |  |  |
| ACC 315：Financial Accounting and Reporting | 3 | 区 |  | Grade of C |  |
| FIN 331：Financial Markets and Institutions | 3 | 囚 |  | Grade of C |  |
| ENG 302：Business Writing（L） | 3 | 区 |  |  |  |
| MKT 300：Marketing and Business Performance | 3 | ® |  | Grade of C |  |
| WPC 301：Business Forum | 1 | 区 |  | Grade of C |  |
| TERM SIX： $76 \mathbf{9 0}$ CREDIT HOURS |  |  |  |  |  |
| FIN 361：Advance Managerial Finance | 3 | 区 |  | Grade of C |  |
| MGT 300：Organization and Management Leadership | 3 | 区 |  | Grade of C |  |
| Upper division Humanities，Fine Arts \＆Design（HU） | 3 | 区 |  |  |  |
| General Education Elective | 3 | $\square$ |  |  |  |
| General Education Elective | 3 | $\square$ |  |  |  |
| TERM SEVEN： 91105 CREDIT HOURS |  |  |  |  |  |
| FIN 421：Security Analysis and Portfolio Management | 3 | 区 |  | Grade of C |  |
| FIN 4＊＊ | 3 | 区 |  | Grade of C |  |
| International Business Course（G） | 3 | 囚 |  | Grade of C |  |
| Les 305：Legal，Ethical，and Regulatory Issues in Business | 3 | 区 |  | Grade of C |  |
| Elective | 3 | $\square$ |  |  |  |
| TERM EIGHT： $106 \mathbf{1 2 0}$ CREDIT HOURS |  |  |  |  |  |
| FIN 461：Financial Cases and Modeling（L） | 3 | 区 |  | Grade of C |  |
| Upper division Elective（Recommended FIN 484） | 3 | 区 |  |  |  |
| Upper division Elective（Recommended ACC 316） | 3 | 区 |  |  |  |
| Upper division Elective | 3 | 囚 |  |  |  |
| General Education Elective | 2 | $\square$ |  |  |  |

Graduation Requirements Summary:

| Total Hours <br> $(120)$ | Total Hrs at <br> ASU (30) | Hrs Resident <br> Credit for <br> Academic <br> Recognition <br> $(56)$ | Transfer UD <br> Bus. Hrs <br> (9 Max.) | Overall GPA <br> $(2.000$ Min.) | BUS GPA <br> $(2.000$ Min.) $)$ | Major GPA <br> $(2.000$ Min. $)$ | C Min. 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:
- 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:

Major Map ：Management－Bachelor of Science（B．S．）
W．P．Carey School of Business，Tempe Campus
Catalog Year：2008－2009

|  |  |  | Completed ATP：$\square$ Yes $\quad \square$ No |  | Completed AGEC：$\square$ Yes $\square$ No |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 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： 015 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 |
| MAT 210：Brief Calculus（MA）OR <br> MAT 270：Calculus with Analytic Geometry I | 3／4 | $\square$ |  | Grade of C |  |
| CIS 105：Computer Applications \＆Information Technology（CS） | 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 | $\square$ |  | Grade of C |  |
| Humanities，Fine Arts \＆Design（HU） | 3 | $\square$ |  |  |  |
| PGS course（SB） | 3 | $\square$ |  |  |  |
| TERM TWO： 1630 CREDIT HOURS |  |  |  |  |  |
| ACC 231：Uses of Accounting Information I | 3 | $\square$ |  | Grade of C |  |
| 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 <br> 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： 3145 CREDIT HOURS |  |  |  |  |  |
| ACC 241：Uses of Accounting Information II | 3 | $\square$ |  | Grade of C | －Complete First Year Composition requirement： ENG 101 \＆ 102 OR ENG 107 \＆ 108 or 105 |
| Complete 1 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 |  |
| Natural Science Quantitative（SQ） | 4 | $\square$ |  |  |  |
| COM 100：Intro to Human Communication OR <br> COM 225：Public Speaking（L）（reccomended）OR <br> COM 230：Small Group Communication <br> COM 259：Communication in Business and the Professions | 3 | $\square$ |  |  |  |
| TERM FOUR： $46 \mathbf{6 0}$ CREDIT HOURS |  |  |  |  |  |
| MGT 310：Collaborative Team Skills | 3 | 区 |  | Grade of C |  |
| MGT 320：Managing People in Organizations | 3 | 区 |  | Grade of C |  |
| SCM 300：Global Supply Operations | 3 | 区 |  | Grade of C |  |
| Historical Awareness（H） | 3 | $\square$ |  |  |  |
| Natural Science Quantitative（SQ）or General（SG） | 4 | $\square$ |  |  |  |
| TERM FIVE： 6175 CREDIT HOURS |  |  |  |  |  |
| MGT 302：Principles of International Business（G）or any approved International Business course | 3 | 区 |  | Grade of C |  |
| MKT 300：Marketing and Business Performance | 3 | 区 |  | Grade of C |  |
| ENG 302：Business Writing（L） | 3 | 区 |  |  |  |
| WPC 301：Business Forum | 1 | 区 |  | Grade of C |  |
| Upper division Humanities，Fine Arts \＆Design（HU） | 3 | 区 |  |  |  |
| Cultural Diversity in the U．S．（C） | 3 | $\square$ |  |  |  |
| TERM SIX： $76 \mathbf{9 0}$ CREDIT HOURS |  |  |  |  |  |
| MGT 410：Responsible Leadership | 3 | 区 |  | Grade of C |  |
| MGT 420 ：Performance Management | 3 | 区 |  | Grade of C |  |
| LES 305：Legal，Ethical，and Regulatory Issues in Business | 3 | 区 |  | Grade of C |  |
| General Education Elective | 3 | $\square$ |  |  |  |
| General Education Elective | 3 | $\square$ |  |  |  |
| TERM SEVEN： 91105 CREDIT HOURS |  |  |  |  |  |
| Upper division Management Elective | 3 | 区 |  | Grade of C |  |
| Upper division Management Elective | 3 | 区 |  | Grade of C |  |
| FIN 300：Fundamentals of Finance | 3 | 区 |  | Grade of C |  |
| Upper division Elective | 3 | 区 |  |  |  |
| General Education Elective | 2 | $\square$ |  |  |  |
| TERM EIGHT： $106 \mathbf{1 2 0}$ CREDIT HOURS |  |  |  |  |  |
| MGT 450：Changing Business Processes（L） | 3 | 区 |  | Grade of C |  |
| MGT 460：Strategic Leadership | 3 | 区 |  | Grade of C |  |
| Upper division Elective | 3 | 区 |  |  |  |
| Elective | 3 | $\square$ |  |  |  |

Major Map : Management - Bachelor of Science (B.S.)
W. P. Carey School of Business, Tempe Campus

Catalog Year: 2008-2009

Graduation Requirements Summary:

| $\begin{aligned} & \hline \text { Total Hours } \\ & (120) \end{aligned}$ | Total Hrs at ASU (30) | Hrs Resident Credit for Academic Recognition (56) | Transfer UD <br> Bus. Hrs <br> (9 Max.) | $\begin{aligned} & \hline \text { Overall GPA } \\ & \text { (2.000 Min.) } \end{aligned}$ | $\begin{aligned} & \hline \text { BUS GPA } \\ & \text { (2.000 Min.) } \end{aligned}$ | $\begin{aligned} & \hline \text { Major GPA } \\ & \text { (2.000 Min.) } \end{aligned}$ | C Min. Req. | $\begin{aligned} & \hline \text { Total UD Hrs } \\ & \text { (51) } \end{aligned}$ | Total Comm. College Hrs. (64 Max) | Total Comm. Coll. Bus. Hrs. (30 Max) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |

## 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:

Major Map: Management (Entrepreneurship) Bachelor of Science (B.S.)<br>W. P. Carey School of Business, Tempe Campus Catalog Year: 2008-2009



Major Map: Management (Entrepreneurship) Bachelor of Science (B.S.)
W. P. Carey School of Business, Tempe Campus

Catalog Year: 2008-2009

Graduation Requirements Summary:

| Total Hours (120) (120) | $\begin{aligned} & \text { Total Hrs at } \\ & \text { ASU (30) } \end{aligned}$ | Hrs Resident Credit for Academic Recognition (56) | Transfer UD Bus. Hrs (9 Max.) | $\begin{aligned} & \hline \text { Overall GPA } \\ & \text { (2.000 Min.) } \end{aligned}$ | $\begin{aligned} & \hline \text { BUS GPA } \\ & \text { (2.000 Min.) } \end{aligned}$ | $\begin{aligned} & \text { Major GPA } \\ & \text { (2.000 Min.) } \end{aligned}$ | C Min. Req. | Total UD Hrs (51) | Total Comm. College Hrs. (64 Max) | Total Comm. Coll. Bus. Hrs. (30 Max) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |

## 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) |
| $\circ$ | 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:

Major Map: Marketing - Bachelor of Science (B.S.)
W. P. Carey School of Business, Tempe Campus

Catalog Year: 2008-2009


Major Map: Marketing - Bachelor of Science (B.S.)
W. P. Carey School of Business, Tempe Campus

Catalog Year: 2008-2009

Graduation Requirements Summary:

| Total Hours <br> $(120)$ | Total Hrs at <br> ASU (30) | Hrs Resident <br> Credit for <br> Academic <br> Recognition <br> $(56)$ | Transfer UD <br> Bus. Hrs <br> $(9$ Max. $)$ | Overall GPA <br> $(2.000$ Min.) | BUS GPA <br> $(2.000$ Min. $)$ | Major GPA <br> $(2.000$ Min.) $)$ | C Min. 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:
- 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:

Major Map: Supply Chain Management -

Bachelor of Science (B.S.)
W. P. Carey School of Business, Tempe Campus

Catalog Year: 2008-2009


## Graduation Requirements Summary:

| Total Hours (120) | Total Hrs at ASU (30) | Hrs Resident Credit for Academic Recognition (56) | Transfer UD Bus. Hrs (9 Max.) | $\begin{aligned} & \hline \text { Overall GPA } \\ & \text { (2.000 Min.) } \end{aligned}$ | $\begin{aligned} & \hline \text { BUS GPA } \\ & \text { (2.000 Min.) } \end{aligned}$ | $\begin{aligned} & \text { Major GPA } \\ & \text { (2.000 Min.) } \end{aligned}$ | C Min. Req. | $\begin{aligned} & \text { Total UD Hrs } \\ & \text { (51) } \end{aligned}$ | Total Comm. College Hrs. (64 Max) | Total Comm. Coll. Bus. Hrs. (30 Max) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |

## 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:

Major Map : Architectural Studies -
Bachelor of Science in Design (B.S.D.)
College of Design, Tempe Campus
Catalog Year: 2008-2009


## Graduation Requirements Summary:

| Total Hours <br> $(120$ minimum $)$ | Total Hrs at ASU <br> $(30$ minimum $)$ | Hrs Resident Credit for Academic <br> Recognition $(56$ minimum $)$ | Major GPA <br> $(2.00$ Min. $)$ | Total UD Hrs <br> $(45$ minimum $)$ | Total Comm. College Hrs. <br> $(64$ maximum $)$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |

## General University Requirements: Legend

- General Studies Core Requirements:
- Literacy and Critical Inquiry (L) (6 credit hours)
- Mathematical Studies (MA) (3 credit hours)
- Computer/Statistics/Quantitative applications (CS) (3 credit hours)
- Humanities, Fine Arts, and Design (HU) (6-9 credit hours)
- Social and Behavioral Sciences (SB) (6-9 credit hours)
- Natural Science-Quantitative (SQ) ( $4-8$ credit hours) (cumulative SQ/SG credit must equal 8 credit hours)
- Natural Science-General (SG) (0-4 credit hours) (cumulative SQ/SG credit must equal 8 credit hours)
- General Studies Awareness Requirements
- Cultural Diversity in the US (C) (3 credit hours) (may be combined with other general studies requirements.)
- Global Awareness (G) (3 credit hours) (may be combined with other general studies requirements.)
- Historical Awareness (H) (3 credit hours) (may be combined with other general studies requirements.)
- First-Year Composition (ENG 101 \& 102 OR ENG 107 \& 108 or 105)


## Additional Notes:

${ }^{1}$ Course offered only in the Fall Semester
${ }^{2}$ Course offered only in the Spring Semester
${ }^{3}$ Suggested elective: GPH 111. Students considering both Architecture and Landscape Architecture, check BSLA requirements.
${ }^{4}$ Transfer credits: evaluated by the college for applicability to this curriculum and must be equivalent in both content and level.
${ }^{5}$ Portfolio review: required for transfer studio work. Submit portfolio to the college's Academic Advising Office, CDS 115
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.

MILESTONE: Architectural Studies - 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 are not dismissed from the College of Design or the University. Students may reapply or transfer to other programs. Academic Advising is available regarding other program options.

Major Map : Design Studies -
Bachelor of Arts (B.A.)
College of Design, Tempe Campus,
Catalog Year: 2008-2009


## Graduation Requirements Summary:

| Total Hours <br> $(120$ minimum $)$ | Total Hrs at ASU <br> $(30$ minimum $)$ | Hrs Resident Credit for Academic <br> Recognition (56 minimum) | Major GPA <br> $(2.00$ Min. $)$ | Total UD Hrs <br> $(45$ minimum $)$ | Total Comm. College Hrs. <br> $(64$ maximum $)$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |

## General University Requirements: Legend

- General Studies Core Requirements:
- Literacy and Critical Inquiry (L) (6 credit hours)
- Mathematical Studies (MA) (3 credit hours)
- Computer/Statistics/Quantitative applications (CS) (3 credit hours)
- Humanities, Fine Arts, and Design (HU) (6-9 credit hours)
- Social and Behavioral Sciences (SB) (6-9 credit hours)
- Natural Science-Quantitative (SQ) ( $4-8$ credit hours) (cumulative SQ/SG credit must equal 8 credit hours)
- Natural Science-General (SG) (0-4 credit hours) (cumulative SQ/SG credit must equal 8 credit hours)
- General Studies Awareness Requirements (may be combined with other general studies requirements)
- Cultural Diversity in the US (C) (3 credit hours)
- Global Awareness (G) (3 credit hours)
- Historical Awareness (H) (3 credit hours)
- First-Year Composition (ENG 101 \& 102 OR ENG 107 \& 108 or 105)


## Additional Notes:

Sophomore List: Students must select one course from each of the following three categories:

| Design History | General Design | Communication for Design |
| :--- | :--- | :--- |
| ALA 100 Introduction to Environmental Design | ALA 102 Architecture, Landscape Architecture <br> and Society | COM 100 Introduction to Human <br> Communication |
| DSC 101 Design Awareness | ALA/DSC 236 or INT 121 Introduction to <br> Computer Modeling | COM 225 Public Speaking |
| GRA 111 Graphic Design History I | APH 294 Culture of Place | COM 230 Small Group Communication |
| GRA 112 Graphic Design History II | GRA 225 Communication/Interaction Design <br> Theory | COM 250 Introduction to Organization <br> Communication |
| INT 111 Interior Design Issues and Theories | IND 242 Materials and Design | COM 259 Communication in <br> Business/Professions |
|  | IND 243 Design for Ecology and Social Equity |  |
|  | INT 123 Introduction to Computer-aided Design |  |
|  | INT 131 Design and Human Behavior |  |
|  | PUP 190 Sustainable Cities |  |
|  | PUP 200 The Planned Environment |  |

## Junior/Senior List: Students must select four courses from each of the following three categories:

| Design History | General Design | Communication for Design |
| :--- | :--- | :--- |
| APH 313 History of Architecture I | GRA 440 Finding Purpose | COM 312 Communication, Conflict, and <br> Negotiation |
| APH 314 History of Architecture II | GRA 401 Creative Environment | ENG 301 Writing for the Professions |
| IND 316 20th Century Design I | IND 344 Human Factors in Design | MKT 394, 395 Various Topics in Marketing |
| IND 317 20th Century Design II | IND 354 Principles of Product Design | TWC 301 General Principles of Multimedia <br> Writing |
| INT 310 History of Interior Design I | PUP 301 Intro to Urban Planning | TWC 351 Technical Writing and Editing |
| INT 311 History of Interior Design II | PUP 420 Theory of Urban Design |  |
| LPH 310 History of Landscape Architecture |  |  |
| PUP 363 History of Planning |  |  |

## Major Map ：Design Studies（Design History）－ Bachelor of Arts（B．A．） <br> College of Design，Tempe Campus， <br> Catalog Year：2008－2009

|  |  |  | Completed ATP：$\square$ Yes $\square$ No |  | Completed AGEC：$\square$ Yes $\square$ No |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 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： 016 CREDIT HOURS |  |  |  |  |  |
| ASU 101：The ASU 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> －Design Electives：select from the following prefixes：AAD，ADE，ALA，ANP，APH，ARP， ATE，AVC，DSC，GRA，HUD，IND，INT，LAA， LAD，LAP，LDE，LNP，LPH，LTC，PLA，PUP． Listed pre－requisites must be met to enroll in any College of Design course． <br> －Minimum 2．0 ASU cumulative GPA |
| ENG 101 and 102：First－Year Composition OR ENG 107 and 108：English for Foreign Students OR ENG 105：Advanced First－Year Composition | 3 | $\square$ |  | Grade of C |  |
| Design Elective： | 3 | $\square$ |  | Grade of C |  |
| Humanities，Fine Arts，Design（HU）with Awareness Area－Global （G）and Historical（H）： | 3 | $\square$ |  |  |  |
| Mathematical Studies（MA）： | 3 | $\square$ |  |  |  |
| Elective： | 3 | $\square$ |  |  |  |
| TERM TWO： 1731 CREDIT HOURS |  |  |  |  | －Design Electives：select from the following prefixes：AAD，ADE，ALA，ANP，APH，ARP， ATE，AVC，DSC，GRA，HUD，IND，INT，LAA， LAD，LAP，LDE，LNP，LPH，LTC，PLA，PUP． Listed pre－requisites must be met to enroll in any College of Design course． <br> －Minimum 2．0 ASU cumulative GPA |
| ENG 101 and 102：First－Year Composition OR ENG 107 and 108：English for Foreign Students OR ENG 105：Advanced First－Year Composition | 3 | $\square$ |  | Grade of C |  |
| Design Elective： | 3 | $\square$ |  | Grade of C |  |
| Social and Behavioral Sciences（SB）： | 3 | $\square$ |  |  |  |
| Elective： | 3 | $\square$ |  |  |  |
| Elective： | 3 | $\square$ |  |  |  |
| TERM THREE： 3247 CREDIT HOURS |  |  |  |  | －Complete First Year Composition requirement： ENG 101 \＆ 102 OR ENG 107 \＆ 108 or 105 <br> －Design Studies：Sophomore List：Complete one course from each of the three categories by end of term 4. <br> －Minimum 2．0 ASU cumulative GPA |
| Literacy and Critical Inquiry（L）： | 3 | $\square$ |  |  |  |
| Social and Behavioral Sciences（SB）： | 3 | $\square$ |  |  |  |
| Awareness Area－Cultural Diversity（C）： | 3 | $\square$ |  |  |  |
| Natural Science－Quantitative（SQ）： | 4 | $\square$ |  |  |  |
| Design Studies： | 3 | $\square$ |  |  |  |
| TERM FOUR： 4863 CREDIT HOURS |  |  |  |  | －Design Studies：Sophomore List：Complete one course from each of the three categories by end of term 4. <br> －Minimum 2．0 ASU cumulative GPA |
| Humanities，Fine Arts，Design（HU）： | 3 | $\square$ |  |  |  |
| Computer／Statistics／Quantitative applications（CS）： | 3 | $\square$ |  |  |  |
| Natural Science－Quantitative or General（SQ／SG）： | 4 | $\square$ |  |  |  |
| Design Studies： | 3 | $\square$ |  |  |  |
| Design Studies： | 3 | $\square$ |  |  |  |
| TERM FIVE： 6478 CREDIT HOURS |  |  |  |  | －Design Studies：Junior List：Complete 2 courses from each of the three categories． <br> －Minimum 2．0 ASU cumulative GPA |
| Design Studies： | 3 | 区 |  |  |  |
| Design Studies： | 3 | 区 |  |  |  |
| Design Studies： | 3 | 区 |  |  |  |
| Upper Division Literacy and Critical Inquiry（L）： | 3 | 区 |  |  |  |
| Elective： | 3 | $\square$ |  |  |  |
| TERM SIX： 7993 CREDIT HOURS |  |  |  |  | －Design Studies：Junior List：Complete 2 courses from each of the three categories． <br> －Minimum 2．0 ASU cumulative GPA |
| Design Studies： | 3 | 凹 |  |  |  |
| Design Studies： | 3 | 区 |  |  |  |
| Design Studies： | 3 | 囚 |  |  |  |
| Upper Division Humanities／Fine Art（HU）or Social／Behavioral Science（SB）： | 3 | 区 |  |  |  |
| Upper Division Elective： | 3 | 区 |  |  |  |
| TERM SEVEN： 94108 CREDIT HOURS |  |  |  |  | －Design Studies：Senior List：Complete 18 credit hours from the senior list including 12 upper division hours． <br> －Minimum 2．0 ASU cumulative GPA |
| Design Studies： | 3 | $\square$ |  |  |  |
| Design Studies： |  | 区 |  |  |  |
| Design Studies： | 3 | 区 |  |  |  |
| Upper Division Elective： | 3 | 区 |  |  |  |
| Elective： | 3 | $\square$ |  |  |  |
| TERM EIGHT： 109120 CREDIT HOURS |  |  |  |  | －Design Studies：Senior List：Complete 18 credit hours from the senior list including 12 upper division hours． <br> －Minimum 2．0 ASU cumulative GPA |
| Design Studies： | 3 | $\square$ |  |  |  |
| Design Studies： | 3 | 区 |  |  |  |
| Design Studies： | 3 | 区 |  |  |  |
| Upper Division Elective： | 3 | 区 |  |  |  |

## Graduation Requirements Summary:

| Total Hours <br> $(120$ minimum $)$ | Total Hrs at ASU <br> $(30$ minimum $)$ | Hrs Resident Credit for Academic <br> Recognition $(56$ minimum $)$ | Major GPA <br> $(2.00$ Min. $)$ | Total UD Hrs <br> $(45$ minimum $)$ | Total Comm. College Hrs. <br> $(64$ maximum $)$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |

General University Requirements: Legend

- General Studies Core Requirements:
- Literacy and Critical Inquiry (L) (6 credit hours)
- Mathematical Studies (MA) (3 credit hours)
- Computer/Statistics/Quantitative applications (CS) (3 credit hours)
- Humanities, Fine Arts, and Design (HU) (6-9 credit hours)
- Social and Behavioral Sciences (SB) (6-9 credit hours)
- Natural Science-Quantitative (SQ) (4-8 credit hours) (cumulative SQ/SG credit must equal 8 credit hours)
- Natural Science-General (SG) (0-4 credit hours) (cumulative SQ/SG credit must equal 8 credit hours)
- General Studies Awareness Requirements (may be combined with other general studies requirements)
- Cultural Diversity in the US (C) (3 credit hours)
- Global Awareness (G) (3 credit hours)
- Historical Awareness (H) (3 credit hours)
- First-Year Composition (ENG 101 \& 102 OR ENG 107 \& 108 or 105)


## Additional Notes:

Sophomore List: Students must select one course from each of the following three categories:

| Design History | General Design | Communication for Design |
| :--- | :--- | :--- |
| ALA 100 Introduction to Environmental Design | ALA 102 Architecture, Landscape Architecture <br> and Society | COM 100 Introduction to Human <br> Communication |
| DSC 101 Design Awareness | ALA/DSC 236 or INT 121 Introduction to <br> Computer Modeling | COM 225 Public Speaking |
| GRA 111 Graphic Design History I | APH 294 Culture of Place | COM 230 Small Group Communication |
| GRA 112 Graphic Design History II | GRA 225 Communication/Interaction Design <br> Theory | COM 250 Introduction to Organization <br> Communication |
| INT 111 Interior Design Issues and Theories | IND 242 Materials and Design | COM 259 Communication in <br> Business/Professions |
|  | IND 243 Design for Ecology and Social Equity |  |
|  | INT 123 Introduction to Computer-aided Design |  |
|  | INT 131 Design and Human Behavior |  |
|  | PUP 190 Sustainable Cities |  |
|  | PUP 200 The Planned Environment |  |

## Junior List: Students must select two courses from each of the following three categories:

| Design History | General Design | Communication for Design |
| :--- | :--- | :--- |
| APH 313 History of Architecture I | GRA 440 Finding Purpose | COM 312 Communication, Conflict, and <br> Negotiation |
| APH 314 History of Architecture II | GRA 401 Creative Environment | ENG 301 Writing for the Professions |
| IND 316 20th Century Design I | IND 344 Human Factors in Design | MKT 394, 395 Various Topics in Marketing |
| IND 317 20th Century Design II | IND 354 Principles of Product Design | TWC 301 General Principles of Multimedia <br> Writing |
| INT 310 History of Interior Design I | PUP 301 Intro to Urban Planning | TWC 351 Technical Writing and Editing |
| INT 311 History of Interior Design II | PUP 420 Theory of Urban Design |  |
| LPH 310 History of Landscape Architecture |  |  |
| PUP 363 History of Planning |  |  |

## Senior List: Students must complete 18 credits. At least 12 credits must be Upper Division

| Lower Division | Upper Division |
| :--- | :--- |
| ALA 100 Introduction to Environmental Design | APH 313 History of Architecture I |
| ARS 102 Art from Renaissance to Present | APH 314 History of Architecture II |
| DSC 101 Design Awareness | APH 494 First Concepts |
| GRA 111 Graphic Design History | IND 316 20th Century Design I |
| GRA 112 Graphic Design History | IND 317 20th Century Design II |
| INT 111 Interior Design Issues and Theories | INT 310 History of Interior Design I |
|  | INT 311 History of Interior Design II |
|  | INT 412 History of Decorative Arts in Interiors |
|  | INT 413 History of Textiles in Interiors |
|  | LPH 310 History of Landscape Architecture |
|  | PUP 363 History of Planning |

Major Map：Design Studies（Design Management）－ Bachelor of Arts（B．A．）<br>College of Design，Tempe Campus，<br>Catalog Year：2008－2009

|  |  |  | Completed ATP：$\square$ Yes $\quad \square$ No |  | Completed AGEC：$\square$ Yes $\square$ No |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 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： 016 CREDIT HOURS |  |  |  |  |  |
| ASU 101：The ASU 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> －Design Electives：select from the following prefixes：AAD，ADE，ALA，ANP，APH，ARP， ATE，AVC，DSC，GRA，HUD，IND，INT，LAA， LAD，LAP，LDE，LNP，LPH，LTC，PLA，PUP． Listed pre－requisites must be met to enroll in any College of Design course． <br> －Minimum 2．0 ASU cumulative GPA |
| ENG 101 and 102：First－Year Composition OR ENG 107 and 108：English for Foreign Students OR ENG 105：Advanced First－Year Composition | 3 | $\square$ |  | Grade of C |  |
| Design Elective： | 3 | $\square$ |  | Grade of C |  |
| Humanities，Fine Arts，Design（HU）with Awareness Area－Global （G）and Historical（H）： | 3 | $\square$ |  |  |  |
| Mathematical Studies（MA）： | 3 | $\square$ |  |  |  |
| Elective： | 3 | $\square$ |  |  |  |
| TERM TWO： 1731 CREDIT HOURS |  |  |  |  |  |
| ENG 101 and 102：First－Year Composition OR ENG 107 and 108：English for Foreign Students OR ENG 105：Advanced First－Year Composition | 3 | $\square$ |  | Grade of C | Design Electives：select from the following prefixes：AAD，ADE，ALA，ANP，APH，ARP， ATE，AVC，DSC，GRA，HUD，IND，INT，LAA， LAD，LAP，LDE，LNP，LPH，LTC，PLA，PUP． Listed pre－requisites must be met to enroll in any College of Design course． <br> －Minimum 2．0 ASU cumulative GPA |
| Design Elective： | 3 | $\square$ |  | Grade of C |  |
| Social and Behavioral Sciences（SB）： | 3 | $\square$ |  |  |  |
| Elective： | 3 | $\square$ |  |  |  |
| Elective： | 3 | $\square$ |  |  |  |
| TERM THREE： 3247 CREDIT HOURS |  |  |  |  |  |
| Literacy and Critical Inquiry（L）： | 3 | $\square$ |  |  | －Complete First Year Composition requirement： ENG 101 \＆ 102 OR ENG 107 \＆ 108 or 105 <br> －Design Studies：Sophomore List：Complete one course from each of the three categories by end of term 4. <br> －Minimum 2．0 ASU cumulative GPA |
| Social and Behavioral Sciences（SB）： | 3 | $\square$ |  |  |  |
| Awareness Area－Cultural Diversity（C）： | 3 | $\square$ |  |  |  |
| Natural Science－Quantitative（SQ）： | 4 | $\square$ |  |  |  |
| Design Studies： | 3 | $\square$ |  |  |  |
| TERM FOUR： $\mathbf{4 8} \mathbf{6 3}$ CREDIT HOURS |  |  |  |  |  |
| Humanities，Fine Arts，Design（HU）： | 3 | $\square$ |  |  | －Design Studies：Sophomore List：Complete one course from each of the three categories by end of term 4. <br> －Minimum 2．0 ASU cumulative GPA |
| Computer／Statistics／Quantitative applications（CS）： | 3 | $\square$ |  |  |  |
| Natural Science－Quantitative or General（SQ／SG）： | 4 | $\square$ |  |  |  |
| Design Studies： | 3 | $\square$ |  |  |  |
| Design Studies： | 3 | $\square$ |  |  |  |
| TERM FIVE： 6478 CREDIT HOURS |  |  |  |  |  |
| Design Studies： | 3 | 区 |  |  | －Design Studies：Junior List：Complete 2 courses from each of the three categories． <br> －Minimum 2．0 ASU cumulative GPA |
| Design Studies： | 3 | 区 |  |  |  |
| Design Studies： | 3 | 区 |  |  |  |
| Upper Division Literacy and Critical Inquiry（L）： | 3 | 区 |  |  |  |
| Elective： | 3 | $\square$ |  |  |  |
| TERM SIX： 7999 CREDIT HOURS |  |  |  |  |  |
| Design Studies： | 3 | 区 |  |  | －Design Studies：Junior List：Complete 2 courses from each of the three categories． <br> －Minimum 2．0 ASU cumulative GPA |
| Design Studies： | 3 | 区 |  |  |  |
| Design Studies： | 3 | 区 |  |  |  |
| Upper Division Humanities／Fine Art（HU）or Social／Behavioral Science（SB）： | 3 | 区 |  |  |  |
| Upper Division Elective： | 3 | 区 |  |  |  |
| TERM SEVEN： 94108 CREDIT HOURS |  |  |  |  |  |
| Design Studies： | 3 | $\square$ |  |  | －Design Studies：Senior List：Complete 18 credit hours from the senior list including 12 upper division hours． <br> －Minimum 2．0 ASU cumulative GPA |
| Design Studies： | 3 | 区 |  |  |  |
| Design Studies： | 3 | 区 |  |  |  |
| Upper Division Elective： | 3 | 区 |  |  |  |
| Elective： | 3 | $\square$ |  |  |  |
| TERM EIGHT： 109120 CREDIT HOURS |  |  |  |  |  |
| Design Studies： | 3 | $\square$ |  |  | －Design Studies：Senior List：Complete 18 credit hours from the senior list including 12 upper division hours． <br> －Minimum 2．0 ASU cumulative GPA |
| Design Studies： | 3 | 囚 |  |  |  |
| Design Studies： | 3 | 区 |  |  |  |
| Upper Division Elective： | 3 | 区 |  |  |  |

## Major Map: Design Studies (Design Management) Bachelor of Arts (B.A.) <br> College of Design, Tempe Campus, Catalog Year: 2008-2009

## Graduation Requirements Summary:

| Total Hours <br> $(120$ minimum $)$ | Total Hrs at ASU <br> $(30$ minimum $)$ | Hrs Resident Credit for Academic <br> Recognition $(56$ minimum $)$ | Major GPA <br> $(2.00$ Min. $)$ | Total UD Hrs <br> $(45$ minimum $)$ | Total Comm. College Hrs. <br> $(64$ maximum $)$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |

## General University Requirements: Legend

- General Studies Core Requirements:
- Literacy and Critical Inquiry (L) (6 credit hours)
- Mathematical Studies (MA) (3 credit hours)
- Computer/Statistics/Quantitative applications (CS) (3 credit hours)
- Humanities, Fine Arts, and Design (HU) (6-9 credit hours)
- Social and Behavioral Sciences (SB) (6-9 credit hours)
- Natural Science-Quantitative (SQ) (4-8 credit hours) (cumulative SQ/SG credit must equal 8 credit hours)
- Natural Science-General (SG) (0-4 credit hours) (cumulative SQ/SG credit must equal 8 credit hours)
- General Studies Awareness Requirements (may be combined with other general studies requirements)
- Cultural Diversity in the US (C) (3 credit hours)
- Global Awareness (G) (3 credit hours)
- Historical Awareness (H) (3 credit hours)
- First-Year Composition (ENG 101 \& 102 OR ENG 107 \& 108 or 105)


## Additional Notes:

Sophomore List: Students must select one course from each of the following three categories:

| Design History | General Design | Communication for Design |
| :--- | :--- | :--- |
| ALA 100 Introduction to Environmental Design | ALA 102 Architecture, Landscape Architecture <br> \& Society | COM 100 Introduction to Human <br> Communication |
| DSC 101 Design Awareness | ALA/DSC 236 or INT 121 Introduction to <br> Computer Modeling | COM 225 Public Speaking |
| GRA 111 Graphic Design History I | APH 294 Culture of Place | COM 230 Small Group Communication |
| GRA 112 Graphic Design History II | GRA 225 Communication/Interaction Design <br> Theory | COM 250 Introduction to Organization <br> Communication |
| INT 111 Interior Design Issues and Theories | IND 242 Materials and Design | COM 259 Communication in <br> Business/Professions |
|  | IND 243 Design for Ecology and Social Equity |  |
|  | INT 123 Introduction to Computer-aided Design |  |
|  | INT 131 Design and Human Behavior |  |
|  | PUP 190 Sustainable Cities |  |
|  | PUP 200 The Planned Environment |  |

Junior List: Students must select two courses from each of the following three categories:

| Design History | General Design | Communication for Design |
| :--- | :--- | :--- |
| APH 313 History of Architecture I | GRA 440 Finding Purpose | COM 312 Communication, Conflict, and <br> Negotiation |
| APH 314 History of Architecture II | GRA 401 Creative Environment | ENG 301 Writing for the Professions |
| IND 316 20th Century Design I | IND 344 Human Factors in Design | MKT 394, 395 Various Topics in Marketing |
| IND 317 20th Century Design II | IND 354 Principles of Product Design | TWC 301 General Principles of Multimedia <br> Writing |
| INT 310 History of Interior Design I | PUP 301 Intro to Urban Planning | TWC 351 Technical Writing and Editing |
| INT 311 History of Interior Design II | PUP 420 Theory of Urban Design |  |
| LPH 310 History of Landscape Architecture |  |  |
| PUP 363 History of Planning |  |  |

Senior List: Students must complete 18 credits. At least 12 credits must be Upper Division.

| Lower Division | Upper Division |
| :--- | :--- |
| COM 100 Introduction to Human Communication | ACC 382 Accounting/Financial Analysis |
| COM 250 Introduction to Organization Communication | COM 312 Communication, Conflict, and Negotiations |
| COM 259 Communication in Business/Professions | ECN 382 Managerial Economics |
| COM 263 Intercultural Communication | ENG 301 Writing for the Professions |
| ECN 212 Microeconomic Principles | FIN 380 Personal Financial Management |
| PHI 103 Principles of Sound Reasoning | INT 471 Facilities Management |
| PHI 105 Introduction to Ethics | LES 380 Consumer Perspectives in Business Law |
|  | MGT 380 Management and Strategy for Non-majors |
|  | MKT 382 Advertising and Marketing Communication |
|  | MKT 394 Introduction to Marketing |
|  | PHI 306 Applied Ethics |
|  | SOC 321 Sociology of Work |
|  | TWC 301 General Principles of Multimedia Writing |
|  | TWC 351 Technical Writing and Editing |

Major Map：Graphic Design－
Bachelor of Science in Design（B．S．D．）
College of Design，Tempe Campus
Catalog Year：2008－2009

|  |  |  | Completed ATP：$\square$ Yes $\square$ No |  | Completed AGEC：$\square$ Yes $\square$ No |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 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： 016 CREDIT HOURS |  |  |  |  |  |
| ASU 101：The ASU 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> －Minimum 2.0 cumulative GPA in all attempts of critical courses． <br> －Minimum 2．50 ASU cumulative GPA |
| ENG 101 and 102：First－Year Composition OR ENG 107 and 108：English for Foreign Students OR ENG 105：Advanced First－Year Composition | 3 | $\square$ |  | Grade of C |  |
| ARS 101：Art－Prehistory Through Middle Ages（HU，H） | 3 | $\square$ |  | Grade of C |  |
| GRA 111：Graphic Design History $\mathrm{I}^{1,4}$（HU） | 3 | $\square$ |  | Grade of C |  |
| GRA 121：Principles for Graphic Design ${ }^{1,4}$ | 3 | $\square$ |  | Grade of C |  |
| GRA 101：Designing Life ${ }^{1,4}$ | 3 | $\square$ |  | Grade of C |  |
| TERM TWO： 1731 CREDIT HOURS |  |  |  |  |  |
| ENG 101 and 102：First－Year Composition OR ENG 107 and 108：English for Foreign Students OR ENG 105：Advanced First－Year Composition | 3 | $\square$ |  | Grade of C | －Minimum 2.0 cumulative GPA in all attempts of critical courses． <br> －Minimum 2．75 ASU cumulative GPA <br> －MILESTONE：Graphic Design（page 2） |
| GRA 112：Graphic Design History II ${ }^{\text {2，4 }}$ | 3 | $\square$ |  | Grade of C |  |
| GRA 122：Principles for Graphic Design II ${ }^{\text {2，4 }}$ | 3 | $\square$ |  | Grade of C |  |
| MAT 142：College Mathematics or higher（MA） | 3 | $\square$ |  |  |  |
| Computer／Statistics／Quantitative applications（CS）： | 3 | $\square$ |  |  |  |
| TERM THREE： 3246 CREDIT HOURS |  |  |  |  |  |
| GRA 220：Design Drawing I ${ }^{\text {1，4 }}$ | 3 | $\square$ |  | Grade of C | －Complete First Year Composition requirement： ENG 101 \＆ 102 OR ENG 107 \＆ 108 or 105 <br> －Minimum 2.0 cumulative GPA in all attempts of critical courses． <br> －Minimum 3．00 ASU cumulative GPA |
| GRA 221：Letterform ${ }^{1,4}$ | 3 | $\square$ |  | Grade of C |  |
| GRA 222：Visual Communication I ${ }^{1,4}$ | 3 | $\square$ |  | Grade of C |  |
| GRA 225：Communication／Interaction Design Theory ${ }^{\text {1，4 }}$ | 3 | $\square$ |  | Grade of C |  |
| Literacy and Critical Inquiry（L） | 3 | $\square$ |  |  |  |
| TERM FOUR： 4762 CREDIT HOURS |  |  |  |  |  |
| GRA 223：Typography ${ }^{\text {2，4 }}$ | 3 | $\square$ |  | Grade of C | －Minimum 2.0 cumulative GPA in all attempts of critical courses． <br> －Minimum 3．00 ASU cumulative GPA |
| GRA 224：Visual Communication II ${ }^{\text {2，4 }}$ | 3 | $\square$ |  | Grade of C |  |
| PGS 101：Introduction to Psychology（SB） | 3 | $\square$ |  |  |  |
| Natural Science－Quantitative or General（SQ／SG）： | 4 | $\square$ |  |  |  |
| Elective： | 3 | $\square$ |  |  |  |
| TERM FIVE： 6377 CREDIT HOURS |  |  |  |  |  |
| GRA 321：Technology for Design I ${ }^{\text {1，4 }}$ | 3 | 区 |  | Grade of C | －Minimum 3．00 ASU cumulative GPA |
| GRA 361：Visual Communication III ${ }^{1,4}$ | 5 | 囚 |  | Grade of C |  |
| Social and Behavioral Sciences（SB）and Awareness Area－Global （G）： | 3 | $\square$ |  |  |  |
| Natural Science－Quantitative（SQ）： | 4 | $\square$ |  |  |  |
| TERM SIX： 7891 CREDIT HOURS |  |  |  |  |  |
| GRA 322：Technology for Design II ${ }^{\text {2，4 }}$ | 3 | 区 |  | Grade of C | －Minimum 3．00 ASU cumulative GPA |
| GRA 345：Design Rhetoric ${ }^{2,4}$（L） | 3 | 区 |  | Grade of C |  |
| GRA 362：Visual Communication IV ${ }^{\text {2，4 }}$ | 5 | 囚 |  | Grade of C |  |
| ARS 300：Introduction to Art（HU） | 3 | 区 |  |  |  |
| SUMMER |  |  |  |  |  |
| GRA 484：Internship ${ }^{3}$ | 2 | 区 |  | Grade of C |  |
| TERM SEVEN： 92107 CREDIT HOURS |  |  |  |  |  |
| GRA 421：Exhibit Design ${ }^{1,4}$ | 3 | 区 |  | Grade of C | －Minimum 3．00 ASU cumulative GPA |
| GRA 422：Motion Graphics and Interaction Design ${ }^{1,4}$ | 3 | 区 |  | Grade of C |  |
| GRA 461：Visual Communication $\mathbf{V}^{\text {1，4 }}$ | 5 | 区 |  | Grade of C |  |
| Awareness Area－Cultural Diversity（C）： | 3 | $\square$ |  |  |  |
| TERM EIGHT： 108120 CREDIT HOURS |  |  |  |  |  |
| GRA 424：Advanced Media ${ }^{2,4}$ | 3 | 区 |  | Grade of C | －Minimum 3．00 ASU cumulative GPA |
| GRA 423：Advanced Interaction Design ${ }^{2,4}$ | 3 | 区 |  | Grade of C |  |
| GRA 462：Visual Communication VI ${ }^{\text {2，4 }}$ | 5 | 区 |  | Grade of C |  |
| Elective： | 2 | $\square$ |  |  |  |

## Graduation Requirements Summary:

| Total Hours <br> $(120$ minimum $)$ | Total Hrs at ASU <br> $(30$ minimum $)$ | Hrs Resident Credit for Academic <br> Recognition (56 minimum) $)$ | Major GPA <br> $(2.00$ Min. $)$ | Total UD Hrs <br> $(45$ minimum $)$ | Total Comm. College Hrs. <br> $(64$ maximum $)$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |

## General University Requirements: Legend

- General Studies Core Requirements:

$$
\begin{aligned}
& \text { Literacy and Critical Inquiry (L) (6 credit hours) } \\
& \text { Mathematical Studies (MA) ( } 3 \text { credit hours) } \\
& \text { Computer/Statistics/Quantitative applications (CS) ( } 3 \text { credit hours) } \\
& \text { Humanities, Fine Arts, and Design (HU) (6-9 credit hours) } \\
& \text { Social and Behavioral Sciences (SB) (6-9 credit hours) } \\
& \text { Natural Science-Quantitative (SQ) ( } 4-8 \text { credit hours) (cumulative SQ/SG credit must equal } 8 \text { credit hours) } \\
& \text { Natural Science-General (SG) ( } 0-4 \text { credit hours) (cumulative SQ/SG credit must equal } 8 \text { credit hours) }
\end{aligned}
$$

- General Studies Awareness Requirements (may be combined with other general studies requirements)
- Cultural Diversity in the US (C) (3 credit hours)
- Global Awareness (G) (3 credit hours)
- Historical Awareness (H) (3 credit hours)
- First-Year Composition (ENG 101 \& 102 OR ENG 107 \& 108 or ENG 105)


## Additional Notes:

${ }^{1}$ Course offered only in the fall semester
${ }^{2}$ Course offered only in the spring semester
${ }^{3}$ Summer Internship: conducted between years $3 \& 4$. Do not register for the class (GRA 484) until the following Fall semester
${ }^{4}$ Transfer credits: evaluated by the college for applicability to this curriculum and must be equivalent in both content and level.
Submit samples of studio work for evaluation to the college's Academic Advising Office, CDS 115
Most studio and some lecture courses are sequential, must be taken in, and may be offered only during the semester noted.
MILESTONE: Graphic Design - 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 are not dismissed from the College of Design or the University. Students may reapply or transfer to other programs. Academic Advising is available regarding other program options.

Major Map: Housing \& Community Development Bachelor of Science in Design (B.S.D.)
College of Design, Tempe Campus
Catalog Year: 2008-2009


## Graduation Requirements Summary:

| Total Hours <br> $(120$ minimum $)$ | Total Hrs at ASU <br> $(30$ minimum $)$ | Hrs Resident Credit for Academic <br> Recognition ( 56 minimum $)$ | Major GPA <br> $(2.00$ Min. $)$ | Total UD Hrs <br> $(45$ minimum $)$ | Total Comm. College <br> Hrs. ( 64 maximum $)$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |

## General University Requirements: Legend

- General Studies Core Requirements:
- Literacy and Critical Inquiry (L) (6 credit hours)
- Mathematical Studies (MA) (3 credit hours)
- Computer/Statistics/Quantitative applications (CS) (3 credit hours)
- Humanities, Fine Arts, and Design (HU) (6-9 credit hours)
- Social and Behavioral Sciences (SB) (6-9 credit hours)
- Natural Science-Quantitative (SQ) (4-8 credit hours) (cumulative SQ/SG credit must equal 8 credit hours)
- Natural Science-General (SG) (0-4 credit hours) (cumulative SQ/SG credit must equal 8 credit hours)
- General Studies Awareness Requirements
- Cultural Diversity in the US (C) (3 credit hours) (may be combined with other general studies requirements.)
- Global Awareness (G) (3 credit hours) (may be combined with other general studies requirements.)
- Historical Awareness (H) (3 credit hours) (may be combined with other general studies requirements.)
- First-Year Composition (ENG 101 \& 102 OR ENG 107 \& 108 or ENG 105)


## Additional Notes:

${ }^{1}$ Course offered only in the fall semester
${ }^{2}$ Course offered only in the spring semester
${ }^{3}$ Design History courses that also fulfill HU (prerequisites for these courses must be met; consult the ASU General Catalog): APH300, APH305, APH313, APH446,
DSC101, GRA111, INT111, INT310, INT311, IND316, IND317, INT412, PUP200, PUP420. If a chosen course does not also satisfy the global (G) requirement, student must account for this area with another course. Other COD History courses may be petitioned to satisfy this requirement
${ }^{4}$ Suggested general studies electives: ECN 211 or 212 (SB), ALA or PUP 100 (HU, H), PUP 301 (L), GPH 111 (SQ, SG).
${ }^{5}$ Suggested Electives: CON 472 Development Feasibility Reports, CON 496 Construction Contract Administration.
${ }^{6}$ Transfer credits: evaluated by the college for applicability to this curriculum and must be equivalent in both content and level.
Most studio courses and some lecture courses are sequential, must be taken in, and may only be offered the semester noted.
MILESTONE: Housing and Community Development - 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 are not dismissed from the College of Design or the University. Students may reapply or transfer to other programs. Academic Advising is available regarding other program options.

Major Map：Industrial Design－
Bachelor of Science in Design（B．S．D．）
College of Design，Tempe Campus
Catalog Year：2008－2009

|  |  |  | Completed ATP：$\square$ Yes $\square$ No |  | Completed AGEC：$\square$ Yes $\square$ No |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 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： 016 CREDIT HOURS |  |  |  |  |  |
| ASU 101：The ASU 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> －Minimum 2．50 ASU cumulative GPA |
| ENG 101 and 102：First－Year Composition OR ENG 107 and 108：English for Foreign Students OR ENG 105：Advanced First－Year Composition | 3 | $\square$ |  | Grade of C |  |
| DSC 101：Design Awareness（HU，G） | 3 | $\square$ |  | Grade of C |  |
| IND 120：Drawing for Industrial Design ${ }^{1,5}$ | 3 | $\square$ |  | Grade of C |  |
| MAT 170：Precalculus（MA） | 3 | $\square$ |  |  |  |
| Elective： | 3 | $\square$ |  |  |  |
| TERM TWO： 1732 CREDIT HOURS |  |  |  |  |  |
| ENG 101 and 102：First－Year Composition OR ENG 107 and 108：English for Foreign Students OR ENG 105：Advanced First－Year Composition | 3 | $\square$ |  | Grade of C | －Minimum 3．00 ASU cumulative GPA <br> －MILESTONE：Industrial Design（page 2） |
| IND 121：Principles of Industrial Design $\mathrm{I}^{2,5}$（lecture） | 3 | $\square$ |  | Grade of C |  |
| IND 122：Principles of Industrial Design II ${ }^{2,5}$（studio） | 3 | $\square$ |  | Grade of C |  |
| PGS 101：Introduction to Psychology（SB） | 3 | $\square$ |  |  |  |
| PHY 111：General Physics and <br> PHY 113：General Physics Laboratory（SQ）${ }^{3}$ | 4 | $\square$ |  |  |  |
| TERM THREE： 3347 CREDIT HOURS |  |  |  |  | －Complete First Year Composition requirement： ENG 101 \＆ 102 OR ENG 107 \＆ 108 or 105 <br> －Complete MAT 170，PGS 101，PHY 111，PHY 113 <br> －Minimum 3．00 ASU cumulative GPA |
| DSC 236：Introduction to Computer Modeling ${ }^{1}$（CS） | 3 | $\square$ |  | Grade of C |  |
| IND 227：Visual Methods for Problem Solving ${ }^{1}$ | 3 | $\square$ |  | Grade of C |  |
| IND 242：Materials and Design ${ }^{1}$ | 3 | $\square$ |  | Grade of C |  |
| IND 260：Industrial Design I ${ }^{1}$ | 3 | $\square$ |  | Grade of C |  |
| ECN 212：Microeconomic Principles（SB） | 3 | $\square$ |  | Grade of C |  |
| TERM FOUR： $48 \mathbf{6 3}$ CREDIT HOURS |  |  |  |  |  |
| IND 228：Imaging and Visualization ${ }^{2}$ | 3 | $\square$ |  | Grade of C | －Minimum 3．00 ASU cumulative GPA |
| IND 243：Design for Ecology and Social Equity ${ }^{2}$ | 3 | $\square$ |  | Grade of C |  |
| IND 261：Industrial Design II ${ }^{\text {² }}$ | 3 | $\square$ |  | Grade of C |  |
| Natural Science－Quantitative of General（SQ／SG）： | 4 | $\square$ |  |  |  |
| Elective： | 3 | $\square$ |  |  |  |
| TERM FIVE： 6477 CREDIT HOURS |  |  |  |  |  |
| IND 327：Presentation Graphics ${ }^{1}$ | 3 | 区 |  | Grade of C | －Minimum 3．00 ASU cumulative GPA |
| IND 344：Human Factors in Design ${ }^{1}$ | 3 | 区 |  | Grade of C |  |
| IND 316：20 ${ }^{\text {th }}$ Century Design I ${ }^{1}$（HU，H） | 3 | 区 |  | Grade of C |  |
| IND 360：Industrial Design III ${ }^{1}$ | 5 | 区 |  | Grade of C |  |
| TERM SIX： 7891 CREDIT HOURS |  |  |  |  |  |
| IND 328：Graphics for Industrial Design ${ }^{2}$ | 3 | 区 |  | Grade of C | －Minimum 3．00 ASU cumulative GPA |
| IND 361：Industrial Design IV ${ }^{2}$ | 5 | 区 |  | Grade of C |  |
| IND 317：20th Century Design II ${ }^{2}$（HU，H） | 3 | 区 |  | Grade of C |  |
| IND 354：Principles of Product Design ${ }^{2}$ | 3 | 区 |  | Grade of C |  |
| SUMMER |  |  |  |  |  |
| ARP 484：Internship | 2 | 区 |  | Grade of C |  |
| TERM SEVEN： 92107 CREDIT HOURS |  |  |  |  |  |
| IND 460：Design Project I ${ }^{1}$ | 5 | 区 |  | Grade of C | －Minimum 3．00 ASU cumulative GPA |
| IND 470：Professional Practice for Industrial Design（L）${ }^{1}$ | 3 | 区 |  | Grade of C |  |
| ENG 301：Writing for the Professions（L） | 3 | 区 |  |  |  |
| Elective： | 3 | $\square$ |  |  |  |
| TERM EIGHT： 108120 CREDIT HOURS |  |  |  |  |  |
| IND 461 Design Project II ${ }^{\text {² }}$ | 5 | 区 |  | Grade of C | －Minimum 3．00 ASU cumulative GPA |
| MKT 395：Essentials of Advertising and Marketing Communication OR approved MKT course | 3 | 区 |  |  |  |
| Awareness Area－Cultural Diversity（C）： | 3 | $\square$ |  |  |  |
| Elective： | 2 | $\square$ |  |  |  |

[^6]Major Map: Industrial Design Bachelor of Science in Design (B.S.D.)<br>College of Design, Tempe Campus<br>Catalog Year: 2008-2009

## Graduation Requirements Summary:

| Total Hours <br> $(120$ minimum $)$ | Total Hrs at ASU <br> $(30$ minimum $)$ | Hrs Resident Credit for Academic <br> Recognition $(56$ minimum $)$ | Major GPA <br> $(2.00$ Min. $)$ | Total UD Hrs <br> $(45$ minimum $)$ | Total Comm. College <br> Hrs. ( 64 maximum) |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |

## General University Requirements: Legend

- General Studies Core Requirements:
- Literacy and Critical Inquiry (L) (6 credit hours)
- Mathematical Studies (MA) (3 credit hours)
- Computer/Statistics/Quantitative applications (CS) (3 credit hours)
- Humanities, Fine Arts, and Design (HU) (6-9 credit hours)
- Social and Behavioral Sciences (SB) (6-9 credit hours)
- Natural Science-Quantitative (SQ) (4-8 credit hours) (cumulative SQ/SG credit must equal 8 credit hours)
- Natural Science-General (SG) (0-4 credit hours) (cumulative SQ/SG credit must equal 8 credit hours)
- General Studies Awareness Requirements
- Cultural Diversity in the US (C) (3 credit hours) (may be combined with other general studies requirements.)
- Global Awareness (G) (3 credit hours) (may be combined with other general studies requirements.)
- Historical Awareness (H) (3 credit hours) (may be combined with other general studies requirements.)
- First-Year Composition (ENG 101 \& 102 OR ENG 107 \& 108 or ENG 105)


## Additional Notes:

MILESTONE: Industrial Design - 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 are not dismissed from the College of Design or the University. Students may reapply or transfer to other programs. Academic Advising is available regarding other program options.

Major Map: Interior Design -
Bachelor of Science in Design (B.S.D.)
College of Design, Tempe Campus
Catalog Year: 2008-2009


Major Map: Interior Design -
Bachelor of Science in Design (B.S.D.)
College of Design, Tempe Campus Catalog Year: 2008-2009

Graduation Requirements Summary:

| Total Hours <br> $(120$ minimum $)$ | Total Hrs at ASU <br> $(30$ minimum $)$ | Hrs Resident Credit for Academic <br> Recognition ( 56 minimum $)$ | Major GPA <br> $(2.00$ Min. $)$ | Total UD Hrs <br> $(45$ minimum $)$ | Total Comm. College Hrs. <br> $(64$ maximum $)$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |

## General University Requirements: Legend

- General Studies Core Requirements:

| $\circ$ | Literacy and Critical Inquiry (L) (6 credit hours) |
| :--- | :--- |
| 0 | Mathematical Studies (MA) (3 credit hours) |
| $\circ$ | Computer/Statistics/Quantitative applications (CS) ( 3 credit hours) |
| $\circ$ | Humanities, Fine Arts, and Design (HU) (6-9 credit hours) |
| $\circ$ | Social and Behavioral Sciences (SB) (6-9 credit hours) |
| $\circ$ | Natural Science-Quantitative (SQ) ( $4-8$ credit hours) (cumulative SQ/SG credit must equal 8 credit hours) |
| $\circ$ | Natural Science-General (SG) $(0-4$ credit hours) (cumulative SQ/SG credit must equal 8 credit hours) |

- General Studies Awareness Requirements
- Cultural Diversity in the US (C) (3 credit hours) (may be combined with other general studies requirements.)
- Global Awareness (G) (3 credit hours) (may be combined with other general studies requirements.)
- Historical Awareness (H) (3 credit hours) (may be combined with other general studies requirements.)
- First-Year Composition (ENG 101 \& 102 OR ENG 107 \& 108 or 105)


## Additional Notes:

${ }^{1}$ Course offered only in the fall semester
${ }^{2}$ Course offered only in the spring semester
${ }^{3}$ Both PHY 111 and 113 must be taken to secure SQ credit.
${ }^{4}$ Prerequisites required: check ASU Catalog for specified course prerequisites
${ }^{5}$ Suggested electives: INT 412 History of Decorative Arts in Interiors and INT 413 History of Textiles in Interiors.
${ }^{6}$ Summer Internship: conducted between years $3 \& 4$. Do not register for the class (INT 484) until the following fall semester.
${ }^{7}$ Transfer credits: evaluated by the college for applicability to this curriculum and must be equivalent in both content and level.
Submit samples of studio work for evaluation to the college's Academic Advising Office, CDS 115.
Most studio and some lecture courses are sequential, must be taken in, and may be offered only during the semester noted.

MILESTONE: Interior Design - 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 are not dismissed from the College of Design or the University. Students may reapply or transfer to other programs. Academic Advising is available regarding other program options.

## Graduation Requirements Summary:

| Total Hours <br> $(120$ minimum $)$ | Total Hrs at ASU <br> $(30$ minimum $)$ | Hrs Resident Credit for Academic <br> Recognition $(56$ minimum $)$ | Major GPA <br> $(2.00$ Min. $)$ | Total UD Hrs <br> $(45$ minimum $)$ | Total Comm. College Hrs. <br> $(64$ maximum $)$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |

## General University Requirements: Legend

- General Studies Core Requirements:
- Literacy and Critical Inquiry (L) (6 credit hours)
- Mathematical Studies (MA) (3 credit hours)
- Computer/Statistics/Quantitative applications (CS) (3 credit hours)
- Humanities, Fine Arts, and Design (HU) (6-9 credit hours)
- Social and Behavioral Sciences (SB) (6-9 credit hours)
- Natural Science-Quantitative (SQ) ( $4-8$ credit hours) (cumulative SQ/SG credit must equal 8 credit hours)
- Natural Science-General (SG) (0-4 credit hours) (cumulative SQ/SG credit must equal 8 credit hours)
- General Studies Awareness Requirements (may be combined with other general studies requirements)
- Cultural Diversity in the US (C) (3 credit hours)
- Global Awareness (G) (3 credit hours)
- Historical Awareness (H) (3 credit hours)
- First-Year Composition (ENG 101 \& 102 OR ENG 107 \& 108 or 105)


## Additional Notes:

${ }^{1}$ Course offered only in the Fall Semester
${ }^{2}$ Course offered only in the Spring Semester
${ }^{3}$ Transfer credits: evaluated by the college for applicability to this curriculum and must be equivalent in both content and level.
${ }^{4}$ Portfolio review: required for transfer studio work. Submit portfolio to the college's Academic Advising Office, CDS 115
Most studio and some lecture courses are sequential, must be taken in, and may be offered only during the semester noted.
MILESTONE: Landscape Architecture - 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 Landscape Architecture degree (BSLA). Students that do not pass the degree milestone are not dismissed from the College of Design or the University. Students may reapply or transfer to other programs. Academic Advising is available regarding other program options.

Major Map：Urban Planning－
Bachelor of Science in Planning（B．S．P．）
College of Design，Tempe Campus
Catalog Year：2008－2009

|  |  |  | Completed ATP：$\square$ Yes $\square$ No |  | Completed AGEC：$\square$ Yes $\square$ No |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 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： 016 CREDIT HOURS |  |  |  |  |  |
| ASU 101：The ASU 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> －Minimum 2.0 cumulative GPA in all attempts of critical courses． <br> －Minimum 2．50 ASU cumulative GPA |
| ENG 101 and 102：First－Year Composition OR <br> ENG 107 and 108：English for Foreign Students OR <br> ENG 105：Advanced First－Year Composition | 3 | $\square$ |  | Grade of C |  |
| PUP 100：Introduction to Environmental Design（HU，G，H） | 3 | $\square$ |  | Grade of C |  |
| MAT 142：College Mathematics or higher（MA） | 3 | $\square$ |  |  |  |
| Elective： | 3 | $\square$ |  |  |  |
| Elective： | 3 | $\square$ |  |  |  |
| TERM TWO： 1732 CREDIT HOURS |  |  |  |  |  |
| ENG 101 and 102：First－Year Composition OR ENG 107 and 108：English for Foreign Students OR ENG 105：Advanced First－Year Composition | 3 | $\square$ |  | Grade of C | －Minimum 2.0 cumulative GPA in all attempts of critical courses． <br> －Minimum 2．75 ASU cumulative GPA <br> －MILESTONE：Urban Planning（page 2） |
| PUP 190：Sustainable Cities ${ }^{2}$（HU／SB，G） | 3 | $\square$ |  | Grade of C |  |
| Natural Science－Quantitative or General（SQ／SG）： | 4 | $\square$ |  |  |  |
| Social and Behavioral Sciences（SB）： | 3 | $\square$ |  |  |  |
| Elective： | 3 | $\square$ |  |  |  |
| TERM THREE： 3347 CREDIT HOURS |  |  |  |  |  |
| PUP 200：The Planned Environment ${ }^{1}$（HU，H） | 3 | $\square$ |  | Grade of C | －Complete First Year Composition requirement： ENG 101 \＆ 102 OR ENG 107 \＆ 108 or 105 <br> －Minimum 2.0 cumulative GPA in all attempts of critical courses． <br> －Minimum 3．00 ASU cumulative GPA |
| Social and Behavioral Sciences（SB）： | 3 | $\square$ |  |  |  |
| Awareness Area－Cultural Diversity（C）： | 3 | $\square$ |  |  |  |
| Elective： | 3 | $\square$ |  |  |  |
| Elective： | 3 | $\square$ |  |  |  |
| TERM FOUR： 4861 CREDIT HOURS |  |  |  |  |  |
| PUP 301：Introduction to Urban Planning（L） | 3 | 区 |  | Grade of C | －Minimum 2.0 cumulative GPA in all attempts of critical courses． <br> －Minimum 3．00 ASU cumulative GPA |
| Approved Statistics ${ }^{3}$（CS）： | 3 | $\square$ |  | Grade of C |  |
| Natural Science－Quantitative（SQ）： | 4 | $\square$ |  |  |  |
| Elective： | 3 | $\square$ |  |  |  |
| TERM FIVE： 6275 CREDIT HOURS |  |  |  |  |  |
| PUP 361：Introductory Urban Planning Studio ${ }^{1}$ | 4 | 区 |  | Grade of C | －Minimum 3．00 ASU cumulative GPA |
| PUP 424：Planning Methods ${ }^{1}$ | 4 | 区 |  | Grade of C |  |
| PUP 442：Environmental Planning ${ }^{1}$ | 3 | 区 |  | Grade of C |  |
| Elective： | 3 | $\square$ |  | Grade of C |  |
| TERM SIX： 7689 CREDIT HOURS |  |  |  |  |  |
| PUP 363：History of Planning ${ }^{2}$ | 3 | 区 |  | Grade of C | －Minimum 3．00 ASU cumulative GPA |
| PUP 420：Theory of Urban Design ${ }^{2}$（HU） | 3 | 区 |  | Grade of C |  |
| PUP 436：City Structure and Planning ${ }^{\text {2 }}$ | 3 | 囚 |  | Grade of C |  |
| Approved Program Elective ${ }^{4}$ | 3 | 区 |  |  |  |
| Approved Program Elective ${ }^{4}$ | 3 | 区 |  |  |  |
| SUMMER |  |  |  |  |  |
| PUP 484：Internship OR Approved Program Elective ${ }^{4}$ OR PUP 485 International Field Studies（Study Abroad） | 3 | 区 |  |  |  |
| TERM SEVEN： 92109 CREDIT HOURS |  |  |  |  |  |
| PUP 432：Planning \＆Development Control Law ${ }^{1}$ | 3 | 区 |  | Grade of C | －Minimum 3．00 ASU cumulative GPA |
| PUP 433：Zoning，Subdivision Regulations，Building Codes $1^{1}$ | 3 | 区 |  | Grade of C |  |
| PUP 510：Citizen Participation $1^{1}$ | 3 | 区 |  | Grade of C |  |
| Approved Program Elective ${ }^{4}$ | 3 | 区 |  |  |  |
| Elective： | 3 | $\square$ |  |  |  |
| TERM EIGHT： 108120 CREDIT HOURS |  |  |  |  |  |
| PUP 434：Urban Land Economics ${ }^{2}$ | 3 | 区 |  | Grade of C | －Minimum 3．00 ASU cumulative GPA |
| PUP 452：Ethics and Theory in Planning ${ }^{2}$（L） | 3 | 区 |  | Grade of C |  |
| PUP 462：Advanced Urban Planning Studio ${ }^{2}$ | 4 | 区 |  | Grade of C |  |
| Approved Program Elective ${ }^{4}$ | 3 | 区 |  |  |  |

Major Map: Urban Planning Bachelor of Science in Planning (B.S.P.)
College of Design, Tempe Campus Catalog Year: 2008-2009

## Graduation Requirements Summary:

| Total Hours <br> $(120$ minimum $)$ | Total Hrs at ASU <br> $(30$ minimum $)$ | Hrs Resident Credit for Academic <br> Recognition $(56$ minimum $)$ | Major GPA <br> $(2.00$ Min. $)$ | Total UD Hrs <br> $(45$ minimum $)$ | Total Comm. College Hrs. <br> $(64$ maximum $)$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |

## General University Requirements: Legend

- General Studies Core Requirements:
- Literacy and Critical Inquiry (L) (6 credit hours)
- Mathematical Studies (MA) (3 credit hours)
- Computer/Statistics/Quantitative applications (CS) (3 credit hours)
- Humanities, Fine Arts, and Design (HU) (6-9 credit hours)
- Social and Behavioral Sciences (SB) (6-9 credit hours)
- Natural Science-Quantitative (SQ) ( $4-8$ credit hours) (cumulative SQ/SG credit must equal 8 credit hours)
- Natural Science-General (SG) (0-4 credit hours) (cumulative SQ/SG credit must equal 8 credit hours)
- General Studies Awareness Requirements
- Cultural Diversity in the US (C) (3 credit hours) (may be combined with other general studies requirements.)
- Global Awareness (G) (3 credit hours) (may be combined with other general studies requirements.)
- Historical Awareness (H) (3 credit hours) (may be combined with other general studies requirements.)
- First-Year Composition (ENG 101 \& 102 OR ENG 107 \& 108 or ENG 105)


## Additional Notes: <br> ${ }^{1}$ Course offered only in the fall semester <br> ${ }^{2}$ Course offered only in the spring semester <br> ${ }^{3}$ Select from STP 220, STP 226, SWU 321, EDP 454, JUS 302, POS 401, PSY 230, SOC 390, SBS 302, CRJ 303, ABS 350. <br> ${ }^{4}$ Approved Program Elective: Select a minimum of 4 courses ( 12 semester hours) from the approved School of Planning list. <br> Most studio courses and some lecture courses are sequential, must be taken in, and may only be offered the semester noted.

MILESTONE: Urban Planning - 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 Planning degree (BSP). Students that do not pass the degree milestone are not dismissed from the College of Design or the University. Students may reapply or transfer to other programs. Academic Advising is available regarding other program options.

# Major Map: Early Childhood Education - <br> Bachelor of Arts in Education (B.A.E.) 

Mary Lou Fulton College of Education, Tempe Campus
Catalog Year: 2008-2009


Major Map：Early Childhood Education－<br>Bachelor of Arts in Education（B．A．E．）<br>Mary Lou Fulton College of Education，Tempe Campus Catalog Year：2008－2009

| 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 SIX： 7690 CREDIT HOURS |  |  |  |  |  |
| BLE 408：SEI for Linguistically Diverse Learners | 3 | 区 |  | Grade of C | －Minimum 2．50 ASU cumulative GPA |
| ECD 406：Assessment：Birth－Age 8 | 3 | 区 |  | Grade of C |  |
| ECD 476：Integrated Curriculum：Birth－Pre－K | 3 | 区 |  | Grade of C |  |
| ECD 477：Student Teaching：Pre－K or Infant／Toddler | 3 | 区 |  | Grade of Y |  |
| Upper Division Humanities，Fine Arts，and Design（HU）or Social and Behavioral Sciences（SB） | 3 | 区 |  |  |  |
| TERM SEVEN： 91105 CREDIT HOURS |  |  |  |  |  |
| ECD 401：Integrated Curriculum \＆Assessment：Social Studies and Creative Arts | 3 | 区 |  | Grade of C | －Minimum 2．50 ASU cumulative GPA |
| ECD 404：Teaching Reading and Language Arts in Early Childhood（L） | 3 | 区 |  | Grade of C |  |
| ECD 420：Integrated Curriculum \＆Assessment：Science | 3 | 区 |  | Grade of C |  |
| ECD 480：Integrated Curriculum \＆Assessment：Mathematics | 3 | 区 |  | Grade of C |  |
| ECD 496：Field Experience（K－3） | 1 | 区 |  | Grade of Y |  |
| TERM EIGHT： 106120 CREDIT HOURS |  |  |  |  |  |
| ECD 478：Student Teaching：K－3 | 10 | 区 |  | Grade of Y | －Minimum 2．50 ASU cumulative GPA |
| ECD 470：Early Childhood Education Student Teaching Seminar | 1 | 区 |  | Grade of C |  |
| ECD 481：Issues \＆Practices in Early Childhood Education | 1 | 区 |  | Grade of C |  |
| SPE 416：Quality Practices in Collaborative Classrooms | 3 | 区 |  | Grade of C |  |

## Graduation Requirements Summary：

| Total Hours <br> $(120$ minimum $)$ | Total Hrs at ASU <br> $(30$ minimum $)$ | Hrs Resident Credit for Academic <br> Recognition $(56$ minimum $)$ | Major GPA <br> $(2.00$ Min．$)$ | Total UD Hrs <br> $(45$ minimum $)$ | Total Comm．College <br> Hrs．（ 64 maximum $)$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |

## General University Requirements：Legend

－General Studies Core Requirements：
－Literacy and Critical Inquiry（L）（6 credit hours）
－Mathematical Studies（MA）（3 credit hours）
－Computer／Statistics／Quantitative applications（CS）（3 credit hours）
－Humanities，Fine Arts，and Design（HU）（6－9 credit hours）
－Social and Behavioral Sciences（SB）（6－9 credit hours）
－Natural Science－Quantitative（SQ）（4－8 credit hours）（cumulative SQ／SG credit must equal 8 credit hours）
－Natural Science－General（SG）（0－4 credit hours）（cumulative SQ／SG credit must equal 8 credit hours）
－General Studies Awareness Requirements
－Cultural Diversity in the US（C）（3 credit hours）（may be combined with other general studies requirements．）
－Global Awareness（G）（3 credit hours）（may be combined with other general studies requirements．）
－Historical Awareness（H）（3 credit hours）（may be combined with other general studies requirements．）
－First－Year Composition（ENG 101 \＆ 102 OR ENG 107 \＆ 108 or ENG 105）

## Additional Notes：

Minimum cumulative 3．0 GPA required in the following courses：BLE 220，ECD 211，ECD 220，ECT 312，MCE 230，and SPE 222
The requirements outlined on this major map meet ASU＇s graduation requirements for this catalog year and major；however，certification requirements are determined by the Arizona Department of Education（ADE）and are subject to change．Occasionally，additional courses，which are not outlined on this major map，may be required to obtain certification and／or an Institutional Recommendation．It is highly recommended that you speak with your COE advisor regarding any certification updates or changes．

Major Map: Elementary Education -<br>Bachelor of Arts in Education (B.A.E.)<br>Mary Lou Fulton College of Education, Tempe Campus<br>Catalog Year: 2008-2009



Major Map: Elementary Education Bachelor of Arts in Education (B.A.E.)<br>Mary Lou Fulton College of Education, Tempe Campus Catalog Year: 2008-2009

| Course Subject and Title <br> (courses in bold/shading are critical) | Hrs. | Upper <br> Division | Transfer <br> Course/Grade | Minimum Grade if <br> Required | Additional Critical Tracking Notes |
| :--- | :---: | :---: | :---: | :--- | :--- | :--- |

## Graduation Requirements Summary:

| Total Hours <br> $(120$ minimum $)$ | Total Hrs at ASU <br> $(30$ minimum $)$ | Hrs Resident Credit for Academic <br> Recognition $(56$ minimum $)$ | Major GPA <br> $(2.00$ Min. $)$ | Total UD Hrs <br> $(45$ minimum $)$ | Total Comm. College <br> Hrs. $(64$ maximum $)$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |

## General University Requirements: Legend

- General Studies Core Requirements:
- Literacy and Critical Inquiry (L) (6 credit hours)
- Mathematical Studies (MA) (3 credit hours)
- Computer/Statistics/Quantitative applications (CS) (3 credit hours)
- Humanities, Fine Arts, and Design (HU) (6-9 credit hours)
- Social and Behavioral Sciences (SB) (6-9 credit hours)
- Natural Science-Quantitative (SQ) (4-8 credit hours) (cumulative SQ/SG credit must equal 8 credit hours)
- Natural Science-General (SG) (0-4 credit hours) (cumulative SQ/SG credit must equal 8 credit hours)
- General Studies Awareness Requirements
- Cultural Diversity in the US (C) (3 credit hours) (may be combined with other general studies requirements.)
- Global Awareness (G) (3 credit hours) (may be combined with other general studies requirements.)
- Historical Awareness (H) (3 credit hours) (may be combined with other general studies requirements.)
- First-Year Composition (ENG 101 \& 102 OR ENG 107 \& 108 or ENG 105)


## Additional Notes:

Minimum cumulative 3.0 GPA required in the following courses: EDP 303 or EDP 313 or CDE 232, BLE 220, MCE 230, MTE 180, MTE 181, SPE 222.
The requirements outlined on this major map meet ASU's graduation requirements for this catalog year and major; however, certification requirements are determined by the Arizona Department of Education (ADE) and are subject to change. Occasionally, additional courses, which are not outlined on this major map, may be required to obtain certification and/or an Institutional Recommendation. It is highly recommended that you speak with your COE advisor regarding any certification updates or changes.

Major Map : Elementary Education (Indigenous Teacher Preparation Program)

- Bachelor of Arts in Education (B.A.E.)

Mary Lou Fulton College of Education, Tempe Campus
Catalog Year: 2008-2009


Page 1 of 2

| 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： 91105 CREDIT HOURS |  |  |  |  |  |
| BLE 408：SEI for Linguistically Diverse Learners | 3 | 区 |  | Grade of C | －Minimum 2．50 ASU cumulative GPA |
| IED 420：Science Methods，Management，Assessment for Indigenous Classrooms | 3 | 区 |  | Grade of C |  |
| IED 430：Issues Language \＆Literacy Indigenous Peoples（HU／SB，C） | 3 | 区 |  | Grade of C |  |
| IED 480：Math Methods，Management，Assessment for Indigenous Classrooms | 3 | 区 |  | Grade of C |  |
| IED 496：Field Experience：Classroom Management and Organization | 1 | 区 |  | Grade of Y |  |
| Elective： | 1 | $\square$ |  |  |  |
| TERM EIGHT： 106120 CREDIT HOURS |  |  |  |  |  |
| BLE 478：Student Teaching in The Elementary School | 12 | 区 |  | Grade of Y | －Minimum 2．50 ASU cumulative GPA |

## Graduation Requirements Summary：

| Total Hours <br> $(120$ minimum $)$ | Total Hrs at ASU <br> $(30$ minimum $)$ | Hrs Resident Credit for Academic <br> Recognition $(56$ minimum $)$ | Major GPA <br> $(2.00$ Min．$)$ | Total UD Hrs <br> $(45$ minimum $)$ | Total Comm．College <br> Hrs．（ 64 maximum $)$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |

## General University Requirements：Legend

－General Studies Core Requirements：
－Literacy and Critical Inquiry（L）（6 credit hours）
－Mathematical Studies（MA）（3 credit hours）
－Computer／Statistics／Quantitative applications（CS）（3 credit hours）
－Humanities，Fine Arts，and Design（HU）（6－9 credit hours）
－Social and Behavioral Sciences（SB）（6－9 credit hours）
－Natural Science－Quantitative（SQ）（ $4-8$ credit hours）（cumulative SQ／SG credit must equal 8 credit hours）
－Natural Science－General（SG）（0－4 credit hours）（cumulative SQ／SG credit must equal 8 credit hours）
－General Studies Awareness Requirements
－Cultural Diversity in the US（C）（3 credit hours）（may be combined with other general studies requirements．）
－Global Awareness（G）（3 credit hours）（may be combined with other general studies requirements．）
－Historical Awareness（H）（3 credit hours）（may be combined with other general studies requirements．）
－First－Year Composition（ENG 101 \＆ 102 OR ENG 107 \＆ 108 or ENG 105）

## Additional Notes：

Minimum 3.00 cumulative GPA required in BLE 220，MCE 230，SPE 222，MTE 180，MTE 181，and RDG 334.
The requirements outlined on this major map meet ASU＇s graduation requirements for this catalog year and major；however，certification requirements are determined by the Arizona Department of Education（ADE）and are subject to change．Occasionally，additional courses，which are not outlined on this major map，may be required to obtain certification and／or an Institutional Recommendation．It is highly recommended that you speak with your COE advisor regarding any certification updates or changes．

Major Map : Elementary Education (Multilingual/Multicultural) -
Bachelor of Arts in Education (B.A.E.)
Mary Lou Fulton College of Education, Tempe Campus
Catalog Year: 2008-2009


| $\begin{aligned} & \begin{array}{l} \text { Course Subject and Title } \\ \text { (courses in bold/shading are critical) } \end{array} \end{aligned}$ | Hrs． | Upper Division | Transfer Course／Grade | Minimum Grade if Required | Additional Critical Tracking Notes |
| :---: | :---: | :---: | :---: | :---: | :---: |
| TERM SEVEN： 91105 CREDIT HOURS |  |  |  |  |  |
| BLE 335：Language Diversity in Classrooms | 3 | 区 |  | Grade of C | －Minimum 2．50 ASU cumulative GPA |
| BLE 414：Reading Methods，Management，and Assessment in Elementary BLE／ESL settings | 3 | 区 |  | Grade of C |  |
| BLE 433：Language Arts Methods，Management，and Assessment in Elementary BLE／ESL settings | 3 | 区 |  | Grade of C |  |
| BLE 481：Reading Practicum | 3 | 区 |  | Grade of C |  |
| BLE 496：Field Experience | 1 | 区 |  | Grade of Y |  |
| Elective： | 0－2 | $\square$ |  |  |  |
| TERM EIGHT： $106 \mathbf{1 2 0}$ CREDIT HOURS |  |  |  |  |  |
| BLE 478：Student Teaching in The Elementary School | 12 | 区 |  | Grade of Y | －Minimum 2．50 ASU cumulative GPA |

Graduation Requirements Summary：

| Total Hours <br> $(120$ minimum $)$ | Total Hrs at ASU <br> $(30$ minimum $)$ | Hrs Resident Credit for Academic <br> Recognition $(56$ minimum $)$ | Major GPA <br> $(2.00 \mathrm{Min})$. | Total UD Hrs <br> $(45$ minimum $)$ | Total Comm．College <br> Hrs．（ 64 maximum） |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |

## General University Requirements：Legend

－General Studies Core Requirements：
－Literacy and Critical Inquiry（L）（6 credit hours）
－Mathematical Studies（MA）（3 credit hours）
Computer／Statistics／Quantitative applications（CS）（3 credit hours）
Humanities，Fine Arts，and Design（HU）（6－9 credit hours）
Social and Behavioral Sciences（SB）（6－9 credit hours）
Natural Science－Quantitative（SQ）（4－8 credit hours）（cumulative SQ／SG credit must equal 8 credit hours）
Natural Science－General（SG）（0－4 credit hours）（cumulative SQ／SG credit must equal 8 credit hours）
－General Studies Awareness Requirements
－Cultural Diversity in the US（C）（3 credit hours）（may be combined with other general studies requirements．）
－Global Awareness（G）（3 credit hours）（may be combined with other general studies requirements．）
－Historical Awareness（H）（3 credit hours）（may be combined with other general studies requirements．）
－First－Year Composition（ENG 101 \＆ 102 OR ENG 107 \＆ 108 or ENG 105）

## Additional Notes：

Minimum 3.0 cumulative GPA required in the following courses：MTE 180，MTE 181，RDG 334，and SPE 222

The requirements outlined on this major map meet ASU＇s graduation requirements for this catalog year and major；however，certification requirements are determined by the Arizona Department of Education（ADE）and are subject to change．Occasionally，additional courses，which are not outlined on this major map，may be required to obtain certification and／or an Institutional Recommendation．It is highly recommended that you speak with your COE advisor regarding any certification updates or changes．

1）BLE／ESL Education Foreign Language Proficiency Options
－Bilingual Proficiency for Bilingual Endorsement
－Students must pass Arizona Classroom Teacher Spanish Proficiency Exam or submit proof of Native American language proficiency．
－Foreign Language for ESL Endorsement－ 6 hours
－Need 6 hours of foreign language－can be met through CLEP．

Major Map：Secondary Education（Biological Sciences）－
Bachelor of Arts in Education（B．A．E．）
Mary Lou Fulton College of Education，Tempe Campus
Catalog Year：2008－2009

|  |  |  | Completed ATP：$\square$ Yes $\quad \square$ No |  | Completed AGEC：$\square$ Yes $\square$ No |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Course Subject and Title （courses in bold／shading are critical） | Hrs． | $\begin{aligned} & \hline \text { Upper } \\ & \text { Division } \end{aligned}$ | Transfer Course／Grade | Minimum Grade if Required | Additional Critical Tracking Notes |
| TERM ONE： 015 CREDIT HOURS |  |  |  |  |  |
| ASU 101：The ASU 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> －Minimum 2．00 ASU cumulative GPA |
| ENG 101 and 102：First－Year Composition OR ENG 107 and 108：English for Foreign Students OR ENG 105：Advanced First－Year Composition | 3 | $\square$ |  | Grade of C |  |
| MAT 170：Precalculus or higher（MA） | 3 | $\square$ |  | Grade of C |  |
| BIO 187：General Biology I（SG） | 4 | $\square$ |  | Grade of C |  |
| CHM 113：General Chemistry I（SQ） | 4 | $\square$ |  | Grade of C |  |
| TERM TWO： 1630 CREDIT HOURS |  |  |  |  |  |
| ENG 101 and 102：First－Year Composition OR ENG 107 and 108：English for Foreign Students OR ENG 105：Advanced First－Year Composition | 3 | $\square$ |  | Grade of C | －Minimum 2.30 cumulative GPA in BIO specialization critical courses <br> －MILESTONE：one professional letter of recommendation <br> －MILESTONE：first draft resume <br> －MILESTONE：Freedom From Conviction of Crime Statement document <br> －Minimum 2．30 ASU cumulative GPA |
| BIO 188：General Biology II（SQ） | 4 | $\square$ |  | Grade of C |  |
| SPE 222：Orientation Education of the Exceptional Child（SB，C） | 3 | $\square$ |  | Grade of B |  |
| CHM 116：General Chemistry II（SQ） | 4 | $\square$ |  | Grade of C |  |
| Computer／Statistics／Quantitative（CS）： | 3 | $\square$ |  |  |  |
| TERM THREE： 3145 CREDIT HOURS |  |  |  |  |  |
| BIO 360：Animal Physiology OR PBL 308：Plant Biology | 3－4 | 区 |  | Grade of C | －Complete First Year Composition requirement： ENG 101 \＆ 102 OR ENG 107 \＆ 108 or 105 <br> －Complete BIO 187，BIO 188 and two（2） additional required BIO courses． <br> －Minimum 2.50 cumulative GPA in BIO specialization critical courses <br> －Minimum 2．50 ASU cumulative GPA <br> －MILESTONE：Submit intent to progress form （online） |
| BIO 320：Fundamentals of Ecology | 3 | 区 |  | Grade of C |  |
| Humanities，Fine Arts，and Design（HU）： <br> （HST 109 recommended to fulfill US Constitution for certification） | 3 | $\square$ |  | Grade of C |  |
| Humanities，Fine Arts，and Design（HU）with Awareness Area－ Global（G）： | 3 | $\square$ |  |  |  |
| Literacy and Critical Inquiry（L）： | 3 | $\square$ |  |  |  |
| TERM FOUR： $46 \mathbf{6 0}$ CREDIT HOURS |  |  |  |  |  |
| History of Biology Course <br> BIO 316：History of Biology：Conflicts and Controversies（H） <br> HPS 330：History of Biology：Conflicts and Controversies（H） <br> HPS 322：History of Science（HU，H） | 3 | 区 |  | Grade of C | －Complete all six（6）BIO specialization critical courses（BIO 187，BIO 188，and 4 additional BIO courses） <br> －Minimum 2.50 cumulative GPA in BIO specialization critical courses <br> －Must complete BLE 220 with a＂ C ＂or better <br> －The following courses may substitute for the PHY 101 requirement if all are completed：PHY 111，112，113， 114 <br> －Minimum 2．50 ASU cumulative GPA <br> －MILESTONE：Attend ITC orientation |
| BLE 220：Foundations of SEI | 3 | 区 |  | Grade of C |  |
| BIO 345：Organic Evolution | 3 | 区 |  | Grade of C |  |
| PHY 101：Introduction to Physics | 4 | $\square$ |  | Grade of C |  |
| TERM FIVE： 6175 CREDIT HOURS |  |  |  |  |  |
| MIC 205／206：Microbiology and Lab OR <br> MIC 220／206：Biology of Microorganisms and Lab | 4 | $\square$ |  | Grade of C | －Must possess DPS fingerprint clearance card to participate in field experience <br> －Minimum 2．50 ASU cumulative GPA ． |
| SPF 301：Culture Schooling（L） | 3 | 区 |  | Grade of C |  |
| BIO 340：General Genetics | 3 | 区 |  | Grade of C |  |
| SPF 401：Theory and Practice in Education | 1 | 区 |  | Grade of C |  |
| EDT 300：Computers in Education | 1 | 区 |  | Grade of C |  |
| EDP 311：Educational Psychology（SB） | 3 | 区 |  | Grade of C |  |
| SED 496：Field Experience | 1 | 区 |  | Grade of Y |  |
| TERM SIX： $76 \mathbf{9 0}$ CREDIT HOURS |  |  |  |  |  |
| BIO Elective（Course list：1XX－4XX BIO or PLB courses excepts the following：BIO 100，BIO 120，BIO 201，BIO 202，BIO 241，BIO 300， BIO 319，PLB 108，or PLB 320） | 3 | $\square$ |  | Grade of C | －Minimum 2．50 ASU cumulative GPA |
| GLG 102：Introduction to Geology II（H）OR GLG 300：Geology of Arizona | 3 | $\square$ |  | Grade of C |  |
| RDG 301：Literacy and Instruction in the Content Area | 3 | 区 |  | Grade of C |  |
| EDP 303：Human Development（L or SB）OR <br> EDP 313：Childhood \＆Adolescent Development（SB） | 3 | 区 |  | Grade of C |  |
| BIO 480：Methods of Teaching Biology | 3 | 区 |  | Grade of C |  |
| SED 496：Field Experience | 1 | 区 |  | Grade of Y |  |

Major Map：Secondary Education（Biological Sciences）－
Bachelor of Arts in Education（B．A．E．）
Mary Lou Fulton College of Education，Tempe Campus
Catalog Year：2008－2009

| 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： 91105 CREDIT HOURS |  |  |  |  |  |
| BIO 370：Vertebrate Zoology OR <br> BIO 385：Comparative Invertebrate Zoology OR <br> PLB 300：Comparative Plant Diversity OR <br> PLB 310：The Flora of Arizona OR | 4 | 区 |  | Grade of C | －Minimum 2．50 ASU cumulative GPA |
| BIO Elective | 3 | 区 |  | Grade of C |  |
| SPE 417：Inclusion Practices at the Secondary Level | 3 | 区 |  | Grade of C |  |
| BLE 407：SEI for Secondary | 3 | 区 |  | Grade of C |  |
| BIO 482：Advanced Methods for Teaching Biology | 3 | 区 |  | Grade of C |  |
| SED 496：Field Experience | 1 | 区 |  | Grade of Y |  |
| TERM EIGHT： $106 \mathbf{1 2 0}$ CREDIT HOURS |  |  |  |  |  |
| SED 478：Student Teaching | 12 | 区 |  | Grade of Y | －Minimum 2．50 ASU cumulative GPA |

## Graduation Requirements Summary：

| Total Hours <br> $(120$ minimum $)$ | Total Hrs at ASU <br> $(30$ minimum $)$ | Hrs Resident Credit for Academic <br> Recognition（ 56 minimum $)$ | Major GPA <br> $(2.00$ Min．$)$ | Total UD Hrs <br> $(45$ minimum $)$ | Total Comm．College <br> Hrs．（ 64 maximum $)$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |

## General University Requirements：Legend

－General Studies Core Requirements：
－Literacy and Critical Inquiry（L）（6 credit hours）
－Mathematical Studies（MA）（3 credit hours）
－Computer／Statistics／Quantitative applications（CS）（3 credit hours）
－Humanities，Fine Arts，and Design（HU）（6－9 credit hours）
－Social and Behavioral Sciences（SB）（6－9 credit hours）
－Natural Science－Quantitative（SQ）（4－8 credit hours）（cumulative SQ／SG credit must equal 8 credit hours）
－Natural Science－General（SG）（0－4 credit hours）（cumulative SQ／SG credit must equal 8 credit hours）
－General Studies Awareness Requirements
－Cultural Diversity in the US（C）（3 credit hours）（may be combined with other general studies requirements．）
－Global Awareness（G）（3 credit hours）（may be combined with other general studies requirements．）
－Historical Awareness（H）（3 credit hours）（may be combined with other general studies requirements．）
－First－Year Composition（ENG 101 \＆ 102 OR ENG 107 \＆ 108 or ENG 105）

## Additional Notes：

Please check course availability in your specialization area as some courses are not offered every semester．
The requirements outlined on this major map meet ASU＇s graduation requirements for this catalog year and major；however，certification requirements are determined by the Arizona Department of Education（ADE）and are subject to change．Occasionally，additional courses，which are not outlined on this major map，may be required to obtain certification and／or an Institutional Recommendation．It is highly recommended that you speak with your COE advisor regarding any certification updates or changes．

Major Map：Secondary Education（Business）－
Bachelor of Arts in Education（B．A．E．）
Mary Lou Fulton College of Education，Tempe Campus
Catalog Year：2008－2009

|  |  |  | Completed ATP：$\square$ Yes $\quad \square$ No |  | Completed AGEC：$\square$ Yes $\square$ No |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 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： 015 CREDIT HOURS |  |  |  |  |  |
| ASU 101：The ASU 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> －Minimum 2．00 ASU cumulative GPA <br> －Recommend HST 109 for HU，H and covers US constitution for certification requirement． |
| ENG 101 and 102：First－Year Composition OR ENG 107 and 108：English for Foreign Students OR ENG 105：Advanced First－Year Composition | 3 | $\square$ |  | Grade of C |  |
| MAT 210：Brief Calculus（MA） | 3 | $\square$ |  | Grade of C |  |
| ECN 211：Macroeconomic Principles（SB）OR ECN 212：Microeconomic Principles（SB） | 3 | $\square$ |  | Grade of C |  |
| Natural Science－Quantitative or General（SQ／SG）： | 4 | $\square$ |  | Grade of C |  |
| Humanities／Fine Arts（HU）with Awareness Area－Historical（H）： | 3 | $\square$ |  |  |  |
| TERM TWO： 1630 CREDIT HOURS |  |  |  |  |  |
| ENG 101 and 102：First－Year Composition OR ENG 107 and 108：English for Foreign Students OR ENG 105：Advanced First－Year Composition | 3 | $\square$ |  | Grade of C | －Minimum 2.30 cumulative GPA in business specialization critical courses <br> －Minimum 2．30 ASU cumulative GPA <br> －MAT 211 is a pre－requisite to ECN 221 （term 3） |
| CIS 105：Computer Applications and Information Technology（CS） | 3 | $\square$ |  | Grade of C |  |
| ECN 211：Macroeconomic Principles（SB）OR ECN 212：Microeconomic Principles（SB） | 3 | $\square$ |  | Grade of C |  |
| SPE 222：Orientation Education of the Exceptional Child（SB，C） | 3 | 区 |  | Grade of B |  |
| MAT 211：Mathematics for Business Analysis（MA） | 3 | $\square$ |  |  |  |
| TERM THREE： 3145 CREDIT HOURS |  |  |  |  |  |
| ACC 231：Uses of Accounting Info I | 3 | $\square$ |  | Grade of C | －Complete First Year Composition requirement： ENG 101 \＆ 102 OR ENG 107 \＆ 108 or 105 <br> －Minimum 2.30 cumulative GPA in business specialization critical courses <br> －Minimum 2．50 ASU cumulative GPA <br> －MILESTONE：Submit intent to progress form （online） |
| ECN 221：Statistical Analysis（CS） | 3 | $\square$ |  | Grade of C |  |
| Natural Science－Qualitative（SQ）： | 4 | $\square$ |  | Grade of C |  |
| Humanities／Fine Arts（HU）with Awareness Areas－Global（G）： | 3 | $\square$ |  |  |  |
| Typing course： | 1 | $\square$ |  |  |  |
| TERM FOUR： 4660 CREDIT HOURS |  |  |  |  |  |
| ACC 241：Uses of Accounting Info II | 3 | $\square$ |  | Grade of C | －Complete $\mathrm{SQ} / \mathrm{SG}$ or L with a＂C＂or better． <br> －Minimum 2.50 cumulative GPA in business specialization critical courses <br> －Must complete BLE 220 with a grade of＂C＂or better <br> －Minimum 2．50 ASU cumulative GPA <br> －MILESTONE：Attend ITC orientation |
| FIN 300：Fundamentals of Finance OR FIN 380：Personal Financial Management | 3 | 区 |  | Grade of C |  |
| LES 305：Legal，Ethical，and Regulatory Issues in Business | 3 | 区 |  | Grade of C |  |
| ENG 301：Writing for Professions（L） | 3 | 区 |  | Grade of C |  |
| BLE 220：Foundations of SEI | 3 | $\square$ |  | Grade of C |  |
| TERM FIVE： 6175 CREDIT HOURS |  |  |  |  |  |
| SCM 300：Global Supply Operations | 3 | 区 |  | Grade of C | －Must possess DPS fingerprint clearance card to participate in field experience． <br> －Minimum 2．50 ASU cumulative GPA |
| EDT 300：Computers in Education | 1 | 区 |  | Grade of C |  |
| SPF 301：Culture and Schooling（L） | 3 | 区 |  | Grade of C |  |
| SPF 401：Theory and Practice in Education | 1 | 区 |  | Grade of C |  |
| EDP 311：Educational Psychology for Teachers（SB） | 3 | 区 |  | Grade of C |  |
| SED 403：Middle and Secondary Principles，Curriculum and Methods | 3 | 区 |  | Grade of C |  |
| SED 496：Field Experience | 1 | 区 |  | Grade of Y |  |
| TERM SIX： $76 \mathbf{9 0}$ CREDIT HOURS |  |  |  |  |  |
| MGT 300：Organizational Management Leadership | 3 | 区 |  | Grade of C | －Minimum 2．50 ASU cumulative GPA |
| MKT 300：Marketing and Business Performance | 3 | 区 |  | Grade of C |  |
| RDG 301：Literacy and Instruction in the Content Area | 3 | 区 |  | Grade of C |  |
| EDP 303：Human Development（L or SB）OR EDP 313：Childhood and Adolescent Development（SB） | 3 | 囚 |  | Grade of C |  |
| BUE 480：Methods of Teaching Business | 3 | 区 |  | Grade of C |  |
| SED 496：Field Experience | 1 | 区 |  | Grade of Y |  |
| TERM SEVEN： $91 \mathbf{1 0 5}$ CREDIT HOURS |  |  |  |  |  |
| MKT 391：Essentials of Selling OR MKT 420：Retail Management | 3 | 区 |  | Grade of C | －Minimum 2．50 ASU cumulative GPA |
| MGT 440：Small Business and Entrepreneurship | 3 | 区 |  | Grade of C |  |
| SPE 417：Inclusion Practices at the Secondary Level | 3 | 囚 |  | Grade of C |  |
| BLE 407：SEI for Secondary Students | 3 | 区 |  | Grade of C |  |
| BUE 481：Technology in Business and Vocational Education | 3 | 区 |  | Grade of C |  |
| SED 496：Field Experience | 1 | 区 |  | Grade of Y |  |
| TERM EIGHT： $106 \mathbf{1 2 0}$ CREDIT HOURS |  |  |  |  |  |
| SED 478：Student Teaching in Secondary Schools | 12 | 区 |  | Grade of Y | －Minimum 2．50 ASU cumulative GPA |

Major Map: Secondary Education (Business) -
Bachelor of Arts in Education (B.A.E.)
Mary Lou Fulton College of Education, Tempe Campus
Catalog Year: 2008-2009

## Graduation Requirements Summary:

| Total Hours <br> $(120$ minimum $)$ | Total Hrs at ASU <br> $(30$ minimum $)$ | Hrs Resident Credit for Academic <br> Recognition ( 56 minimum $)$ | Major GPA <br> $(2.00$ Min. $)$ | Total UD Hrs <br> $(45$ minimum $)$ | Total Comm. College <br> Hrs. ( 64 maximum $)$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |

## General University Requirements: Legend

- General Studies Core Requirements:
- Literacy and Critical Inquiry (L) (6 credit hours)
- Mathematical Studies (MA) (3 credit hours)
- Computer/Statistics/Quantitative applications (CS) (3 credit hours)
- Humanities, Fine Arts, and Design (HU) (6-9 credit hours)
- Social and Behavioral Sciences (SB) (6-9 credit hours)
- Natural Science-Quantitative (SQ) (4-8 credit hours) (cumulative SQ/SG credit must equal 8 credit hours)
- Natural Science-General (SG) (0-4 credit hours) (cumulative SQ/SG credit must equal 8 credit hours)
- General Studies Awareness Requirements
- Cultural Diversity in the US (C) (3 credit hours) (may be combined with other general studies requirements.)
- Global Awareness (G) (3 credit hours) (may be combined with other general studies requirements.)
- Historical Awareness (H) (3 credit hours) (may be combined with other general studies requirements.)
- First-Year Composition (ENG 101 \& 102 OR ENG 107 \& 108 or ENG 105)


## Additional Notes:

Please check course availability in your specialization area as some courses are not offered every semester.
The requirements outlined on this major map meet ASU's graduation requirements for this catalog year and major; however, certification requirements are determined by the Arizona Department of Education (ADE) and are subject to change. Occasionally, additional courses, which are not outlined on this major map, may be required to obtain certification and/or an Institutional Recommendation. It is highly recommended that you speak with your COE advisor regarding any certification updates or changes.

## Graduation Requirements Summary:

| Total Hours <br> $(120$ minimum $)$ | Total Hrs at ASU <br> $(30$ minimum $)$ | Hrs Resident Credit for Academic <br> Recognition $(56$ minimum $)$ | Major GPA <br> $(2.00 \mathrm{Min})$. | Total UD Hrs <br> $(45$ minimum $)$ | Total Comm. College <br> Hrs. ( 64 maximum $)$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |

## General University Requirements: Legend

- General Studies Core Requirements:
- Literacy and Critical Inquiry (L) (6 credit hours)
- Mathematical Studies (MA) (3 credit hours)
- Computer/Statistics/Quantitative applications (CS) (3 credit hours)
- Humanities, Fine Arts, and Design (HU) (6-9 credit hours)
- Social and Behavioral Sciences (SB) (6-9 credit hours)
- Natural Science-Quantitative (SQ) ( $4-8$ credit hours) (cumulative SQ/SG credit must equal 8 credit hours)
- Natural Science-General (SG) (0-4 credit hours) (cumulative SQ/SG credit must equal 8 credit hours)
- General Studies Awareness Requirements
- Cultural Diversity in the US (C) (3 credit hours) (may be combined with other general studies requirements.)
- Global Awareness (G) (3 credit hours) (may be combined with other general studies requirements.)
- Historical Awareness (H) (3 credit hours) (may be combined with other general studies requirements.)
- First-Year Composition (ENG 101 \& 102 OR ENG 107 \& 108 or ENG 105)


## Additional Notes:

Please check course availability in your specialization area as some courses are not offered every semester.

The requirements outlined on this major map meet ASU's graduation requirements for this catalog year and major; however, certification requirements are determined by the Arizona Department of Education (ADE) and are subject to change. Occasionally, additional courses, which are not outlined on this major map, may be required to obtain certification and/or an Institutional Recommendation. It is highly recommended that you speak with your COE advisor regarding any certification updates or changes.
Major Map : Secondary Education (Earth and Space
Science) - Bachelor of Arts in Education (B.A.E.)
Mary Lou Fulton College of Education, Tempe Campus Catalog Year: 2008-2009


## Graduation Requirements Summary:

| Total Hours <br> $(120$ minimum $)$ | Total Hrs at ASU <br> $(30$ minimum $)$ | Hrs Resident Credit for Academic <br> Recognition ( 56 minimum $)$ | Major GPA <br> $(2.00$ Min. $)$ | Total UD Hrs <br> $(45$ minimum $)$ | Total Comm. College <br> Hrs. ( 64 maximum $)$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |

## General University Requirements: Legend

- General Studies Core Requirements:
- Literacy and Critical Inquiry (L) (6 credit hours)
- Mathematical Studies (MA) (3 credit hours)
- Computer/Statistics/Quantitative applications (CS) (3 credit hours)
- Humanities, Fine Arts, and Design (HU) (6-9 credit hours)
- Social and Behavioral Sciences (SB) (6-9 credit hours)
- Natural Science-Quantitative (SQ) ( $4-8$ credit hours) (cumulative SQ/SG credit must equal 8 credit hours)
- Natural Science-General (SG) (0-4 credit hours) (cumulative SQ/SG credit must equal 8 credit hours)
- General Studies Awareness Requirements
- Cultural Diversity in the US (C) (3 credit hours) (may be combined with other general studies requirements.)
- Global Awareness (G) (3 credit hours) (may be combined with other general studies requirements.)
- Historical Awareness (H) (3 credit hours) (may be combined with other general studies requirements.)
- First-Year Composition (ENG 101 \& 102 OR ENG 107 \& 108 or ENG 105)


## Additional Notes:

Please check course availability in your specialization area, as some courses are not offered every semester.
The requirements outlined on this major map meet ASU's graduation requirements for this catalog year and major; however, certification requirements are determined by the Arizona Department of Education (ADE) and are subject to change. Occasionally, additional courses, which are not outlined on this major map, may be required to obtain certification and/or an Institutional Recommendation. It is highly recommended that you speak with your COE advisor regarding any certification updates or changes.

Mary Lou Fulton College of Education，Tempe Campus Catalog Year：2008－2009

| Course Subject and Title （courses in bold／shading are critical） | Hrs． | $\begin{aligned} & \hline \text { Upper } \\ & \text { Division } \end{aligned}$ | Transfer Course／Grade | $\begin{aligned} & \text { Minimum Grade if } \\ & \text { Required } \end{aligned}$ | Additional Critical Tracking Notes |
| :---: | :---: | :---: | :---: | :---: | :---: |
| TERM SEVEN： 91105 CREDIT HOURS |  |  |  |  |  |
| ECN 475：Capstone in Economics OR ECN 493：Honors Thesis（L） | 3 | 区 |  | Grade of C | －Minimum 2．50 ASU cumulative GPA |
| Elective： | 1 | 区 |  | Grade of C |  |
| BLE 407：SEI for Secondary Students | 3 | 区 |  | Grade of C |  |
| SPE 417：Inclusion Practices at the Secondary Level | 3 | 区 |  | Grade of C |  |
| Select second methods course with advisor | 3 | 区 |  | Grade of C |  |
| SED 496：Field Experience | 1 | 区 |  | Grade of Y |  |
| TERM EIGHT： 106120 CREDIT HOURS |  |  |  |  |  |
| SED 478：Student Teaching | 12 | 区 |  | Grade of Y | －Minimum 2．50 ASU cumulative GPA |

## Graduation Requirements Summary：

| Total Hours <br> $(120$ minimum $)$ | Total Hrs at ASU <br> $(30$ minimum $)$ | Hrs Resident Credit for Academic <br> Recognition $(56$ minimum $)$ | Major GPA <br> $(2.00$ Min．$)$ | Total UD Hrs <br> $(45$ minimum $)$ | Total Comm．College <br> Hrs．（ 64 maximum） |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |

## General University Requirements：Legend

－General Studies Core Requirements：

| $\circ$ | Literacy and Critical Inquiry（L）（6 credit hours） |
| :--- | :--- |
| $\circ$ | Mathematical Studies（MA）（3 credit hours） |
| $\circ$ | Computer／Statistics／Quantitative applications（CS）（ 3 credit hours） |
| $\circ$ | Humanities，Fine Arts，and Design（HU）（6－9 credit hours） |
| $\circ$ | Social and Behavioral Sciences（SB）（6－9 credit hours） |
| $\circ$ | Natural Science－Quantitative（SQ）（4－8 credit hours）（cumulative SQ／SG credit must equal 8 credit hours） |
| $\circ$ | Natural Science－General（SG）（0－4 credit hours）（cumulative SQ／SG credit must equal 8 credit hours） |

－General Studies Awareness Requirements
－Cultural Diversity in the US（C）（3 credit hours）（may be combined with other general studies requirements．）
－Global Awareness（G）（3 credit hours）（may be combined with other general studies requirements．）
－Historical Awareness（H）（3 credit hours）（may be combined with other general studies requirements．）
－First－Year Composition（ENG 101 \＆ 102 OR ENG 107 \＆ 108 or ENG 105）

## Additional Notes：

Please check course availability in your specialization area，as some courses are not offered every semester．
The requirements outlined on this major map meet ASU＇s graduation requirements for this catalog year and major；however，certification requirements are determined by the Arizona Department of Education（ADE）and are subject to change．Occasionally，additional courses，which are not outlined on this major map，may be required to obtain certification and／or an Institutional Recommendation．It is highly recommended that you speak with your COE advisor regarding any certification updates or changes．

Major Map：Secondary Education（English）－
Bachelor of Arts in Education（B．A．E．）
Mary Lou Fulton College of Education，Tempe Campus
Catalog Year：2008－2009

|  |  |  | Completed ATP：$\square$ Yes $\quad \square$ No |  | Completed AGEC：$\square$ Yes $\square$ No |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 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： 015 CREDIT HOURS |  |  |  |  |  |
| ASU 101：The ASU 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> －Minimum 2．00 ASU cumulative GPA |
| ENG 101 and 102：First－Year Composition OR ENG 107 and 108：English for Foreign Students OR ENG 105：Advanced First－Year Composition | 3 | $\square$ |  | Grade of C |  |
| MAT 142：College Mathematics（MA）or higher | 3 | $\square$ |  | Grade of C |  |
| Natural Science－Quantitative or General（SQ／SG）： | 4 | $\square$ |  |  |  |
| Awareness Area－Global（G）： | 3 | $\square$ |  |  |  |
| Elective： | 3 | $\square$ |  |  |  |
| TERM TWO： 1630 CREDIT HOURS |  |  |  |  |  |
| ENG 101 and 102：First－Year Composition OR ENG 107 and 108：English for Foreign Students OR ENG 105：Advanced First－Year Composition | 3 | $\square$ |  | Grade of C | －Complete Mathematical Studies（MA）requirement <br> －Minimum 2.30 cumulative GPA in English specialization critical courses <br> －Minimum 2．30 ASU cumulative GPA |
| SPE 222：Orientation Education of the Exceptional Child（SB，C） | 3 | $\square$ |  | Grade of B |  |
| Natural Science－Quantitative（SQ）： | 4 | $\square$ |  | Grade of C |  |
| Computer／Statistics／Quantitative（CS）： | 3 | $\square$ |  | Grade of C |  |
| Elective： | 3 | $\square$ |  |  |  |
| TERM THREE： 3145 CREDIT HOURS |  |  |  |  |  |
| ENG 200：Critical Reading and Writing about Literature（L or HU） | 3 | $\square$ |  | Grade of C | －Complete First Year Composition requirement： ENG 101 \＆ 102 OR ENG 107 \＆ 108 or 105 <br> －Minimum 2.30 cumulative GPA in English specialization critical courses <br> －Minimum 2．50 ASU cumulative GPA <br> －MILESTONE：Submit Intent to Progress form （online） |
| ENG 221：Survey of English Literature（HU） | 3 | $\square$ |  | Grade of 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） | 3 | $\square$ |  | Grade of C |  |
| BLE 220：Foundations of SEI： | 3 | $\square$ |  | Grade of C |  |
| Elective： | 1 | $\square$ |  |  |  |
| TERM FOUR： $46 \mathbf{6 0}$ CREDIT HOURS |  |  |  |  |  |
| ENG 222：Survey of English Literature（HU，H） | 3 | $\square$ |  | Grade of C | －Complete $\mathrm{SQ} / \mathrm{SG}$ or L with a＂C＂or better． <br> －Minimum 2.50 cumulative GPA in English specialization critical courses <br> －Must complete ENG 200 and four additional ENG courses（not including ENG 101／102）by the end of the semester <br> －Must complete BLE 220 with a grade of＂C＂or better <br> －Minimum 2．50 ASU cumulative GPA <br> －MILESTONE：Attend ITC orientation |
| ENG 471：Literature fir Adolescents（HU） | 3 | 区 |  | Grade of C |  |
| ENG 312：English in its Social Setting（L or HU or SB）OR ENG 314：Modern Grammar | 3 | 区 |  | Grade of C |  |
| ENG 241：Literature of the US to 1860 （HU） | 3 | $\square$ |  | Grade of C |  |
| EDP 311：Educational Psychology for Teachers（SB） | 3 | 区 |  | Grade of C |  |
| TERM FIVE： 6175 CREDIT HOURS |  |  |  |  |  |
| ENG 333：American Ethnic Literature（L or HU，and C）OR 3 $\boxtimes$   <br> ENG 353：African American Literature：Beginnings through the     <br> Harlem Renaissance（L or HU，and C）OR     of C |  |  |  |  | －Minimum 2．50 ASU cumulative GPA |
| ENG 242：Literature of the US 1860 －present（HU） | 3 | $\square$ |  | Grade of C |  |
| SPF 301：Culture and Schooling（L） | 3 | 区 |  | Grade of C |  |
| EDT 300：Computers in Education | 1 | 区 |  | Grade of C |  |
| SPF 401：Theory and Practice in Education | 1 | 区 |  | Grade of C |  |
| SED 403：Middle and Secondary Principles，Curriculum and Methods | 3 | 区 |  | Grade of C |  |
| SED 496：Field Experience | 1 | 区 |  | Grade of Y |  |
| TERM SIX： $76 \mathbf{9 0}$ CREDIT HOURS |  |  |  |  |  |
| ENG Upper Division： | 3 | 区 |  | Grade of C | －Minimum 2．50 ASU cumulative GPA |
| ENG 421：Shakespeare（HU）OR <br> ENG 422：Studies in Shakespeare（HU） | 3 | 区 |  | Grade of C |  |
| ENG Elective： | 3 | $\square$ |  | Grade of C |  |
| EDP 303：Human Development（L or SB）OR <br> EDP 313：Childhood and Adolescent Development（SB） | 3 | 区 |  | Grade of C |  |
| ENG 480：Methods of Teaching Composition | 3 | 区 |  | Grade of C |  |
| SED 496：Field Experience | 1 | 区 |  | Grade of Y |  |

Major Map：Secondary Education（English）－
Bachelor of Arts in Education（B．A．E．）
Mary Lou Fulton College of Education，Tempe Campus Catalog Year：2008－2009

| 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： 91105 CREDIT HOURS |  |  |  |  |  |
| ENG Upper Division： | 3 | 区 |  | Grade of C | －Minimum 2．50 ASU cumulative GPA |
| RDG 301：Literacy and Instruction in the Content Area | 3 | 囚 |  | Grade of C |  |
| BLE 407：SEI for Secondary Students | 3 | 区 |  | Grade of C |  |
| ENG 482：Methods of Teaching Language | 3 | 区 |  | Grade of C |  |
| SPE 417：Inclusion Practices at the Secondary Level | 3 | 区 |  | Grade of C |  |
| SED 496：Field Experience | 1 | 区 |  | Grade of Y |  |
| TERM EIGHT： $106 \mathbf{1 2 0}$ CREDIT HOURS |  |  |  |  |  |
| SED 478：Student Teaching in Secondary Schools | 12 | 区 |  | Grade of Y | －Minimum 2．50 ASU cumulative GPA |

## Graduation Requirements Summary：

| Total Hours <br> $(120$ minimum $)$ | Total Hrs at ASU <br> $(30$ minimum $)$ | Hrs Resident Credit for Academic <br> Recognition $(56$ minimum $)$ | Major GPA <br> $(2.00$ Min．$)$ | Total UD Hrs <br> $(45$ minimum $)$ | Total Comm．College <br> Hrs．（ 64 maximum $)$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |

## General University Requirements：Legend

－General Studies Core Requirements：
－Literacy and Critical Inquiry（L）（6 credit hours）
－Mathematical Studies（MA）（3 credit hours）
－Computer／Statistics／Quantitative applications（CS）（3 credit hours）
－Humanities，Fine Arts，and Design（HU）（6－9 credit hours）
－Social and Behavioral Sciences（SB）（6－9 credit hours）
－Natural Science－Quantitative（SQ）（4－8 credit hours）（cumulative SQ／SG credit must equal 8 credit hours）
－Natural Science－General（SG）（0－4 credit hours）（cumulative SQ／SG credit must equal 8 credit hours）
－General Studies Awareness Requirements
－Cultural Diversity in the US（C）（3 credit hours）（may be combined with other general studies requirements．）
－Global Awareness（G）（3 credit hours）（may be combined with other general studies requirements．）
－Historical Awareness（H）（3 credit hours）（may be combined with other general studies requirements．）
－First－Year Composition（ENG 101 \＆ 102 OR ENG 107 \＆ 108 or ENG 105）

## Additional Notes：

Please check course availability in your specialization area，as some courses are not offered every semester．
The requirements outlined on this major map meet ASU＇s graduation requirements for this catalog year and major；however，certification requirements are determined by the Arizona Department of Education（ADE）and are subject to change．Occasionally，additional courses，which are not outlined on this major map，may be required to obtain certification and／or an Institutional Recommendation．It is highly recommended that you speak with your COE advisor regarding any certification updates or changes．

Major Map: Secondary Education (French) -<br>Bachelor of Arts in Education (B.A.E.)<br>Mary Lou Fulton College of Education, Tempe Campus<br>Catalog Year: 2008-2009



Major Map：Secondary Education（French）－
Bachelor of Arts in Education（B．A．E．）
Mary Lou Fulton College of Education，Tempe Campus Catalog Year：2008－2009

| 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 SIX： 7690 CREDIT HOURS |  |  |  |  |  |
| FRE 411：Advanced Spoken French（G） | 3 | 区 |  | Grade of C | －Minimum 2．50 ASU cumulative GPA |
| SLC 498：Special Topics | 3 | 区 |  | Grade of C |  |
| EDP 303：Human Development（L or SB）OR <br> EDP 313：Childhood and Adolescent Development（SB） | 3 | 区 |  | Grade of C |  |
| RDG 301：Literacy and Instruction in Content Area | 3 | 区 |  | Grade of C |  |
| SLC 480：Methods of Teaching Foreign Languages（spring only） | 3 | 囚 |  | Grade of C |  |
| SED 496：Field Experience | 1 | 区 |  | Grade of Y |  |
| TERM SEVEN： 91105 CREDIT HOURS |  |  |  |  |  |
| FRE 412：Advanced Written French（G） | 3 | 区 |  | Grade of C | －Minimum 2．50 ASU cumulative GPA |
| BLE 407：SEI for Secondary Students | 3 | 区 |  | Grade of C |  |
| SPE 417：Inclusion Practices at the Secondary Level | 3 | 区 |  | Grade of C |  |
| SPF 301：Culture and Schooling（L） | 3 | 区 |  | Grade of C |  |
| SED 496：Field Experience | 1 | 区 |  | Grade of Y |  |
| Elective： | 1 | $\square$ |  |  |  |
| TERM EIGHT： 106120 CREDIT HOURS |  |  |  |  |  |
| SED 478：Student Teaching | 12 | 区 |  | Grade of Y | －Minimum 2．50 ASU cumulative GPA |

## Graduation Requirements Summary：

| Total Hours <br> $(120$ minimum $)$ | Total Hrs at ASU <br> $(30$ minimum $)$ | Hrs Resident Credit for Academic <br> Recognition（ 56 minimum $)$ | Major GPA <br> $(2.00$ Min．$)$ | Total UD Hrs <br> $(45$ minimum $)$ | Total Comm．College <br> Hrs．（ 64 maximum） |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |

## General University Requirements：Legend

－General Studies Core Requirements：
－Literacy and Critical Inquiry（L）（6 credit hours）
－Mathematical Studies（MA）（3 credit hours）
－Computer／Statistics／Quantitative applications（CS）（3 credit hours）
－Humanities，Fine Arts，and Design（HU）（6－9 credit hours）
－Social and Behavioral Sciences（SB）（6－9 credit hours）
－Natural Science－Quantitative（SQ）（4－8 credit hours）（cumulative SQ／SG credit must equal 8 credit hours）
－Natural Science－General（SG）（0－4 credit hours）（cumulative SQ／SG credit must equal 8 credit hours）
－General Studies Awareness Requirements
－Cultural Diversity in the US（C）（3 credit hours）（may be combined with other general studies requirements．）
－Global Awareness（G）（3 credit hours）（may be combined with other general studies requirements．）
－Historical Awareness（H）（3 credit hours）（may be combined with other general studies requirements．）
－First－Year Composition（ENG 101 \＆ 102 OR ENG 107 \＆ 108 or ENG 105）

## Additional Notes：

Please check course availability in your specialization area as some courses are not offered every semester．
The requirements outlined on this major map meet ASU＇s graduation requirements for this catalog year and major；however，certification requirements are determined by the Arizona Department of Education（ADE）and are subject to change．Occasionally，additional courses，which are not outlined on this major map，may be required to obtain certification and／or an Institutional Recommendation．It is highly recommended that you speak with your COE advisor regarding any certification updates or changes．

Major Map ：Secondary Education（Geography）－
Bachelor of Arts in Education（B．A．E．）
Mary Lou Fulton College of Education，Tempe Campus
Catalog Year：2008－2009

|  | Hrs． |  | Completed ATP：$\square$ Yes $\square$ No |  | Completed AGEC：$\square$ Yes $\square$ No Additional Critical Tracking Notes |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Course Subject and Title （courses in bold／shading are critical） |  | Upper Division | Transfer Course／Grade | Minimum Grade if Required |  |
| TERM ONE： 015 CREDIT HOURS |  |  |  |  |  |
| ASU 101：The ASU Experience <br> ENG 101 and 102：First－Year Composition OR ENG 107 and 108：English for Foreign Students OR ENG 105：Advanced First－Year Composition | 1 | $\square$ |  | Grade of C | －ASU 101 is for native ASU students only．Not required of transfer students． <br> －Minimum 2．00 ASU cumulative GPA |
|  | 3 | $\square$ |  | Grade of C |  |
| MAT 142：College Mathematics（MA）or higher | 3 | $\square$ |  | Grade of C |  |
| GCU 102：Introduction to Human Geography（SB，G） | 3 | $\square$ |  | Grade of C |  |
| Natural Science－Quantitative or General（SQ／SG）OR Literacy and Critical Inquiry（L） | 3－4 | $\square$ |  |  |  |
| Elective： | 3 | $\square$ |  |  |  |
| TERM TWO： 1630 CREDIT HOURS |  |  |  |  |  |
| ENG 101 and 102：First－Year Composition OR ENG 107 and 108：English for Foreign Students OR ENG 105：Advanced First－Year Composition | 3 | $\square$ |  | Grade of C | －Complete Mathematical Studies（MA） requirement <br> －Minimum 2.30 cumulative GPA in geography |
| GCU 121：World Geography（SB，G） | 3 | $\square$ |  | Grade of C | specialization critical courses |
| GPH 111：Introduction to Physical Geography（SQ） | 4 | $\square$ |  | Grade of C | mum 2．30 ASU cumulative GPA |
| SPE 222：Orientation Education of the Exceptional Child（SB，C） | 3 | $\square$ |  | Grade of B |  |
| Elective： | 3 | $\square$ |  |  |  |
| TERM THREE： 3145 CREDIT HOURS |  |  |  |  |  |
| Computer／Statistics／Quantitative（CS）： | 3 | $\square$ |  |  | －Complete First Year Composition requirement： |
| Physical Geography <br> GPH 210：Society and Environment（G） <br> GPH 211：Landform Process（L） <br> GPH 212／214：Introduction to Meteorology and Laboratory（SQ） <br> GPH 314：Global Change（HU，G） | 3－4 | $\square$ |  | Grade of C | －Recommend HST 109 for HU，H and covers US constitution for certification requirement．Minimum 2.30 cumulative GPA in geography specialization critical courses |
| Human Geography <br> GCU 141：Introduction to Economic Geography（SB，G） <br> GCU 322：Geography of US and Canada（SB，C） <br> GCU 351：Population Geography（SB，G） <br> GCU 361：Urban Geography（SB） | 3 | 区 |  | Grade of C | －MILESTONE：Submit Intent to Progress form （online） |
| Select one course（not already taken）： <br> Natural Science－Quantitative or General（SQ／SG）OR <br> Literacy and Critical Inquiry（L） | 3－4 | $\square$ |  |  |  |
| Humanities／Fine Arts and Design（HU）with Awareness Area－ Historical（H）： | 3 | $\square$ |  |  |  |
| TERM FOUR： 4660 CREDIT HOURS |  |  |  |  |  |
| GPH or GCU Upper Division Elective： | 3－4 | 区 |  | Grade of C | －Complete SQ／SG or L with a＂C＂or better． |
| GPH or GCU Upper Division Elective： | 3 | 区 |  | Grade of C | －Minimum 2.30 cumulative GPA in geography specialization critical courses |
| EDP 311：Educational Psychology for Teachers（SB） | 3 | 区 |  | Grade of C | －Must complete BLE 220 with a grade of＂C＂or |
| BLE 220：Foundations of SEI | 3 | $\square$ |  | Grade of C | －Minimum 2．50 ASU cumulative GPA |
| Humanities／Fine Arts and Design（HU）： | 3 | $\square$ |  |  | －MILESTONE：Attend ITC orientation |
| TERM FIVE： 6175 CREDIT HOURS |  |  |  |  |  |
| GPH or GCU Upper Division Elective： | 3－4 | 区 |  | Grade of C | －Minimum 2．50 ASU cumulative GPA |
| SPF 401：Theory and Practice in Education | 1 | 区 |  | Grade of C | card to participate in field experience |
| SPF 301：Culture and Schooling（L） | 3 | 区 |  | Grade of C |  |
| SED 403：Middle and Secondary Principles，Curriculum and Methods | 3 | 区 |  | Grade of C |  |
| SED 496：Field Experience | 1 | 区 |  | Grade of Y |  |
| TERM SIX： $76 \mathbf{9 0}$ CREDIT HOURS |  |  |  |  |  |
| GPH or GCU Upper Division Elective： | 3－4 | 区 |  |  | －Minimum 2．50 ASU cumulative GPA |
| EDT 300：Computers in Education | 1 | 区 |  | Grade of C | －Thirty credits required in Geography specialization |
| EDP 303：Human Development（L or SB）OR EDP 313：Childhood and Adolescent Development（SB） | 3 | 区 |  | Grade of C |  |
| SED 480：Social Studies Methods | 3 | 区 |  | Grade of C |  |
| SED 496：Field Experience | 1 | 区 |  | Grade of Y |  |
| Elective： | 3 | $\square$ |  |  |  |


| Course Subject and Title <br> (courses in bold/shading are critical) | Hrs. | Upper <br> Division | Transfer <br> Course/Grade | Minimum Grade <br> if Required | Additional Critical Tracking Notes |
| :--- | :---: | :---: | :---: | :--- | :--- | :--- | :--- | :--- |

## Graduation Requirements Summary:

| Total Hours <br> $(120$ minimum $)$ | Total Hrs at ASU <br> $(30$ minimum $)$ | Hrs Resident Credit for Academic <br> Recognition $(56$ minimum) | Major GPA <br> $(2.00$ Min. $)$ | Total UD Hrs <br> $(45$ minimum $)$ | Total Comm. College <br> Hrs. (64 maximum) |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |

## General University Requirements: Legend

- General Studies Core Requirements:
- Literacy and Critical Inquiry (L) (6 credit hours)
- Mathematical Studies (MA) (3 credit hours)
- Computer/Statistics/Quantitative applications (CS) (3 credit hours)
- Humanities, Fine Arts, and Design (HU) (6-9 credit hours)
- Social and Behavioral Sciences (SB) (6-9 credit hours)
- Natural Science-Quantitative (SQ) ( $4-8$ credit hours) (cumulative SQ/SG credit must equal 8 credit hours)
- Natural Science-General (SG) (0-4 credit hours) (cumulative SQ/SG credit must equal 8 credit hours)
- General Studies Awareness Requirements
- Cultural Diversity in the US (C) (3 credit hours) (may be combined with other general studies requirements.)
- Global Awareness (G) (3 credit hours) (may be combined with other general studies requirements.)
- Historical Awareness (H) (3 credit hours) (may be combined with other general studies requirements.)
- First-Year Composition (ENG 101 \& 102 OR ENG 107 \& 108 or ENG 105)


## Additional Notes:

Please check course availability in your specialization area, as some courses are not offered every semester.
The requirements outlined on this major map meet ASU's graduation requirements for this catalog year and major; however, certification requirements are determined by the Arizona Department of Education (ADE) and are subject to change. Occasionally, additional courses, which are not outlined on this major map, may be required to obtain certification and/or an Institutional Recommendation. It is highly recommended that you speak with your COE advisor regarding any certification updates or changes.

Major Map ：Secondary Education（German）
Bachelor of Arts in Education（B．A．E．）
Mary Lou Fulton College of Education，Tempe Campus
Catalog Year：2008－2009

|  |  |  | Completed ATP：$\square$ Yes $\square$ No |  | Completed AGEC：$\square$ Yes $\square$ No |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 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： 015 CREDIT HOURS |  |  |  |  |  |
| ASU 101：The ASU 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> －Minimum 2.50 cumulative GPA in German specialization critical courses <br> －Minimum 2．00 ASU cumulative GPA <br> －Recommend HST 109 for HU，H and covers US constitution for certification requirement |
| ENG 101 and 102：First－Year Composition OR ENG 107 and 108：English for Foreign Students OR ENG 105：Advanced First－Year Composition | 3 | $\square$ |  | Grade of C |  |
| MAT 142：College Mathematics（MA）or higher | 3 | $\square$ |  | Grade of C |  |
| GER 201：Intermediate German（G） | 4 | $\square$ |  | Grade of C |  |
| Humanities／Fine Arts and Design（HU）with Awareness Area（H）： | 3 | $\square$ |  |  |  |
| Computer／Statistics／Quantitative（CS）：： | 3 | $\square$ |  |  |  |
| TERM TWO： 1630 CREDIT HOURS |  |  |  |  |  |
| ENG 101 and 102：First－Year Composition OR ENG 107 and 108：English for Foreign Students OR ENG 105：Advanced First－Year Composition | 3 | $\square$ |  | Grade of C | －Complete Mathematical Studies（MA）requirement <br> －Minimum 2.75 cumulative GPA in German specialization critical courses <br> －MILESTONE：one professional letter of recommendation <br> －MILESTONE：first draft resume <br> －MILESTONE：Freedom From Conviction of Crime Statement document <br> －Minimum 2．30 ASU cumulative GPA |
| SPE 222：Orientation Education of the Exceptional Child（SB，C） | 3 | $\square$ |  | Grade of B |  |
| Natural Science－Quantitative or General（SQ／SG）： | 4 | $\square$ |  | Grade of C |  |
| GER 202：Intermediate German（G） | 4 | $\square$ |  | Grade of C |  |
| Elective： | 2 | $\square$ |  |  |  |
| TERM THREE： 3145 CREDIT HOURS |  |  |  |  |  |
| GER 311：German Conversation（G）OR GER 312：German Composition（G） | 3 | 区 |  | Grade of C | －Complete First Year Composition requirement： ENG 101 \＆ 102 OR ENG 107 \＆ 108 or 105 <br> －Minimum 3.00 cumulative GPA in German specialization critical courses <br> －Minimum 2．50 ASU cumulative GPA <br> －MILESTONE：Fingerprint Clearance／Background Check <br> －MILESTONE： $2^{\text {nd }}$ professional letter of recommendation（A total of 2 must be submitted） |
| GER Upper Division Elective： | 3 | $\square$ |  | Grade of C |  |
| SLC 201：Introduction to Linguistics OR <br> SLC 202：Introduction to Literacy and Cultural Theory（G） | 3 | $\square$ |  | Grade of C |  |
| GER Related Field（reference course list）： | 3 | $\square$ |  |  |  |
| TERM FOUR： 46 60 CREDIT HOURS |  |  |  |  |  |
| GER 313：German Composition（G） | 3 | 区 |  | Grade of C | －Complete $\mathrm{SQ} / \mathrm{SG}$ or L with a＂C＂or better． <br> －Minimum 3.00 cumulative GPA in German specialization critical courses <br> －Minimum 2．50 ASU cumulative GPA <br> －MILESTONE：final resume <br> －MILESTONE：Fingerprint Clearance Card |
| GER Upper Division Elective： | 3 | 区 |  | Grade of C |  |
| SLC 201：Introduction to Linguistics OR SLC 202：Introduction to Literacy and Cultural Theory（G） | 3 | $\square$ |  | Grade of C |  |
| GER Related Field（reference course list）： | 3 | $\square$ |  | Grade of C |  |
| Natural Science－Quantitative（SQ）： | 4 | $\square$ |  |  |  |
| TERM FIVE： 6175 CREDIT HOURS |  |  |  |  |  |
| GER 411：Advanced Grammar and Conversation（G） | 3 | 区 |  | Grade of C | －Minimum 2．50 ASU cumulative GPA |
| GER 421：German Literature（HU） | 3 | 区 |  | Grade of C |  |
| EDT 300：Computers in Education | 1 | 区 |  | Grade of C |  |
| SPF 401：Theory and Practice in Education | 1 | 区 |  | Grade of C |  |
| SLC 479：Introduction to Teaching Foreign Languages | 3 | 区 |  | Grade of C |  |
| SED 403：Middle and Secondary Principles，Curriculum and Methods | 3 | 区 |  | Grade of C |  |
| SED 496：Field Experience | 1 | 区 |  | Grade of C |  |
| TERM SIX： 7690 CREDIT HOURS |  |  |  |  |  |
| GER 412：Advanced Grammar and Composition（G） | 3 | 区 |  | Grade of C | －Minimum 2．50 ASU cumulative GPA |
| GER 422：German Literature（L or HU） | 3 | 区 |  | Grade of C |  |
| EDP 303：Human Development（L or SB）OR <br> EDP 313：Childhood and Adolescent Development（SB） | 3 | 区 |  | Grade of C |  |
| RDG 301：Literacy \＆Instruction in Content Area | 3 | 区 |  | Grade of C |  |
| SLC 480：Methods of Teaching Foreign Languages | 3 | 区 |  | Grade of C |  |
| SED 496：Field Experience | 1 | 区 |  | Grade of C |  |
| TERM SEVEN： 91105 CREDIT HOURS |  |  |  |  |  |
| EDP 311：Educational Psychology for Teachers（SB） | 3 | 区 |  | Grade of C | －Minimum 2．50 ASU cumulative GPA |
| SPF 301：Culture and Schooling（L） | 3 | 区 |  | Grade of C |  |
| BLE 407 SEI for Secondary Students | 3 | 区 |  | Grade of C |  |
| SPE 417：Inclusion Practices at the Secondary Level | 3 | 囚 |  | Grade of C |  |
| SED 496：Field Experience | 1 | 区 |  | Grade of C |  |
| SLC 498 | 3 | 区 |  | Grade of C |  |
| TERM EIGHT： $106 \mathbf{1 2 0}$ CREDIT HOURS |  |  |  |  |  |
| SED 478：Student Teaching in Secondary Schools | 12 | 区 |  | Grade of C | －Minimum 2．50 ASU cumulative GPA |

Major Map : Secondary Education (German)
Bachelor of Arts in Education (B.A.E.)
Mary Lou Fulton College of Education, Tempe Campus
Catalog Year: 2008-2009

## Graduation Requirements Summary:

| Total Hours <br> $(120$ minimum $)$ | Total Hrs at ASU <br> $(30$ minimum $)$ | Hrs Resident Credit for Academic <br> Recognition $(56$ minimum $)$ | Major GPA <br> $(2.00$ Min. $)$ | Total UD Hrs <br> $(45$ 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:

Please check course availability in your specialization area as some courses are not offered every semester.

The requirements outlined on this major map meet ASU's graduation requirements for this catalog year and major; however, certification requirements are determined by the Arizona Department of Education (ADE) and are subject to change. Occasionally, additional courses, which are not outlined on this major map, may be required to obtain certification and/or an Institutional Recommendation. It is highly recommended that you speak with your advisor regarding any certification updates or changes.

Major Map：Secondary Education（History）
Bachelor of Arts in Education（B．A．E．）
Mary Lou Fulton College of Education，Tempe Campus
Catalog Year：2008－2009

|  |  |  | Completed ATP：$\square$ Yes $\quad \square$ No |  | Completed AGEC：$\square$ Yes $\square$ No |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 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： 015 CREDIT HOURS |  |  |  |  |  |
| ASU 101：The ASU 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> －Minimum 2.00 cumulative GPA in history specialization courses <br> －Minimum 2．00 ASU cumulative GPA |
| ENG 101 and 102：First－Year Composition OR ENG 107 and 108：English for Foreign Students OR ENG 105：Advanced First－Year Composition | 3 | $\square$ |  | Grade of C |  |
| MAT 142：College Mathematics（MA）or higher | 3 | $\square$ |  | Grade of C |  |
| HST 109：United States to 1865 （HU／SB，H）OR HST 110：United States since 1865 （SB，H） | 3 | $\square$ |  | Grade of C |  |
| Non－US History（list in DARS）： | 3 | $\square$ |  | Grade of C |  |
| HST 101：Global History Since 1500 （HU，H，G） | 3 | $\square$ |  |  |  |
| TERM TWO： 1630 CREDIT HOURS |  |  |  |  |  |
| ENG 101 and 102：First－Year Composition OR ENG 107 and 108：English for Foreign Students OR ENG 105：Advanced First－Year Composition | 3 | $\square$ |  | Grade of C | －Complete Mathematical Studies（MA） requirement <br> －Minimum 2.50 cumulative GPA in history specialization courses <br> －Minimum 2．30 ASU cumulative GPA |
| HST Related Area（AFR，AFH，AFS，AIS，CCS，CSH，CSS，ECN， GCU，GPH，POS，SOC，WSH，WST）： | 3 | $\square$ |  | Grade of C |  |
| Natural Science－Quantitative or General（SQ／SG） | 4 | $\square$ |  |  |  |
| HST 109：United States to 1865 （HU／SB，H）OR HST 110：United States since 1865 （SB，H） | 3 | $\square$ |  | Grade of C |  |
| SPE 222：Orientation Education of the Exceptional Child （SB，C） | 3 | $\square$ |  | Grade of B |  |
| TERM THREE： 3145 CREDIT HOURS |  |  |  |  |  |
| US History（list in DARS）： | 3 | $\square$ |  | Grade of C | －Complete First Year Composition requirement： ENG 101 \＆ 102 OR ENG 107 \＆ 108 or 105 <br> －Minimum 2.75 cumulative GPA in history specialization courses <br> －Minimum 2．30 ASU cumulative GPA <br> －MILESTONE：Submit Intent to Progress form （online） |
| BLE 220：Foundations of SEI | 3 | $\square$ |  | Grade of C |  |
| HST Related Area（AFR，AFH，AFS，AIS，CCS，CSH，CSS，ECN， GCU，GPH，POS，SOC，WSH，WST）： | 3 | $\square$ |  | Grade of C |  |
| Non－US History（list in DARS）： | 3 | $\square$ |  | Grade of C |  |
| Computer／Statistics／Quantitative（CS）： | 3 | $\square$ |  | Grade of C |  |
| TERM FOUR： 46 60 CREDIT HOURS |  |  |  |  |  |
| US History（list in DARS）： | 3 | $\square$ |  | Grade of C | －Complete $\mathrm{SQ} / \mathrm{SG}$ or L with a＂C＂or better． <br> －Minimum 2.75 cumulative GPA in history specialization courses <br> －Must complete at least four HST courses by the end of the semester． <br> －Must complete BLE 220 with a grade of＂C＂or better <br> －Minimum 2．50 ASU cumulative GPA <br> －MILESTONE：Attend ITC orientation |
| US History（list in DARS）： | 3 | $\square$ |  | Grade of C |  |
| HST Related Area（AFR，AFH，AFS，AIS，CCS，CSH，CSS，ECN， GCU，GPH，POS，SOC，WSH，WST）： | 3 | $\square$ |  | Grade of C |  |
| HST Related Area（AFR，AFH，AFS，AIS，CCS，CSH，CSS，ECN， GCU，GPH，POS，SOC，WSH，WST）： | 3 | $\square$ |  | Grade of C |  |
| Natural Science－Quantitative（SQ） | 4 | $\square$ |  |  |  |
| TERM FIVE： 6175 CREDIT HOURS |  |  |  |  |  |
| HST 300：Historical Inquiry（L／HU／SB，H） | 3 | 区 |  | Grade of C | －Minimum 2.75 cumulative GPA in history specialization courses <br> －Minimum 2．50 ASU cumulative GPA <br> －Must possess valid DPS fingerprint clearance card to participate in field experience |
| EDP 311：Educational Psychology for Teachers（SB） | 3 | 区 |  | Grade of C |  |
| SPF 301：Culture and Schooling（L） | 3 | 区 |  | Grade of C |  |
| EDT 300：Computers in Education | 1 | 区 |  | Grade of C |  |
| SED 403：Middle and Secondary Principles，Curriculum and Methods | 3 | 区 |  | Grade of C |  |
| SED 496：Field Experience | 1 | 区 |  | Grade of Y |  |
| TERM SIX： 7690 CREDIT HOURS |  |  |  |  |  |
| HST 498：History Pro－Seminar（L） | 3 | 区 |  | Grade of C | －Minimum 2.75 cumulative GPA in history specialization courses <br> －Minimum 2．50 ASU cumulative GPA |
| EDP 303：Human Development（L or SB）OR EDP 313：Childhood and Adolescent Development（SB） | 3 | 区 |  | Grade of C |  |
| RDG 301：Literacy and Instruction in Content Area | 3 | 区 |  | Grade of C |  |
| SPF 401：Theory and Practice in Education | 3 | 区 |  | Grade of C |  |
| HST 480：Methods of Teaching History in the Classroom | 3 | 区 |  | Grade of C |  |
| SED 496：Field Experience | 1 | 区 |  | Grade of Y |  |
| TERM SEVEN： 91105 CREDIT HOURS |  |  |  |  |  |
| BLE 407：SEI for Secondary | 3 | 区 |  | Grade of C | －Minimum 2.75 cumulative GPA in history specialization courses <br> －Minimum 2．50 ASU cumulative GPA |
| SPE 417：Inclusion Practices at the Secondary Level | 3 | 区 |  | Grade of C |  |
| HST 481：Methods of Teaching History in the Community | 3 | 区 |  | Grade of C |  |
| SED 496：Field Experience | 1 | 区 |  | Grade of Y |  |
| Elective： | 3 | $\square$ |  |  |  |
| Elective： | 2 | $\square$ |  |  |  |
| TERM EIGHT： 106120 CREDIT HOURS |  |  |  |  |  |
| SED 478：Student Teaching in Secondary Schools | 12 | 区 |  | Grade of Y | －Minimum 2．50 ASU cumulative GPA |

# Major Map: Secondary Education (History) 

Bachelor of Arts in Education (B.A.E.)
Mary Lou Fulton College of Education, Tempe Campus Catalog Year: 2008-2009

## Graduation Requirements Summary:

| Total Hours <br> $(120$ minimum $)$ | Total Hrs at ASU <br> $(30$ minimum $)$ | Hrs Resident Credit for Academic <br> Recognition $(56$ minimum $)$ | Major GPA <br> $(2.00$ Min. $)$ | Total UD Hrs <br> $(45$ minimum $)$ | Total Comm. College <br> Hrs. ( 64 maximum) |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |

## General University Requirements: Legend

- General Studies Core Requirements:
- Literacy and Critical Inquiry (L) (6 credit hours)
- Mathematical Studies (MA) (3 credit hours)
- Computer/Statistics/Quantitative applications (CS) (3 credit hours)
- Humanities, Fine Arts, and Design (HU) (6-9 credit hours)
- Social and Behavioral Sciences (SB) (6-9 credit hours)
- Natural Science-Quantitative (SQ) (4-8 credit hours) (cumulative SQ/SG credit must equal 8 credit hours)
- Natural Science-General (SG) (0-4 credit hours) (cumulative SQ/SG credit must equal 8 credit hours)
- General Studies Awareness Requirements
- Cultural Diversity in the US (C) (3 credit hours) (may be combined with other general studies requirements.)
- Global Awareness (G) (3 credit hours) (may be combined with other general studies requirements.)
- Historical Awareness (H) (3 credit hours) (may be combined with other general studies requirements.)
- First-Year Composition (ENG 101 \& 102 OR ENG 107 \& 108 or ENG 105)


## Additional Notes:

Please check course availability in your specialization area, as some courses are not offered every semester
The requirements outlined on this major map meet ASU's graduation requirements for this catalog year and major; however, certification requirements are determined by the Arizona Department of Education (ADE) and are subject to change. Occasionally, additional courses, which are not outlined on this major map, may be required to obtain certification and/or an Institutional Recommendation. It is highly recommended that you speak with your COE advisor regarding any certification updates or changes.

Major Map : Secondary Education (Japanese) -
Bachelor of Arts in Education (B.A.E.)
Mary Lou Fulton College of Education, Tempe Campus
Catalog Year: 2008-2009


Major Map : Secondary Education (Japanese) Bachelor of Arts in Education (B.A.E.)<br>Mary Lou Fulton College of Education, Tempe Campus Catalog Year: 2008-2009

## Graduation Requirements Summary:

| Total Hours <br> $(120$ minimum $)$ | Total Hrs at ASU <br> $(30$ minimum $)$ | Hrs Resident Credit for Academic <br> Recognition $(56$ minimum $)$ | Major GPA <br> $(2.00 \mathrm{Min})$. | Total UD Hrs <br> $(45$ minimum $)$ | Total Comm. College <br> Hrs. $(64$ maximum $)$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |

## General University Requirements: Legend

- General Studies Core Requirements:
- Literacy and Critical Inquiry (L) (6 credit hours)
- Mathematical Studies (MA) (3 credit hours)
- Computer/Statistics/Quantitative applications (CS) (3 credit hours)
- Humanities, Fine Arts, and Design (HU) (6-9 credit hours)
- Social and Behavioral Sciences (SB) (6-9 credit hours)
- Natural Science-Quantitative (SQ) ( $4-8$ credit hours) (cumulative SQ/SG credit must equal 8 credit hours)
- Natural Science-General (SG) (0-4 credit hours) (cumulative SQ/SG credit must equal 8 credit hours)
- General Studies Awareness Requirements
- Cultural Diversity in the US (C) ( 3 credit hours) (may be combined with other general studies requirements.)
- Global Awareness (G) (3 credit hours) (may be combined with other general studies requirements.)
- Historical Awareness (H) (3 credit hours) (may be combined with other general studies requirements.)
- First-Year Composition (ENG 101 \& 102 OR ENG 107 \& 108 or ENG 105)


## Additional Notes:

Please check course availability in your specialization area, as some courses are not offered every semester.
The requirements outlined on this major map meet ASU's graduation requirements for this catalog year and major; however, certification requirements are determined by the Arizona Department of Education (ADE) and are subject to change. Occasionally, additional courses, which are not outlined on this major map, may be required to obtain certification and/or an Institutional Recommendation. It is highly recommended that you speak with your COE advisor regarding any certification updates or changes.

| Related Area: Historical Overview |
| :--- |
| ARS 201: Art of Asia (HU, H, G) |
| ARS 473: Art of Japan (HU) |
| HST 108: Introduction to Japan (SB, G, H) |
| HST 387: Japan (L/SB, H) |
| REL 355: Japanese Cities and Cultures to 1800 (L/HU, H) |
| REL 444: Religion in Japan (HU, H, G) |
|  |
|  |
| Upper Division Elective |
| JPN 309: Intermediate Japanese Conversation |
| JPN 310: Intermediate Japanese Conversation |
| JPN 311: Japanese Conversation and Composition (G) |
| JPN 312: Japanese Conversation and Composition (G) |
| JPN 394: Special Topics |
| JPN 435: Advanced Readings |
| JPN 485: Problems of Translation |
| JPN 494: Special Topics |

Related Area
ARS 472: Art of China (HU)
ARS 473: Art of Japan (HU)
ARS 475: Chinese Painting (HU)
GCU 326: Geography of Asia (SB, G)
HST 106: Asian Civilizations (HU/SB, G, H)
HST 107: Asian Civilizations (SB, G, H)
HST 108: Introduction to Japan (SB, G, H)
HST 201: Historical Themes in Asia ((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/SB, H)
HST 387: Japan (L/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/HU, H)
REL 355: Japanese Cities and Cultures to 1800 (L/HU, H)
REL 444: Religion in Japan (HU, H, G)

Major Map ：Secondary Education（Mathematics）－
Bachelor of Arts in Education（B．A．E．）
Mary Lou Fulton College of Education，Tempe Campus
Catalog Year：2008－2009

|  |  |  | Completed ATP：$\quad \square$ Yes $\quad \square$ No |  | Completed AGEC：$\square \square$ Yes $\square$ No |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Course Subject and Title （courses in bold／shading are critical） | Hrs． | $\begin{aligned} & \text { Upper } \\ & \text { Divisis } \end{aligned}$ | Transfer Course／Grade | Minimum Grade if Required | Additional Critical Tracking Notes |
| TERM ONE： 015 CREDIT HOURS |  |  |  |  |  |
| ASU 101：The ASU 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> －Minimum 2．00 ASU cumulative GPA <br> －Recommend HST 109 for HU，H and meets US constitution requirement for certification． |
| ENG 101 and 102：First－Year Composition OR ENG 107 and 108：English for Foreign Students OR ENG 105：Advanced First－Year Composition | 3 | $\square$ |  | Grade of C |  |
| MAT 270：Calculus with Analytic Geometry I（MA） | 4 | $\square$ |  | Grade of C |  |
| Natural Science－Quantitative or General（SQ／SG）： | 4 | $\square$ |  | Grade of C |  |
| Humanities／Fine Arts and Design（HU）with Awareness Area（H）： | 3 | $\square$ |  | Grade of C |  |
| TERM TWO： 1630 CREDIT HOURS |  |  |  |  |  |
|  |  |  |  |  | －Minimum 2.30 cumulative GPA in mathematics specialization critical courses <br> －Minimum 2．30 ASU cumulative GPA |
| CSE 100： <br> CSE 110：Principles of Programming with C＋＋（CS）OR <br> CSE 205： Concepts of Pompamming with Java（CS）OR <br> Computer Science and Data Structures（CS）  3 $\square$  Grade of C |  |  |  |  |  |
| MAT 271：Calculus with Analytic Geometry II | 4 | $\square$ |  | Grade of C |  |
| SPE 222：Orientation Education of the Exceptional Child（SB，C） | 3 | $\square$ |  | Grade of B |  |
| Elective（DCI 211 recommended）： | 3 | $\square$ |  |  |  |
| TERM THREE： 3145 CREDIT HOURS |  |  |  |  |  |
| MAT 300：Mathematical Structures（L） | 3 | $\square$ |  | Grade of C | Complete First Year Composition requirement： ENG 101 \＆ 102 OR ENG 107 \＆ 108 or 105 <br> －Minimum 2.30 cumulative GPA in mathematics specialization courses <br> －Minimum 2．50 ASU cumulative GPA <br> －MILESTONE：Submit Intent to Progress form （online） <br> －Recommend HST 109 for HU，H and covers US constitution for certification requirement． |
| MAT 272：Calculus with Analytic Geometry III | 4 | $\square$ |  | Grade of C |  |
| Elective： | 3 | $\square$ |  |  |  |
| Elective： | 3 | $\square$ |  |  |  |
| Humanities／Fine Arts（HU）with Awareness Area－Global（G）： | 3 | $\square$ |  |  |  |
| TERM FOUR： 4660 CREDIT HOURS |  |  |  |  |  |
| MAT 310：Introduction to Geometry（spring only） | 3 | 区 |  | Grade of C | －Minimum 2.50 cumulative GPA in mathematics specialization courses <br> －Minimum 2．50 ASU cumulative GPA <br> －Must complete BLE 220 with a grade of＂C＂or better <br> －MILESTONE：Attend ITC orientation |
| STP 420：Introductory Applied Statistics（CS） | 3 | 区 |  | Grade of C |  |
| Natural Science－Quantitative（SQ）： | 3 | $\square$ |  | Grade of C |  |
| BLE 220：Foundations of SEI | 3 | $\square$ |  | Grade of C |  |
| Elective | 3 | $\square$ |  |  |  |
| TERM FIVE： 6175 CREDIT HOURS |  |  |  |  |  |
| MAT 370 Intermediate Calculus OR MAT 371：Advanced Calculus I | 3 | 区 |  | Grade of C | －MAT 300 complete <br> －Minimum 2．50 ASU cumulative GPA <br> －Must possess valid DPS fingerprint card to participate in field experience |
| EDT 300：Computers in Education | 1 | 区 |  | Grade of C |  |
| EDP 311：Educational Psychology for Teachers（SB） | 3 | 区 |  | Grade of C |  |
| SPF 301：Culture and Schooling（L） | 3 | 区 |  | Grade of C |  |
| SPF 401：Theory and Practice in Education | 1 | 区 |  | Grade of C |  |
| SED 403：Middle and Secondary Principles，Curriculum and Methods | 3 | 区 |  | Grade of C |  |
| SED 496：Field Experience | 1 | 区 |  | Grade of Y |  |
| TERM SIX： 7690 CREDIT HOURS |  |  |  |  |  |
| MAT 483：Mathmatica in Secondary Schools（Spring only） | 3 | 区 |  | Grade of C | －Minimum 2．50 ASU cumulative GPA |
| MAT 342：Applied Linear Algebra | 3 | 区 |  | Grade of C |  |
| EDP 303：Human Development（L or SB）OR <br> EDP 313：Childhood and Adolescent Development（SB） | 3 | 区 |  | Grade of C |  |
| RDG 301：Literacy and Instruction in Content Area | 3 | 区 |  | Grade of C |  |
| MTE 482：Methods Teaching Math in Secondary Schools | 3 | 区 |  | Grade of C |  |
| SED 496：Field Experience | 1 | 区 |  | Grade of Y |  |
| TERM SEVEN： 91105 CREDIT HOURS |  |  |  |  |  |
| MAT 443：Introduction to Abstract Algebra OR <br> MAT 445：Theory of Numbers OR <br> MAT 447：Cryptography | ${ }^{3}$ | 区 |  | Grade of C | －Minimum 2．50 ASU cumulative GPA |
| SPE 417：Inclusion Practices at the Secondary Level | 3 | 区 |  | Grade of C |  |
| BLE 407：SEI for Secondary Students | 3 | 区 |  | Grade of C |  |
| MTE 494：Advanced Methods Teaching Mathematics Secondary Schools | 3 | 区 |  | Grade of C |  |
| SED 496：Field Experience | 1 | 区 |  | Grade of Y |  |
| Elective： | 2 | $\square$ |  |  |  |
| TERM EIGHT： 106120 CREDIT HOURS |  |  |  |  |  |
| SED 478：Student Teaching in Secondary Schools | 12 | 区 |  | Grade of Y | －Minimum 2．50 ASU cumulative GPA |

## Graduation Requirements Summary:

| Total Hours <br> $(120$ minimum $)$ | Total Hrs at ASU <br> $(30$ minimum $)$ | Hrs Resident Credit for Academic <br> Recognition $(56$ minimum $)$ | Major GPA <br> $(2.00 \mathrm{Min})$. | Total UD Hrs <br> $(45$ minimum $)$ | Total Comm. College <br> Hrs. ( 64 maximum) |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |

## General University Requirements: Legend

- General Studies Core Requirements:
- Literacy and Critical Inquiry (L) (6 credit hours)
- Mathematical Studies (MA) (3 credit hours)
- Computer/Statistics/Quantitative applications (CS) (3 credit hours)
- Humanities, Fine Arts, and Design (HU) (6-9 credit hours)
- Social and Behavioral Sciences (SB) (6-9 credit hours)
- Natural Science-Quantitative (SQ) (4-8 credit hours) (cumulative SQ/SG credit must equal 8 credit hours)
- Natural Science-General (SG) (0-4 credit hours) (cumulative SQ/SG credit must equal 8 credit hours)
- General Studies Awareness Requirements
- Cultural Diversity in the US (C) (3 credit hours) (may be combined with other general studies requirements.)
- Global Awareness (G) (3 credit hours) (may be combined with other general studies requirements.)
- Historical Awareness (H) (3 credit hours) (may be combined with other general studies requirements.)
- First-Year Composition (ENG 101 \& 102 OR ENG 107 \& 108 or ENG 105)


## Additional Notes: <br> Please check course availability in your specialization area as some courses are not offered every semester.

The requirements outlined on this major map meet ASU's graduation requirements for this catalog year and major; however, certification requirements are determined by the Arizona Department of Education (ADE) and are subject to change. Occasionally, additional courses, which are not outlined on this major map, may be required to obtain certification and/or an Institutional Recommendation. It is highly recommended that you speak with your COE advisor regarding any certification updates or changes.

Major Map : Secondary Education (Physics) Bachelor of Arts in Education (B.A.E.)<br>Mary Lou Fulton College of Education, Tempe Campus<br>Catalog Year: 2008-2009

## Graduation Requirements Summary:

| Total Hours <br> $(120$ minimum $)$ | Total Hrs at ASU <br> $(30$ minimum $)$ | Hrs Resident Credit for Academic <br> Recognition $(56$ minimum $)$ | Major GPA <br> $(2.00$ Min. $)$ | Total UD Hrs <br> $(45$ minimum $)$ | Total Comm. College <br> Hrs. $(64$ maximum $)$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |

## General University Requirements: Legend

- General Studies Core Requirements:
- Literacy and Critical Inquiry (L) (6 credit hours)
- Mathematical Studies (MA) (3 credit hours)
- Computer/Statistics/Quantitative applications (CS) (3 credit hours)
- Humanities, Fine Arts, and Design (HU) (6-9 credit hours)
- Social and Behavioral Sciences (SB) (6-9 credit hours)
- Natural Science-Quantitative (SQ) (4-8 credit hours) (cumulative SQ/SG credit must equal 8 credit hours)
- Natural Science-General (SG) (0-4 credit hours) (cumulative SQ/SG credit must equal 8 credit hours)
- General Studies Awareness Requirements
- Cultural Diversity in the US (C) ( 3 credit hours) (may be combined with other general studies requirements.)
- Global Awareness (G) (3 credit hours) (may be combined with other general studies requirements.)
- Historical Awareness (H) (3 credit hours) (may be combined with other general studies requirements.)
- First-Year Composition (ENG 101 \& 102 OR ENG 107 \& 108 or ENG 105)


## Additional Notes:

Please check course availability in your specialization area as some courses are not offered every semester.
The requirements outlined on this major map meet ASU's graduation requirements for this catalog year and major; however, certification requirements are determined by the Arizona Department of Education (ADE) and are subject to change. Occasionally, additional courses, which are not outlined on this major map, may be required to obtain certification and/or an Institutional Recommendation. It is highly recommended that you speak with your COE advisor regarding any certification updates or changes.

Major Map ：Secondary Education（Political Science）－
Bachelor of Arts in Education（B．A．E．）
Mary Lou Fulton College of Education，Tempe Campus
Catalog Year：2008－2009

|  |  |  | Completed ATP：$\square$ Yes $\square$ No |  | Completed AGEC：$\square$ Yes $\square$ No |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 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： 015 CREDIT HOURS |  |  |  |  |  |
| ASU 101：The ASU 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> －Minimum 2.00 cumulative GPA in political science specialization courses <br> －Minimum 2．00 ASU cumulative GPA |
| ENG 101 and 102：First－Year Composition OR ENG 107 and 108：English for Foreign Students OR ENG 105：Advanced First－Year Composition | 3 | $\square$ |  | Grade of C |  |
| MAT 142：College Mathematics（MA）or higher | 3 | $\square$ |  | Grade of C |  |
| POS 110：Government and Politics（SB） OR POS 150：Comparative Government／POS 160：Global Politics（SB，G） | 3 | $\square$ |  | Grade of C |  |
| Humanities／Fine Arts（HU）： | 3 | $\square$ |  |  |  |
| Related Area（AFR，AFH，AFS，ASB，ASM，CCS，CSH，CSS，ECN， GCU，GPH，HST，PGS，PSY，SOC，WSH，WST） | 3 | $\square$ |  |  |  |
| TERM TWO： 1630 CREDIT HOURS |  |  |  |  |  |
| ENG 101 and 102：First－Year Composition OR ENG 107 and 108：English for Foreign Students OR ENG 105：Advanced First－Year Composition | 3 | $\square$ |  | Grade of C | －Complete Mathematical Studies（MA）requirement <br> －Minimum 2.30 cumulative GPA in political science specialization courses <br> －Minimum 2．30 ASU cumulative GPA |
| POS 110：Government and Politics（SB） OR POS 150：Comparative Government／POS 160：Global Politics（SB，G） | 3 | $\square$ |  | Grade of C |  |
| POS 210：Political Ideologies（SB） | 3 | $\square$ |  | Grade of C |  |
| Select one course（not already taken）： <br> Natural Science－Quantitative or General（SQ／SG）OR <br> Literacy and Critical Inquiry（L） | 3－4 | $\square$ |  |  |  |
| SPE 222：Orientation Education of the Exceptional Child（SB，C） | 3 | $\square$ |  | Grade of B |  |
| TERM THREE： 3145 CREDIT HOURS |  |  |  |  |  |
| POS 301：Empirical Political Inquiry（SB） | 3 | $\square$ |  | Grade of C | －Complete First Year Composition requirement： ENG 101 \＆ 102 OR ENG 107 \＆ 108 or 105 <br> －Minimum 2.50 cumulative GPA in political science specialization courses <br> －Minimum 2．30 ASU cumulative GPA <br> －MILESTONE：Submit Intent to Progress form （online） <br> －Recommend HST 109 for HU，H and covers US constitution for certification requirement． |
| POS Elective： | 3 | $\square$ |  | Grade of C |  |
| Computer／Statistics／Quantitative（CS）： | 3 | $\square$ |  |  |  |
| Select one course（not already taken）： <br> Natural Science－Quantitative or General（SQ／SG）OR <br> Literacy and Critical Inquiry（L） | 3－4 | $\square$ |  | Grade of C |  |
| Humanities／Fine Arts（HU）with Awareness Area－Historical（H）： | 3 | $\square$ |  |  |  |
| TERM FOUR： $46 \mathbf{6 0}$ CREDIT HOURS |  |  |  |  |  |
| POS Upper Division Elective： | 3 | 区 |  | Grade of C | －Complete SQ／SG or L with a＂C＂or better． <br> －Must complete four POS courses by the end of the semester． <br> －Minimum 2.50 cumulative GPA in political science specialization courses <br> －Complete BLE 220 with a＂C＂or better <br> －Minimum 2．50 ASU cumulative GPA <br> －MILESTONE：Attend orientation |
| POS Upper Division Elective： | 3 | 区 |  | Grade of C |  |
| Related Area（AFR，AFH，AFS，ASB，ASM，CCS，CSH，CSS，ECN， GCU，GPH，HST，PGS，PSY，SOC，WSH，WST） | 3 | $\square$ |  | Grade of C |  |
| Natural Science－Quantitative（SQ）： | 4 | $\square$ |  | Grade of C |  |
| BLE 220：Foundations of SEI | 3 | $\square$ |  | Grade of C |  |
| TERM FIVE： 6175 CREDIT HOURS |  |  |  |  |  |
| POS 311：Arizona Constitution OR <br> POS 417：The Arizona Political System（SB） | 2－3 | 区 |  | Grade of C | －Must possess valid DPS fingerprint clearance card to participate in field experience． <br> －Minimum 2．50 ASU cumulative GPA |
| EDT 300：Computers in Education | 1 | 区 |  | Grade of C |  |
| EDP 311：Educational Psychology for Teachers（SB） | 3 | 区 |  | Grade of C |  |
| SPF 401：Theory and Practice in Education | 1 | 区 |  | Grade of C |  |
| SPF 301：Culture and Schooling（L） | 3 | 区 |  | Grade of C |  |
| SED 403：Middle and Secondary Principles，Curriculum and Methods | 3 | 囚 |  | Grade of C |  |
| SED 496：Field Experience | 1 | 区 |  | Grade of Y |  |
| TERM SIX： $76 \mathbf{9 0}$ CREDIT HOURS |  |  |  |  |  |
| POS Upper Division Elective： | 3 | 区 |  | Grade of C | －Minimum 2．50 ASU cumulative GPA |
| Related Area（AFR，AFH，AFS，ASB，ASM，CCS，CSH，CSS，ECN， GCU，GPH，HST，PGS，PSY，SOC，WSH，WST） | 3 | $\square$ |  | Grade of C |  |
| EDP 303：Human Development（L or SB）OR EDP 313：Childhood and Adolescent Development（SB） | 3 | 区 |  | Grade of C |  |
| RDG 301：Literacy and Instruction in Content Area | 3 | 区 |  | Grade of C |  |
| SED 480：Methods of Teaching Social Studies | 3 | 区 |  | Grade of C |  |
| SED 496：Field Experience | 1 | 区 |  | Grade of Y |  |
| TERM SEVEN： 91105 CREDIT HOURS |  |  |  |  |  |
| POS Upper Division Elective： | 3 | 区 |  | Grade of C | －Minimum 2．50 ASU cumulative GPA |
| Related Area（AFR，AFH，AFS，ASB，ASM，CCS，CSH，CSS，ECN， GCU，GPH，HST，PGS，PSY，SOC，WSH，WST） | 3 | $\square$ |  | Grade of C |  |
| BLE 407：SEI for Secondary | 3 | 区 |  | Grade of C |  |
| SPE 417：Inclusion Practices at the Secondary Level | 3 | 区 |  | Grade of C |  |
| HST 480：Method Teaching History：Classroom Resources OR HST 481：Method Teaching History：Community Resources | 3 | 区 |  | Grade of C |  |
| SED 496：Field Experience | 1 | 区 |  | Grade of Y |  |
| TERM EIGHT： 106120 CREDIT HOURS |  |  |  |  |  |
| SED 478：Student Teaching in Secondary Schools | 12 | 区 |  | Grade of Y | －Minimum 2．50 ASU cumulative GPA |

## Graduation Requirements Summary:

| Total Hours <br> $(120$ minimum $)$ | Total Hrs at ASU <br> $(30$ minimum $)$ | Hrs Resident Credit for Academic <br> Recognition $(56$ minimum $)$ | Major GPA <br> $(2.00$ Min. $)$ | Total UD Hrs <br> $(45$ minimum $)$ | Total Comm. College <br> Hrs. ( 64 maximum $)$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |

## General University Requirements: Legend

- General Studies Core Requirements:
- Literacy and Critical Inquiry (L) (6 credit hours)
- Mathematical Studies (MA) (3 credit hours)
- Computer/Statistics/Quantitative applications (CS) (3 credit hours)
- Humanities, Fine Arts, and Design (HU) (6-9 credit hours)
- Social and Behavioral Sciences (SB) (6-9 credit hours)
- Natural Science-Quantitative (SQ) ( $4-8$ credit hours) (cumulative SQ/SG credit must equal 8 credit hours)
- Natural Science-General (SG) (0-4 credit hours) (cumulative SQ/SG credit must equal 8 credit hours)
- General Studies Awareness Requirements
- Cultural Diversity in the US (C) (3 credit hours) (may be combined with other general studies requirements.)
- Global Awareness (G) ( 3 credit hours) (may be combined with other general studies requirements.)
- Historical Awareness (H) (3 credit hours) (may be combined with other general studies requirements.)
- First-Year Composition (ENG 101 \& 102 OR ENG 107 \& 108 or ENG 105)


## Additional Notes:

Please check course availability in your specialization area, as some courses are not offered every semester.
The requirements outlined on this major map meet ASU's graduation requirements for this catalog year and major; however, certification requirements are determined by the Arizona Department of Education (ADE) and are subject to change. Occasionally, additional courses, which are not outlined on this major map, may be required to obtain certification and/or an Institutional Recommendation. It is highly recommended that you speak with your COE advisor regarding any certification updates or changes.

Major Map ：Secondary Education（Social Studies）－
Bachelor of Arts in Education（B．A．E．）
Mary Lou Fulton College of Education，Tempe Campus
Catalog Year：2008－2009

|  |  |  | Completed ATP：$\square$ Yes $\square$ No |  | Completed AGEC：$\square$ Yes $\square$ No |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 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： 015 CREDIT HOURS |  |  |  |  |  |
| ASU 101：The ASU 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> －Complete 2 of the 10 SST critical requirements in the specialization core <br> －Minimum 2.00 cumulative GPA in specialization courses <br> －Minimum 2．00 ASU cumulative GPA |
| ENG 101 and 102：First－Year Composition OR <br> ENG 107 and 108：English for Foreign Students OR ENG 105：Advanced First－Year Composition | 3 | $\square$ |  | Grade of C |  |
| MAT 142：College Mathematics（MA）or higher | 3 | $\square$ |  | Grade of C |  |
| SST Core： | 3 | $\square$ |  | Grade of C |  |
| SST Core： | 3 | $\square$ |  | Grade of C |  |
| SST Core： | 3 | $\square$ |  | Grade of C |  |
| TERM TWO： 1630 CREDIT HOURS |  |  |  |  |  |
| ENG 101 and 102：First－Year Composition OR <br> ENG 107 and 108：English for Foreign Students OR <br> ENG 105：Advanced First－Year Composition | 3 | $\square$ |  | Grade of C | －Complete Mathematical Studies（MA）requirement <br> －Complete 4 of the 10 SST critical requirements in the specialization core <br> －Minimum 2.50 cumulative GPA in specialization courses <br> －Minimum 2．30 ASU cumulative GPA |
| SPE 222：Orientation Education of the Exceptional Child（SB，C） | 3 | $\square$ |  | Grade of B |  |
| Natural Science－Quantitative or General（SQ／SG）： | 4 | $\square$ |  | Grade of C |  |
| SST Core： | 3 | $\square$ |  | Grade of C |  |
| SST Core： | 3 | $\square$ |  | Grade of C |  |
| TERM THREE： 3145 CREDIT HOURS |  |  |  |  |  |
| SST Core： | 3 | $\square$ |  | Grade of C | －Complete First Year Composition requirement： ENG $101 \& 102$ OR ENG $107 \& 108$ or 105 <br> －Complete 7 of the 10 SST critical requirements in the specialization core <br> －Minimum 2.75 cumulative GPA in specialization courses <br> －Minimum 2．30 ASU cumulative GPA <br> －MILESTONE：Submit intent to progress form （online） <br> －Recommend HST 109 for HU，H and covers US constitution for certification requirement． |
| SST Core： | 3 | $\square$ |  | Grade of C |  |
| SST Core： | 3 | $\square$ |  | Grade of C |  |
| Computer／Statistics／Quantitative（CS）： | 3 | $\square$ |  |  |  |
| Natural Science－Quantitative（SQ）： | 4 | $\square$ |  |  |  |
| TERM FOUR： 46 60 CREDIT HOURS |  |  |  |  |  |
| SST Core： | 3 | $\square$ |  | Grade of C | －Complete SQ／SG or L with a＂C＂or better． <br> －Complete all of the 10 SST critical requirements in the specialization core <br> －Minimum 2.75 cumulative GPA in history specialization courses <br> －Must complete BLE 220 with a grade of＂C＂or better <br> －Minimum 2．50 ASU cumulative GPA <br> －MILESTONE：Attend ITC orientation |
| SST Core： | 3 | $\square$ |  | Grade of C |  |
| Literacy and Critical Inquiry（L）： | 3 | $\square$ |  | Grade of C |  |
| BLE 220：Foundations of SEI | 3 | $\square$ |  | Grade of C |  |
| SST Core： | 3 | $\square$ |  | Grade of C |  |
| TERM FIVE： 6175 CREDIT HOURS |  |  |  |  |  |
| SST Concentration Course： | 3 | $\square$ |  | Grade of C | －Completion of at least 75 credit hours <br> －Minimum 2.5 cumulative ASU GPA at end of the semester <br> －Must possess valid DPS fingerprint clearance card to participate in field experience |
| SST Concentration Course： | 3 | $\square$ |  | Grade of C |  |
| EDP 311：Educational Psychology for Teachers（SB） | 3 | 区 |  | Grade of C |  |
| SPF 301：Culture and Schooling（L） | 3 | 区 |  | Grade of C |  |
| EDT 300：Computers in Education | 1 | 区 |  | Grade of C |  |
| SED 480：Methods of Teaching Social Studies | 3 | 区 |  | Grade of C |  |
| SED 496：Field Experience | 1 | 区 |  | Grade of Y |  |
| TERM SIX： 7690 CREDIT HOURS |  |  |  |  |  |
| SST Concentration Course or Elective： | 3 | $\square$ |  | Grade of C | －Minimum 2．5 GPA |
| SST Concentration Course： | 3 | $\square$ |  | Grade of C |  |
| EDP 303：Human Development（L or SB）OR <br> EDP 313：Childhood and Adolescent Development（SB） | 3 | 区 |  | Grade of C |  |
| RDG 301：Literacy and Instruction in Content Area | 3 | 区 |  | Grade of C |  |
| SPF 401：Theory and Practice in Education | 1 | 区 |  | Grade of C |  |
| SST Concentration Course： | 3 | 区 |  | Grade of C |  |
| SED 496：Field Experience | 1 | 区 |  | Grade of Y |  |
| TERM SEVEN： 91105 CREDIT HOURS |  |  |  |  |  |
| SST Concentration Course or Elective： | 3 | $\square$ |  | Grade of C | －Minimum 2．5 GPA |
| SST Concentration Course： | 3 | $\square$ |  | Grade of C |  |
| BLE 407：SEI for Secondary | 3 | 区 |  | Grade of C |  |
| SPE 417：Inclusion Practices at the Secondary Level | 3 | 区 |  | Grade of C |  |
| HST 480：Method Teaching History：Classroom Resources OR HST 481：Method Teaching History：Community Resources （SEE ADVISOR TO CHOOSE METHODS COURSE） | 3 | 区 |  | Grade of C |  |
| SED 496：Field Experience | 1 | 区 |  | Grade of Y |  |
| TERM EIGHT： 106120 CREDIT HOURS |  |  |  |  |  |
| SED 478：Student Teaching | 12 | 区 |  | Grade of Y | －Minimum 2．5 GPA |

## Graduation Requirements Summary:

| Total Hours <br> $(120$ minimum $)$ | Total Hrs at ASU <br> $(30$ minimum $)$ | Hrs Resident Credit for Academic <br> Recognition $(56$ minimum $)$ | Major GPA <br> $(2.00$ Min. $)$ | Total UD Hrs <br> $(45$ minimum $)$ | Total Comm. College <br> Hrs. ( 64 maximum $)$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |

## General University Requirements: Legend

- General Studies Core Requirements:
- Literacy and Critical Inquiry (L) (6 credit hours)
- Mathematical Studies (MA) (3 credit hours)
- Computer/Statistics/Quantitative applications (CS) (3 credit hours)
- Humanities, Fine Arts, and Design (HU) (6-9 credit hours)
- Social and Behavioral Sciences (SB) (6-9 credit hours)
- Natural Science-Quantitative (SQ) ( $4-8$ credit hours) (cumulative SQ/SG credit must equal 8 credit hours)
- Natural Science-General (SG) (0-4 credit hours) (cumulative SQ/SG credit must equal 8 credit hours)
- General Studies Awareness Requirements
- Cultural Diversity in the US (C) (3 credit hours) (may be combined with other general studies requirements.)
- Global Awareness (G) (3 credit hours) (may be combined with other general studies requirements.)
- Historical Awareness (H) (3 credit hours) (may be combined with other general studies requirements.)
- First-Year Composition (ENG 101 \& 102 OR ENG 107 \& 108 or ENG 105)


## Additional Notes:

Please check course availability in your specialization area, as some courses are not offered every semester.
The requirements outlined on this major map meet ASU's graduation requirements for this catalog year and major; however, certification requirements are determined by the Arizona Department of Education (ADE) and are subject to change. Occasionally, additional courses, which are not outlined on this major map, may be required to obtain certification and/or an Institutional Recommendation. It is highly recommended that you speak with your COE advisor regarding any certification updates or changes.

Social Studies Core (SST - Core) courses
ECN 211: Macroeconomic Principles
ECN 212: Microeconomic Principles
GCU 102: Introduction to Human Geography
GCU 121: World Geography
HST 109: United States to 1865
HST 110: United States since 1865
HST 101: Global History since 1500
HST 103: Western Civilization
HST 104: Western Civilization
HST 107: Asian Civilizations
POS 150: Comparative Government POS 160: Global Politics
POS 110: Government and Politics
POS 310: American National Government

Major Map : Secondary Education (Social Studies) Bachelor of Arts in Education (B.A.E.)
Mary Lou Fulton College of Education, Tempe Campus
Catalog Year: 2008-2009

1) SST - Geography Concentration: GPH $370=$ CS
2) $\mathrm{SST}-$ History and SST - Middle Grade: HST $300=\mathrm{L}$
3) Students can choose from the following concentrations in Social Studies: Economics, Geography, History, Middle Grade, and Political Science.
4) Depending on the SST-Concentration students will need 120-125 credits to complete the SED - Social Studies BAE degree.

| ECONOMIC High School Concentration (24 hrs) | LD | UD | GEOGRAPHY High School Concentration (24 hrs) | LD | UD |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ECN | 3 |  | GCU 141: Introduction to Economic Geog. | 3 |  |
| ECN | 3 |  | GCU 322: Geography of US and Canada |  | 3 |
| UD ECN |  | 3 | GPH 370: Geography Information Technology (CS) |  | 3 |
| UD ECN |  | 3 | GPH 111: Introduction to Physical Geography $\underline{O R}$ GPH 411: Physical Geography |  | 3 |
| UD ECN |  | 3 | Choose from one of the following courses: GCU, 323, 325, 326, $327,328,332,344,421,423,424,425,426,433$ |  | 3 |
| UD ECN |  | 3 | Choose from one of the following: GCU 351, 357, 364, 441, 442 |  | 3 |
| UD ECN |  | 3 | Upper Division GCU or GPH |  | 3 |
| UD ECN |  | 3 | Upper Division GCU or GPH |  | 3 |
| HISTORY High School Concentration (18hrs) | LD | UD | Middle Grade High School Concentration (24-25 hrs) | LD | UD |
| HST 300: Historical Inquiry (L) |  | 3 | GCU 141: Introduction to Economic Geography | 3 |  |
| HST 498: PS: History Pro Seminar |  | 3 | GPH 111: Introduction to Physical Geography $\underline{O R}$ GPH 411: Physical Geography |  | 3 |
| Choose one from the following course: HST 302, 303, 304, 305, 306 |  | 3 | HST 300: Historical Inquiry (L) |  | 3 |
| Choose two of the following courses: <br> HST 372, 375, 376, 378, 384, 388, 391, 394, 447 |  | 3 | Upper Division POS |  | 3 |
| Upper Division HST course |  | 3 | Upper Division POS |  | 3 |
|  |  |  | Upper Division POS |  | 3 |
|  |  |  | Choose 2 courses from the following prefixes: AFR, AFH, AFS, ASB, ASM, CCS, CSH, CSS, CAN, GCU, GPH, HST, JUS, POS, PGS, PSY, SOC, WSH, WST |  |  |
| Political Science High School Concentration (24hrs) | LD | UD |  |  |  |
| POS 101: Political Ideologies | 3 |  |  |  |  |
| POS 301: Empirical Political Inquiry |  | 3 |  |  |  |
| Upper Division Political Science |  | 3 |  |  |  |
| Upper Division Political Science |  | 3 |  |  |  |
| Upper Division Political Science |  | 3 |  |  |  |
| Upper Division Political Science |  | 3 |  |  |  |
| Upper Division Political Science |  | 3 |  |  |  |
| Upper Division Political Science |  | 3 |  |  |  |

Major Map ：Secondary Education（Spanish）－ Bachelor of Arts in Education（B．A．E．）
Mary Lou Fulton College of Education，Tempe Campus
Catalog Year：2008－2009

|  |  |  | Completed ATP：$\square$ Yes $\square$ No |  | Completed AGEC：$\square$ Yes $\square$ No |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 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： 015 CREDIT HOURS |  |  |  |  |  |
| ASU 101：The ASU 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> －Minimum 2．00 ASU cumulative GPA |
| ENG 101 and 102：First－Year Composition OR ENG 107 and 108：English for Foreign Students OR ENG 105：Advanced First－Year Composition | 3 | $\square$ |  | Grade of C |  |
| MAT 142：College Mathematics（MA）or higher | 3 | $\square$ |  | Grade of C |  |
| Natural Science－Quantitative or General（SQ／SG）： | 4 | $\square$ |  | Grade of C |  |
| Computer／Statistics／Quantitative（CS）： | 3 | $\square$ |  |  |  |
| Elective： | 1 | $\square$ |  |  |  |
| TERM TWO： 1630 CREDIT HOURS |  |  |  |  |  |
| ENG 101 and 102：First－Year Composition OR ENG 107 and 108：English for Foreign Students OR ENG 105：Advanced First－Year Composition | 3 | $\square$ |  | Grade of C | －Complete Mathematical Studies（MA）requirement <br> －Minimum 2.75 cumulative GPA in French specialization critical courses <br> －Minimum 2．30 ASU cumulative GPA |
| SPE 222：Orientation Education of the Exceptional Child（SB，C） | 3 | $\square$ |  | Grade of B |  |
| Awareness Area－Historical（H） | 3 | $\square$ |  |  |  |
| BLE 220：Foundations of SEI | 3 | $\square$ |  | Grade of C |  |
| Natural Science－Quantitative（SQ）： | 4 | $\square$ |  |  |  |
| TERM THREE： 3145 CREDIT HOURS |  |  |  |  |  |
| SPA 325：Introduction to Hispanic Literature（HU） | 3 | 囚 |  | Grade of C | －Complete First Year Composition requirement： ENG 101 \＆ 102 OR ENG 107 \＆ 108 or 105 <br> －Complete 3 SPA upper division specialization courses <br> －Minimum 3.00 cumulative GPA in Spanish specialization courses <br> －Minimum 2．50 ASU cumulative GPA <br> －MILESTONE：Submit Intent to Progress form （online） |
| SPA 412：Advanced Conversation and Composition（G） | 3 | 区 |  | Grade of C |  |
| SPA Civilizations（list on page 2）： | 3 | 区 |  | Grade of C |  |
| SPA Elective（list on page 2）： | 3 | 区 |  | Grade of C |  |
| SLC 201：Introduction to Linguistics OR <br> SLC 202：Introduction to Literacy and Cultural Theory（G） | 3 | $\square$ |  | Grade of C |  |
| TERM FOUR 46 60 CREDIT HOURS |  |  |  |  |  |
| SPA 400：Introduction to Spanish Linguistics | 3 | 区 |  | Grade of C | －Complete SQ／SG or L with a＂C＂or better． <br> －Minimum 3.00 cumulative GPA in Spanish specialization courses <br> －Complete BLE 220 with a＂C＂or better <br> －Minimum 2．50 ASU cumulative GPA <br> －MILESTONE：Attend Orientation |
| SPA 425：Spanish Literature（HU） | 3 | 囚 |  | Grade of C |  |
| SPA Literature（list on page 2）： | 3 | 区 |  | Grade of C |  |
| SPA Elective（list on page 2）： | 3 | 区 |  | Grade of C |  |
| SLC 201：Introduction to Linguistics OR <br> SLC 202：Introduction to Literacy and Cultural Theory（G） | 3 | $\square$ |  |  |  |
| TERM FIVE： 6175 CREDIT HOURS |  |  |  |  |  |
| SPA 420：Applied Spanish Linguistics（L） | 3 | 区 |  | Grade of C | －Must possess valid DPS fingerprint clearance card to participate in field experience． <br> －Minimum 2．50 ASU cumulative GPA |
| EDP 311：Educational Psychology for Teachers（SB） | 3 | 区 |  | Grade of C |  |
| EDT 300：Computers in Education | 1 | 区 |  | Grade of C |  |
| SPF 401：Theory \＆Practice in Education | 1 | 区 |  | Grade of C |  |
| SLC 479：Introduction to Teaching Foreign Languages | 3 | $\square$ |  | Grade of C |  |
| SED 403：Middle and Secondary Principles，Curriculum and Methods | 3 | 区 |  | Grade of C |  |
| SED 496：Field Experience | 1 | 区 |  | Grade of Y |  |
| TERM SIX： $76 \mathbf{9 0}$ CREDIT HOURS |  |  |  |  |  |
| SPA Literature（list on page 2）： | 3 | 区 |  | Grade of C | －Minimum 2．50 ASU cumulative GPA |
| SPA Civilizations（list on page 2）： | 3 | 囚 |  | Grade of C |  |
| EDP 303：Human Development（L or SB）OR <br> EDP 313：Childhood and Adolescent Development（SB） | 3 | 区 |  | Grade of C |  |
| RDG 301：Literacy and Instruction in Content Area | 3 | 区 |  | Grade of C |  |
| SLC 480：Methods of Teaching Foreign Languages | 3 | 区 |  | Grade of C |  |
| SED 496：Field Experience | 1 | 区 |  | Grade of Y |  |
| TERM SEVEN： 91105 CREDIT HOURS |  |  |  |  |  |
| SPA Literature（list on page 2）： | 3 | 区 |  | Grade of C | －Minimum 2．50 ASU cumulative GPA |
| SLC 498：Interdisciplinary Capstone Seminar | 3 | 区 |  | Grade of C |  |
| BLE 407 SEI for Secondary Students | 3 | 囚 |  | Grade of C |  |
| SPE 417：Inclusion Practices at the Secondary level | 3 | 区 |  | Grade of C |  |
| SPF 301：Culture and Schooling（L） | 3 | 区 |  | Grade of C |  |
| SED 496：Field Experience | 1 | 区 |  | Grade of Y |  |
| TERM EIGHT： $106 \mathbf{1 2 0}$ CREDIT HOURS |  |  |  |  |  |
| SED 478：Student Teaching in Secondary Schools | 12 | 囚 |  | Grade of Y | －Minimum 2．50 ASU cumulative GPA |

Major Map : Secondary Education (Spanish) Bachelor of Arts in Education (B.A.E.)<br>Mary Lou Fulton College of Education, Tempe Campus<br>Catalog Year: 2008-2009

## Graduation Requirements Summary:

| Total Hours <br> $(120$ minimum $)$ | Total Hrs at ASU <br> $(30$ minimum $)$ | Hrs Resident Credit for Academic <br> Recognition ( 56 minimum $)$ | Major GPA <br> $(2.00$ Min. $)$ | Total UD Hrs <br> $(45$ minimum $)$ | Total Comm. College <br> Hrs. ( 64 maximum) |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |

## General University Requirements: Legend

- General Studies Core Requirements:
- Literacy and Critical Inquiry (L) (6 credit hours)
- Mathematical Studies (MA) (3 credit hours)
- Computer/Statistics/Quantitative applications (CS) (3 credit hours)
- Humanities, Fine Arts, and Design (HU) (6-9 credit hours)
- Social and Behavioral Sciences (SB) (6-9 credit hours)
- Natural Science-Quantitative (SQ) (4-8 credit hours) (cumulative SQ/SG credit must equal 8 credit hours)
- Natural Science-General (SG) (0-4 credit hours) (cumulative SQ/SG credit must equal 8 credit hours)
- General Studies Awareness Requirements
- Cultural Diversity in the US (C) (3 credit hours) (may be combined with other general studies requirements.)
- Global Awareness (G) ( 3 credit hours) (may be combined with other general studies requirements.)
- Historical Awareness (H) (3 credit hours) (may be combined with other general studies requirements.)
- First-Year Composition (ENG 101 \& 102 OR ENG 107 \& 108 or ENG 105)


## Additional Notes:

Please check course availability in your specialization area as some courses are not offered every semester.

The requirements outlined on this major map meet ASU's graduation requirements for this catalog year and major; however, certification requirements are determined by the Arizona Department of Education (ADE) and are subject to change. Occasionally, additional courses, which are not outlined on this major map, may be required to obtain certification and/or an Institutional Recommendation. It is highly recommended that you speak with your COE advisor regarding any certification updates or changes.

```
SPA Elective - select two from the following
SPA 394: Special Topics
SPA 413: Advanced Spanish Grammar (G)
SPA 429: Mexican Literature
SPA 434: Drama of the Golden Age
SPA 435: Cervantes-Don Quijote
SPA 454: 19 th Century Spanish American Narrative
SPA 456: 20 }\mp@subsup{0}{}{\mathrm{ th }}\mathrm{ Century Spanish American Fiction
SPA 474: Mexican Culture
SPA 485: Mexican American Short Story (L)
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
```

SPA Civilizations - select two from the following.
SPA 471: Civilization of the Spanish Southwest
SPA 472: Spanish American Civilization (HU, H, G)
SPA 473: Spanish Civilization (HU/SB, G)
SPA Literature - select three from the following:
SPA 426: Spanish Literature (HU)
SPA 427: Spanish American Literature (L)
SPA 428: Spanish American Literature (L, G)
SPA 429: Mexican Literature

Major Map: Special Education -
Bachelor of Arts in Education (B.A.E.)
Mary Lou Fulton College of Education, Tempe Campus
Catalog Year: 2008-2009


Major Map：Special Education－<br>Bachelor of Arts in Education（B．A．E．）<br>Mary Lou Fulton College of Education，Tempe Campus Catalog Year：2008－2009

| 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： 91105 CREDIT HOURS |  |  |  |  |  |
| SPE 411：Parental Involvement and Regulatory Issues | 3 | 区 |  | Grade of C | －Minimum 2．50 ASU cumulative GPA |
| SPE 414：Instructional Management and Strategies：Reading\＆ Writing | 3 | 囚 |  | Grade of C |  |
| SPE 415：Classroom and Behavior Management | 3 | 囚 |  | Grade of C |  |
| SPE 419：Instruction in Content Areas：Science and Social Studies | 3 | 囚 |  | Grade of C |  |
| SPE 413：Methods in Language，Reading，and Mathematics for Exceptional Children | 3 | 区 |  | Grade of C |  |
| SPE 496：Field Experience | 1 | 区 |  | Grade of Y |  |
| TERM EIGHT： $106 \mathbf{1 2 0}$ CREDIT HOURS |  |  |  |  |  |
| SPE 478：Student Training in Special Education | 12 | 区 |  | Grade of Y | －Minimum 2．50 ASU cumulative GPA |

## Graduation Requirements Summary：

| Total Hours <br> $(120$ minimum $)$ | Total Hrs at ASU <br> $(30$ minimum $)$ | Hrs Resident Credit for Academic <br> Recognition $(56$ minimum $)$ | Major GPA <br> $(2.00$ Min．$)$ | Total UD Hrs <br> $(45$ minimum $)$ | Total Comm．College <br> Hrs．（ 64 maximum） |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |

## General University Requirements：Legend

－General Studies Core Requirements：
－Literacy and Critical Inquiry（L）（6 credit hours）
－Mathematical Studies（MA）（3 credit hours）
－Computer／Statistics／Quantitative applications（CS）（3 credit hours）
－Humanities，Fine Arts，and Design（HU）（6－9 credit hours）
－Social and Behavioral Sciences（SB）（6－9 credit hours）
－Natural Science－Quantitative（SQ）（ $4-8$ credit hours）（cumulative SQ／SG credit must equal 8 credit hours）
－Natural Science－General（SG）（0－4 credit hours）（cumulative SQ／SG credit must equal 8 credit hours）
－General Studies Awareness Requirements
－Cultural Diversity in the US（C）（3 credit hours）（may be combined with other general studies requirements．）
－Global Awareness（G）（3 credit hours）（may be combined with other general studies requirements．）
－Historical Awareness（H）（3 credit hours）（may be combined with other general studies requirements．）
－First－Year Composition（ENG 101 \＆ 102 OR ENG 107 \＆ 108 or ENG 105）

## Additional Notes：

Minimum 3.00 cumulative GPA required in BLE 220，SPE 309，SPE 222，MTE 180 and MTE 181.
The requirements outlined on this major map meet ASU＇s graduation requirements for this catalog year and major；however，certification requirements are determined by the Arizona Department of Education（ADE）and are subject to change．Occasionally，additional courses，which are not outlined on this major map，may be required to obtain certification and／or an Institutional Recommendation．It is highly recommended that you speak with your COE advisor regarding any certification updates or changes．

Major Map: Early Childhood Education -
Bachelor of Arts in Education (B.A.E.)
School of Educational Innovation and Teacher Preparation, Polytechnic Campus Catalog Year: 2008-2009

|  |  |  | Completed ATP: $\square$ Yes $\square$ No |  | Completed AGEC: $\square$ Yes $\square$ No |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Course Subject and Title (courses in bold/shading are critical) | Hrs. | Upper Division | Transfer Course/Grade | Minimum Grade if Required |  |
| TERM ONE: 015 CREDIT HOURS |  |  |  |  |  |
| ASU 101: The ASU 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> - Recommended course: EDC 294: Special Topics - Education in the Community (elective) <br> - Minimum 2.00 ASU cumulative GPA |
| 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 |  |
| CED 111 or TEL 111: Survey of Education (SB) | 3 | $\square$ |  | Grade of C |  |
| MAT 142: College Mathematics or higher (MA) | 3 | $\square$ |  | Grade of C |  |
| Computer/Statistics/Quantitative Applications (CS): | 3 | $\square$ |  |  |  |
| Elective (recommend ECD 294):: | 3 | $\square$ |  |  |  |

The Early Childhood program in the School of Educational Innovation and Teacher Preparation is undergoing revisions for 2008-2009. An updated major map will be available in April 2008.

## Graduation Requirements Summary:

| Total Hours (120) | Total Hrs at ASU <br> $($ minimum 30) | Resident Credit for Academic <br> Recognition (minimum 56) | Major GPA (2.50 <br> Min.) | Total UD Hrs <br> (minimum 45) | Total Comm. College <br> Hrs. (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:

Major Map : Elementary Education - Bachelor of Arts in
Education (B.A.E.)
$\begin{aligned} & \text { School of Educational Innovation and Teacher Preparation, Polytechnic Campus } \\ & \text { Catalog Year: } 2008-2009\end{aligned}$ Catalog Year: 2008-2009

|  |  |  | Completed ATP: $\square$ Yes $\square$ No |  | Completed AGEC: $\square$ Yes $\square$ No |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 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: 015 CREDIT HOURS |  |  |  |  |  |
| ASU 101: The ASU 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> - Recommended course: EDC 294: Special Topics - Education in the Community (elective) <br> - Minimum 2.00 ASU cumulative GPA |
| 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 or higher (MA) | 3 | $\square$ |  | Grade of C |  |
| Social/Behavioral Science (SB): | 3 | $\square$ |  |  |  |
| Computer/Statistics/Quantitative Applications (CS): | 3 | $\square$ |  |  |  |
| Elective (recommend ECD 294): | 3 | $\square$ |  |  |  |
| TERM TWO: 1630 CREDIT HOURS |  |  |  |  |  |
| 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 | - MA (MAT 142 or above) must be completed <br> - Recommended: HST 109 (HU, H) to fulfill US Constitution requirement for Arizona teacher certification <br> - Minimum 2.20 ASU cumulative GPA |
| MCE 230: Understanding the Culturally Divers Child (C) OR SPE 222: Orientation Education of Exceptional Children (SB, C) | 3 | $\square$ |  | Grade of C |  |
| MTE 180: Mathematics for Elementary Teachers I | 3 | $\square$ |  | Grade of C |  |
| Science (SQ/SG): | 4 | $\square$ |  |  |  |
| Humanities/Fine Arts (HU) with Awareness Area (H): | 3 | $\square$ |  |  |  |
| TERM THREE: 3145 CREDIT HOURS |  |  |  |  |  |
| MCE 230: Understanding the Culturally Divers Child (C) OR SPE 222: Orientation Education of Exceptional Children (SB, C) | 3 | $\square$ |  | Grade of C | - Complete First Year Composition requirement: ENG 101 \& 102 OR ENG 107 \& 108 or 105 <br> - Minimum 2.40 ASU cumulative GPA |
| Science (SQ/: | 4 | $\square$ |  | Grade of C |  |
| MTE 181: Mathematics for Elementary Teachers II | 3 | $\square$ |  | Grade of C |  |
| Literacy and Critical Inquiry (L): | 3 | $\square$ |  |  |  |
| Humanities/Fine Arts (HU) with Awareness Area (G): | 3 | $\square$ |  |  |  |
| TERM FOUR: $46 \mathbf{6 0}$ CREDIT HOURS |  |  |  |  |  |
| EDP: 311: Educational Psychology for Teachers (SB) | 3 | $\square$ |  | Grade of C | - All critical courses completed <br> - CS course completed <br> - Milestone: Resume <br> - Milestone: Two professional letters of recommendation <br> - Selection of appropriate Child Development Course depends on Arizona Department of Education certification requirements for the grade level the student plans to teach - see an advisor for course selection. <br> - Minimum 2.50 GPA in all critical courses <br> - Minimum 2.50 ASU cumulative GPA |
| EDC 340: Writing and the Professional Educator (L) | 3 | $\square$ |  | Grade of C |  |
| Child Development Course (EDP 303: Human Development, EDP 313: Childhood and Adolescence, or equivalent - see department advisor) | 3 | $\square$ |  | Grade of C |  |
| Elective: | 3 | $\square$ |  |  |  |
| Elective: | 3 | $\square$ |  |  |  |
| TERM FIVE: 6175 CREDIT HOURS |  |  |  |  |  |
| EDC 320: Integrated Learning Experience I: Learning Climate | 2 | $\square$ |  | Grade of C | - MTE 181 completed <br> - Minimum 2.50 ASU cumulative GPA |
| EDC 330: Literacy I: Emerging Literacy | 3 | $\square$ |  | Grade of C |  |
| EDC 355: Accommodating Instruction for Diverse Learners | 3 | $\square$ |  | Grade of C |  |
| EDC 354: Educational Media in the Classroom | 3 | $\square$ |  | Grade of C |  |
| EDC 474: Field Experience | 1 | $\square$ |  |  |  |
| Elective: | 3 | $\square$ |  |  |  |
| TERM SIX: 7690 CREDIT HOURS |  |  |  |  |  |
| EDC 325: Integrated Learning Experience II: Instructional Design and Implementation | 2 | $\square$ |  | Grade of C | - Science courses (SQ and SQ/SG) completed <br> - Minimum 2.50 ASU cumulative GPA |
| EDC 335: Literacy II: Intermediate Literacy and Phonetic Principles | 3 | $\square$ |  | Grade of C |  |
| EDC 345: Math Methods for the Elementary Classroom | 3 | $\square$ |  | Grade of C |  |
| ELL 415: Structured English Immersion (SEI) Methods | 3 | $\square$ |  | Grade of C |  |
| EDC 474: Field Experience | 1 | $\square$ |  |  |  |
| Elective: | 3 | $\square$ |  |  |  |

# Major Map : Elementary Education - Bachelor of Arts in 

 Education (B.A.E.)School of Educational Innovation and Teacher Preparation, Polytechnic Campus Catalog Year: 2008-2009

| Course Subject and Title (courses in bold/shading are critical) | Hrs. | Upper Division | Transfer Course/Grade | $\begin{aligned} & \text { Minimum Grade if } \\ & \text { Required } \\ & \hline \end{aligned}$ | Additional Critical Tracking Notes |
| :---: | :---: | :---: | :---: | :---: | :---: |
| TERM SEVEN: 91105 CREDIT HOURS |  |  |  |  |  |
| EDC 420: Integrated Learning Experience III: Assessment | 2 | $\square$ |  | Grade of C | - All General Studies and School of Education requirements must be complete <br> - Minimum 2.50 ASU cumulative |
| EDC 430: Literacy III: Interventions | 3 | $\square$ |  | Grade of C |  |
| EDC 440: Science Methods for the Elementary Classroom | 3 | $\square$ |  | Grade of C |  |
| EDC 450: Social Studies Methods for the Elementary Classroom | 3 | $\square$ |  | Grade of C |  |
| EDC 474: Field Experience | 1 | $\square$ |  |  |  |
| Elective: | 3 | $\square$ |  |  |  |
| Elective: | 1 | $\square$ |  |  |  |
| TERM EIGHT: $106 \mathbf{1 2 0}$ CREDIT HOURS |  |  |  |  |  |
| EDC 425: Integrated Learning Experience IV: Advanced Management and Professional Knowledge | 2 | $\square$ |  | Grade of C | - Minimum 2.5 cumulative ASU GPA at end of the semester |
| EDC 484: Internship | 10 | $\square$ |  |  |  |

Graduation Requirements Summary:

| Total Hours (120) | Total Hrs at ASU <br> (minimum 30) | Resident Credit for Academic <br> Recognition (minimum 56) | Major GPA (2.50 <br> Min.) | Total UD Hrs <br> (minimum 45) | Total Comm. College <br> Hrs. (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:

Major Map : Secondary Education (Physical Education)<br>- Bachelor of Arts in Education (B.A.E.)<br>School of Educational Innovation and Teacher Preparation, Polytechnic Campus<br>Catalog Year: 2008-2009

|  |  |  | Completed ATP: $\square$ Yes $\square$ No |  | Completed AGEC: $\square$ Yes $\square$ No |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 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: 015 CREDIT HOURS |  |  |  |  |  |
| ASU 101: The ASU 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> - Recommended SQ: BIO 100 <br> - Recommended course: EDC 294: Special Topics - Education in the Community (elective) Minimum 2.00 ASU cumulative GPA |
| 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 |  |  |  |  |  |
| MAT 142: College Mathematics or higher (MA) <br> Science (SQ): | 3 | $\square$ |  | Grade of C |  |
|  | 4 | $\square$ |  | Grade of C |  |
| PPE 210: Teaching Fitness Activities for K-12 Students, PPE 215: Teaching Team Sports, PPE 220: Teaching Lifetime Activity K-12, PPE 225: Teaching Cooperative and Initiative Games Or EXW 212: Instructional Competency Laboratory | 2 | $\square$ |  | Grade of C |  |
| Elective (recommend ECD 294): | 3 | $\square$ |  |  |  |
| TERM TWO: 1630 CREDIT HOURS |  |  |  |  |  |
| 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 | - MA (MAT 142 or above) must be completed <br> - Recommended: HST 109 (HU, H) to fulfill US Constitution requirement for Arizona teacher certification <br> - Minimum 2.20 ASU cumulative GPA |
| SPE 222: Orientation to Education of Exceptional Children (SB,C) | 3 | $\square$ |  | Grade of C |  |
| BIO 201: Human Anatomy/Physiology I (SG) : | 4 | $\square$ |  | Grade of C |  |
| PPE 210: Teaching Fitness Activities for K-12 Students, PPE 215: Teaching Team Sports, PPE 220: Teaching Lifetime Activity K-12, PPE 225: Teaching Cooperative and Initiative Games Or EXW 212: Instructional Competency Laboratory | 2 | $\square$ |  | Grade of C |  |
| Humanities/Fine Arts (HU) with Awareness Area (H): | 3 | $\square$ |  |  |  |
| TERM THREE: 3145 CREDIT HOURS |  |  |  |  |  |
| PGS 101: Introduction to Psychology (SB) | 3 | $\square$ |  | Grade of C | - Complete First Year Composition requirement: ENG 101 \& 102 OR ENG 107 \& 108 or 105 <br> - Recommend Literacy and Critical Inquiry (L): <br> PPE 365: Teaching Physical Activity Concepts <br> - Minimum 2.40 ASU cumulative GPA |
| EXW 310: Computers Skills and Technology for Exercise and Wellness (CS) | 3 | $\square$ |  | Grade of C |  |
| BIO 201: Human Anatomy/Physiology II: | 4 | $\square$ |  | Grade of C |  |
| Literacy and Critical Inquiry (L): | 3 | $\square$ |  |  |  |
| Humanities/Fine Arts (HU) with Awareness Area (G): | 3 | $\square$ |  |  |  |
| TERM FOUR: 4660 CREDIT HOURS |  |  |  |  |  |
| EDP 311: Educational Psychology for Teachers (SB) | 3 | $\square$ |  | Grade of C | - All critical courses completed <br> - BIO 202 completed <br> - Milestone: Resume <br> - Milestone: Two professional letters of recommendation <br> - Minimum 2.50 GPA in all critical courses <br> - Minimum 2.50 ASU cumulative GPA |
| EXW 300: Foundations of Exercise and Wellness (SB) | 3 | $\square$ |  | Grade of C |  |
| EXW 450: Cultural and Social Issues in Exercise and Wellness (L or SB; \& C) | 3 | $\square$ |  | Grade of C |  |
| PPE 210: Teaching Fitness Activities for K-12 Students, PPE 215: Teaching Team Sports, PPE 220: Teaching Lifetime Activity K-12, PPE 225: Teaching Cooperative and Initiative Games Or EXW 212: Instructional Competency Laboratory | 2 | $\square$ |  | Grade of C |  |
| Elective: | 3 | $\square$ |  |  |  |
| Elective: | 3 | $\square$ |  |  |  |
| TERM FIVE: 6175 CREDIT HOURS |  |  |  |  |  |
| EDP 303: Human Development or EDP 313: Childhood and Adolescence | 3 | $\square$ |  | Grade of C | - Minimum 2.50 ASU cumulative GPA |
| EXW 315: Physiological Foundations of Movement OR EXW 330: Kinesiological Foundations of Movement | 3 | $\square$ |  | Grade of C |  |
| PPE 350: Elementary Methods | 3 | $\square$ |  | Grade of C |  |
| PPE 355: Secondary Methods | 3 | $\square$ |  | Grade of C |  |
| ELL 415: Structured English Immersion (SEI) Methods | 3 | $\square$ |  | Grade of C |  |
| TERM SIX: 7690 CREDIT HOURS |  |  |  |  | - Science courses (SQ and SQ/SG) completed <br> - Minimum 2.50 ASU cumulative GPA |
| EXW 315: Physiological Foundations of Movement OR EXW 330: Kinesiological Foundations of Movement | 3 | $\square$ |  | Grade of C |  |
| PPE 360: Adaptive and Inclusive Physical Education | 3 | $\square$ |  | Grade of C |  |
| PPE 474: Field Experience in Physical Education | 1 | $\square$ |  | Grade of C |  |
| RDG 301: Literacy in the Content Area | 3 | $\square$ |  | Grade of C |  |
| Elective | 3 | $\square$ |  | Grade of C |  |
| Elective | 1 | $\square$ |  |  |  |


| 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: 91105 CREDIT HOURS |  |  |  |  |  |
| PPE 484: Internship: Student Teaching (Elementary) | 6 | $\square$ |  | Grade of C | - All General Studies and School of Education requirements must be complete <br> - Minimum 2.50 ASU cumulative |
| PPE 480: Professional Seminar for Physical Education | 3 | $\square$ |  | Grade of C |  |
| Elective: | 3 | $\square$ |  |  |  |
| Elective: | 3 | $\square$ |  | Grade of C |  |
| TERM EIGHT: 106120 CREDIT HOURS |  |  |  |  |  |
| PPE 484: Internship: Student Teaching (Secondary) | 6 | $\square$ |  | Grade of C | - Minimum 2.5 cumulative ASU GPA at end of the semester |
| EDC 405: Classroom Management K-12 | 3 | $\square$ |  | Grade of C |  |
| Elective: | 3 | $\square$ |  |  |  |

## Graduation Requirements Summary:

| Total Hours (120) | Total Hrs at ASU <br> (minimum 30) | Resident Credit for Academic <br> Recognition (minimum 56) | Major GPA (2.50 <br> Min.) | Total UD Hrs <br> (minimum 45) | Total Comm. College <br> Hrs. (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:

Major Map: Special Education -
Bachelor of Arts in Education (B.A.E.)
School of Educational Innovation and Teacher Preparation, Polytechnic Campus Catalog Year: 2008-2009

|  |  |  | Completed ATP: $\square$ Yes $\square$ No |  | Completed AGEC: $\square$ Yes $\square$ No |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 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: 015 CREDIT HOURS |  |  |  |  |  |
| ASU 101: The ASU Experience | 1 | $\square$ |  | Grade of C | - ASU 101 is for ASU freshman students only. Not required of transfer students |
| 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 | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses |
| CED 111 or TEL 111: Survey of Education (SB) | 3 | $\square$ |  | Grade of C | - ASU Math Placement Exam score determines |
| MAT 142: College Mathematics or higher (MA) | 3 | $\square$ |  | Grade of C | placement in Mathematics course |
| Computer/Statistics/Quantitative (CS): | 3 | $\square$ |  |  | Topics - Education in the Community (elective) |
| Elective (recommend ECD 294): | 2 | $\square$ |  |  | Minimum 2.00 ASU cumulative GPA |

The Special Education program in the School of Educational Innovation and Teacher Preparation is undergoing revisions for 2008-2009. An updated major map will be available in April 2008.

Graduation Requirements Summary:

| Total Hours <br> $(120$ hours $)$ | Total Hrs at ASU <br> (minimum 30) | Resident Credit for Academic <br> Recognition (minimum 56) | Major GPA <br> $(2.50$ Min. $)$ | Total UD Hrs <br> (minimum 45) | Total Comm. College <br> Hrs. (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) |
| $\circ$ | Natural Science-General (SG) |
| eral | Studies Awareness Requirements |
| $\circ$ | Cultural Diversity in the US (C) |
| $\circ$ | Global Awareness (G) |
| $\circ$ | Historical Awareness (H) |

- First-Year Composition


## Additional Notes:

Major Map: Aerospace Engineering (Aeronautics) Bachelor of Science in Engineering (B.S.E.)
Ira A. Fulton School of Engineering, Tempe Campus
Catalog Year: 2008-2009


## Graduation Requirements Summary:

| Total Hours Regular <br> Curriculum (120) | Total Hrs at ASU (30 <br> $\mathrm{min})$ | Hrs Resident Credit for Academic <br> Recognition <br> $(56 \mathrm{~min})$ | Major GPA (2.000 <br> Min. CUM GPA $)$ | Total UD Hrs (45 <br> $\mathrm{min})$ | Total Comm. College <br> Hrs. (64 Max) |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |

## 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:

## Major Map：Aerospace Engineering（Astronautics）－ Bachelor of Science in Engineering（B．S．E．） <br> Ira A．Fulton School of Engineering，Tempe Campus <br> Catalog Year：2008－2009

|  |  |  | Completed ATP：$\square$ Yes $\square$ No |  | Completed AGEC：$\square$ Yes $\square$ No |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 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： 015 CREDIT HOURS |  |  |  |  |  |
| ASU 101：The ASU Experience | 1 | $\square$ |  |  | －Complete CHM 114 or 116 or 115 or SES 100 with a minimum grade of＂C＂ <br> －Complete MAT 265 with a min grade of＂C＂ <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> ＊CHM 113 is a prerequisite and does not apply towards degree credit <br> ＊＊If ENG 105 a 3 hr applicable elective must also be taken prior to graduation．See Advisor． <br> \＃Designates Major Course：A minimum cumulative GPA of 2.0 required． |
| CHM 114：General Chemistry for Engineers（SQ）OR <br> CHM 115：General Chemistry with Qualitative Analysis（SQ）OR <br> CHM 116：General Chemistry II＊（SQ） | 4 | $\square$ |  | Grade of C |  |
| \＃SES 100：Introduction to Exploration OR |  |  |  |  |  |
| Social \＆Behavioral Science（SB）AND Cultural Diversity in the US （C），Global Awareness（G），or Historical Awareness（H）： | 3 | $\square$ |  | Grade of C in SES $100$ |  |
| MAT 265：Calculus for Engineers I（MA） | 3 | $\square$ |  | Grade of C |  |
| 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 |  |
| TERM TWO： 1630 CREDIT HOURS |  |  |  |  |  |
| \＃SES 100：Intro to Mechanical and Aerospace Engineering， if completed take Social \＆Behavioral Science（SB）AND Cultural Diversity in the US （C），Global Awareness（G），or Historical Awareness（H）： | 3 | $\square$ |  |  | －Complete CHM 114 or 116 or 115；MAT 266； PHY 121，122；SES 100 with a minimum grade of＂C＂ <br> \＃Designates Major Course：A minimum cumulative GPA of 2.0 required．＂ |
| MAT 266：Calculus for Engineers II | 3 | $\square$ |  | Grade of C |  |
| PHY 121／122：University Physics I／Laboratory I（SQ） | 3／1 | $\square$ |  | Grade of C |  |
| Humanities，Fine Arts \＆Design（HU）AND Cultural Diversity in the US（C），Global Awareness（G），or Historical Awareness（H）： | 3 | $\square$ |  |  |  |
| 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 |  |
| TERM THREE： 3145 CREDIT HOURS |  |  |  |  |  |
| \＃MAE 212：Engineering Mechanics | 4 | $\square$ |  | Grade of C | －Complete ENG 102 or 108 or 105；MAE 212； MAT 267， 275 with a minimum grade of＂C＂ <br> －Complete First－Year Composition requirement： ENG 101 \＆ 102 or ENG 107 \＆ 108 or ENG 105 <br> \＃Designates Major Course：A minimum cumulative GPA of 2.0 required． |
| MAT 275：Modern Differential Equations | 3 | $\square$ |  | Grade of C |  |
| MAT 267：Calculus for Engineers III | 3 | $\square$ |  | Grade of C |  |
| \＃SES 210：Engineering Systems and Experimental Design | 3 | $\square$ |  |  |  |
| TERM FOUR： $46 \mathbf{6 0}$ CREDIT HOURS |  |  |  |  |  |
| \＃MAE 213：Solid Mechanics | 3 | $\square$ |  |  | －Complete MAE 213. <br> \＃Designates Major Course：A minimum cumulative GPA of 2.0 required． |
| \＃MAE 214：Computer－Aided Engineering I | 1 | $\square$ |  |  |  |
| \＃MAE 240：Thermofluids I | 4 | $\square$ |  |  |  |
| PHY 131／132：University Physics II Electricity and Magnetism／ Laboratory II（SQ） | 3／1 | $\square$ |  | Grade of C |  |
| MAT 343：Applied Linear Algebra | 3 | 区 |  | Grade of C |  |
| TERM FIVE： 6175 CREDIT HOURS |  |  |  |  |  |
| \＃EEE 202：Circuits I | 4 | $\square$ |  |  | \＃Designates Major Course：A minimum cumulative GPA of 2.0 required． |
| \＃MAE 384：Numerical Methods for Engineers（CS） | 3 | 区 |  |  |  |
| \＃SES 310：Elec／Mech Engineering Design | 3 | 区 |  |  |  |
| Literacy and Critical Inquiry（L）： | 3 | $\square$ |  |  |  |
| Social \＆Behavioral Science（SB）AND Cultural Diversity in the US （C），Global Awareness（G），or Historical Awareness（H）： | 3 | $\square$ |  |  |  |
| TERM SIX： $76 \mathbf{9 0}$ CREDIT HOURS |  |  |  |  |  |
| \＃MAE 318：Sensors and Controls | 5 | 区 |  |  | \＃Designates Major Course：A minimum cumulative GPA of 2.0 required． |
| \＃MAE 345：Structures in a Space Environment | 4 | 区 |  |  |  |
| \＃MAE 362：High－Speed Aerodynamics | 4 | 区 |  |  |  |
| \＃SES 311：Essentials of Astrobiology，Life in the Universe | 3 | 区 |  |  |  |
| TERM SEVEN： 91105 CREDIT HOURS |  |  |  |  |  |
| \＃EEE 304：Signals \＆Systems II | 4 | 区 |  |  | \＃Designates Major Course：A minimum cumulative GPA of 2.0 required． |
| \＃MAE 462：Space Vehicle Dynamics and Control | 3 | 区 |  |  |  |
| \＃MAE 465：Rocket Propulsion | 3 | 区 |  |  |  |
| \＃SES 410：Senior Exploration Project I | 3 | 囚 |  |  |  |
| UD Humanities，Fine Arts \＆Design（HU）OR Social \＆Behavioral Science（SB）： | 3 | 区 |  |  |  |
| TERM EIGHT： 106120 CREDIT HOURS |  |  |  |  |  |
| \＃MAE 400：Engineering Profession（L） | 3 | 区 |  |  | \＃Designates Major Course：A minimum cumulative GPA of 2.0 required． |
| \＃SES 411：Senior Exploration Project II | 3 | 区 |  |  |  |
| \＃Aeronautics Elective： | 3 | 区 |  |  |  |
| Elective： | 3 | $\square$ |  |  |  |
| Humanities，Fine Arts \＆Design（HU）AND Cultural Diversity in the US（C），Global Awareness（G），or Historical Awareness（H）： | 3 | $\square$ |  |  |  |

Major Map: Aerospace Engineering (Astronautics) Bachelor of Science in Engineering (B.S.E.)
Ira A. Fulton School of Engineering, Tempe Campus
Catalog Year: 2008-2009

## Graduation Requirements Summary:

| Total Hours Regular <br> Curriculum (120) | Total Hrs at ASU (30 <br> $\mathrm{min})$ | Hrs Resident Credit for Academic <br> Recognition <br> $(56 \mathrm{~min})$ | Major GPA (2.000 <br> Min cum GPA.) | Total UD Hrs (45 <br> $\mathrm{min})$ | Total Comm. College <br> Hrs. (64 Max) |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |

## 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:

Major Map：Bioengineering－
Bachelor of Science in Engineering（B．S．E．）
Ira A．Fulton School of Engineering，Tempe Campus
Catalog Year：2008－2009

|  |  |  | Completed ATP：$\square$ Yes $\square$ No |  | Completed AGEC：$\square$ Yes $\square$ No |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 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： 015 CREDIT HOURS |  |  |  |  |  |
| ASU 101：The ASU Experience | 1 | $\square$ |  |  | －Complete MAT 265 with a minimum grade of ＂C＂ <br> －Complete 2 of：BME 100 with a minimum grade of＂C＂；BME 111\＆ 112 with a minimum grade of＂C＂OR BIO 188；CHM 114 or 116 <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> ＊CHM 113 is a prerequisite and does not apply towards degree credit <br> ＊＊If ENG 105 a 3 hr applicable elective must also be taken prior to graduation．See Advisor． |
| BME 100：Introduction to Bioengineering OR BME 111／112：Engineering Perspectives on Biological Systems／Laboratory or BIO 188：General Biology II（SQ） | $\begin{gathered} 2 \text { or } \\ 4 \\ \hline \end{gathered}$ | $\square$ |  | Grade of C in BME 100；BME 111／112 |  |
| CHM 114：General Chemistry for Engineers（SQ）OR CHM 116：General Chemistry II＊ | 4 | $\square$ |  |  |  |
| MAT 265：Calculus for Engineers 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 | $\square$ |  | Grade of C |  |
| TERM TWO： 1630 CREDIT HOURS |  |  |  |  |  |
| BME 100：Introduction to Bioengineering OR BME 111／112：Engineering Perspectives on Biological Systems／Laboratory or BIO 188：General Biology II（SQ） | $\begin{gathered} 2 \text { or } \\ 4 \\ \hline \end{gathered}$ | $\square$ |  | Grade of C in BME 100；BME 111／112 | －Complete BME 100 with a minimum grade of ＂C＂ <br> －Complete BME 11\＆ 112 with a minimum grade of＂C＂or BIO 188 <br> －Complete CHM 114 or 116 <br> －Complete MAT 266 with a minimum grade of ＂C＂ <br> －Complete PHY 121／122 |
| MAT 266：Calculus for Engineers II | 3 | $\square$ |  | Grade of C |  |
| PHY 121／122：University Physics I／Laboratory I（SQ） | 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： 3145 CREDIT HOURS |  |  |  |  |  |
| BME 235：Physiology for Engineers | 4 | $\square$ |  | Grade of C | －Complete MAT 267 with a minimum grade of＂C＂；PHY 131， 132 <br> －Complete First Year Composition requirement： ENG 101 \＆ 102 or ENG 107 \＆ 108 or ENG 105 |
| MAT 267：Calculus for Engineers III | 3 | $\square$ |  | Grade of C |  |
| PHY 131／132：University Physics Electricity and Magnetism II／ Laboratory II（SQ） | 3／1 | $\square$ |  |  |  |
| CHM 231／235：Elementary Organic Chemistry／Laboratory or CHM 233／237：General Organic Chemistry I／Laboratory I | 3／1 | $\square$ |  |  |  |
| CSE 100：Principles of Programming with C＋＋（CS） | 3 | $\square$ |  |  |  |
| TERM FOUR： $46 \mathbf{6 0}$ CREDIT HOURS |  |  |  |  |  |
| BME 200：Conservation Principles of Bioengineering | 3 | $\square$ |  | Grade of C | －Complete BME 200， 235 each with a minimum grade of＂$C$＂ |
| EEE 202：Circuits I | 4 | $\square$ |  |  |  |
| MAE 212：Engineering Mechanics | 4 | $\square$ |  |  |  |
| MAT 275：Modern Differential Equations（MA） | 3 | $\square$ |  |  |  |
| Humanities，Fine Arts \＆Design（HU）AND Cultural Diversity in the US （C），Global Awareness（G）or Historical Awareness（H） | 3 | $\square$ |  |  |  |
| TERM FIVE： 6175 CREDIT HOURS |  |  |  |  |  |
| \＃BME 318：Biomaterials | 4 | 区 |  | Grade of C | \＃Designates Major Course：A minimum cumulative GPA of 2.0 required． |
| \＃BME 350：Signals and Systems for Bioengineering | 3 | 区 |  | Grade of C |  |
| \＃CHM 341：Elementary Physical Chemistry | 3 | 区 |  |  |  |
| \＃MAT 343：Applied Linear Algebra | 3 | $\boxtimes$ |  |  |  |
| \＃IEE 380：Probability and Statistics for Engineering Problem Solving （CS） | 3 | 区 |  |  |  |
| TERM SIX： $76 \mathbf{9 0}$ CREDIT HOURS |  |  |  |  |  |
| \＃BME 300：Bioengineering Product Design | 3 | 区 |  | Grade of C | \＃Designates Major Course：A minimum cumulative GPA of 2.0 required． |
| \＃BME 331：Bioengineering Transport Phenomena | 3 | 区 |  | Grade of C |  |
| \＃BME 370：Microcomputer Applications in Bioengineering | 3 | 区 |  | Grade of C |  |
| 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 Diversity in the US（C）， Global Awareness（G）or Historical Awareness（H） | 3 | $\square$ |  |  |  |
| TERM SEVEN： 91105 CREDIT HOURS |  |  |  |  |  |
| \＃BME 413：Biomedical Instrumentation（BME 413 \＆423＝L） | 3 | 区 |  | Grade of C | \＃Designates Major Course：A minimum cumulative GPA of 2.0 required． |
| \＃BME 417：Biomedical Engineering Capstone Design I（L） | 4 | 区 |  | Grade of C |  |
| \＃BME 423：Biomedical Instrumentation Laboratory | 1 | 区 |  | Grade of C |  |
| \＃BME 434：Applications of Bioengineering OR <br> \＃BME 416：Biomechanics OR <br> \＃BME 419：Biocontrol Systems | 3 | 区 |  | Grade of C |  |
| Social \＆Behavioral Science（SB）AND Cultural Diversity in the US（C）， Global Awareness（G）or Historical Awareness（H） | 3 | $\square$ |  |  |  |

Major Map：Bioengineering－<br>Bachelor of Science in Engineering（B．S．E．）<br>Ira A．Fulton School of Engineering，Tempe Campus<br>Catalog Year：2008－2009

| 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 EIGHT： $106 \mathbf{1 2 0}$ CREDIT HOURS |  |  |  |  |  |
| \＃BME 490：Biomedical Engineering Capstone Design II | 4 | 区 |  | Grade of C | \＃Designates Major Course：A minimum cumulative GPA of 2.0 required． |
| \＃Technical Elective | 3 | 区 |  | Grade of C |  |
| \＃Technical Elective | 3 | 区 |  | Grade of C |  |
| UD Humanities，Fine Arts \＆Design（HU）OR Social \＆Behavioral Science（SB）AND Cultural Diversity in the US（C），Global Awareness（G）or Historical Awareness（H） | 3 | 区 |  |  |  |

## Graduation Requirements Summary：

| Total Hours Regular <br> Curriculum（120） | Total Hrs at ASU（30 <br> $\mathrm{min})$ | Hrs Resident Credit for Academic <br> Recognition <br> $(56 \mathrm{~min})$ | Major GPA（2．000 <br> Min．CUM GPA $)$ | Total UD Hrs（45 <br> $\mathrm{min})$ | Total Comm．College <br> Hrs．（64 Max） |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |

## 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） |
| $\circ$ | Natural Science－General（SG） |

－General Studies Awareness Requirest
－Cultural Diversity in the US（C）
－Global Awareness（G）
－Historical Awareness（H）
－First Year Composition
Additional Notes：

## Major Map：Chemical Engineering－ <br> Bachelor of Science in Engineering（B．S．E．） <br> Ira A．Fulton School of Engineering，Tempe Campus <br> Catalog Year：2008－2009

|  |  |  | Completed ATP：$\square$ Yes $\quad \square$ No |  | Completed AGEC：$\square$ Yes $\square$ No |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 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： 015 CREDIT HOURS |  |  |  |  |  |
| ASU 101：The ASU Experience | 1 | $\square$ |  |  | －Complete MAT 265 with a minimum grade of ＂C＂ <br> －Complete CHM 113 <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> ＊＊If ENG 105 a 3 hr applicable elective must also be taken prior to graduation．See Advisor． <br> \＃Designates Major Course：A minimum cumulative GPA of 2.0 required． |
| \＃CHE 100：Introduction to Chemical Engineering | 2 | $\square$ |  |  |  |
| CHM 113：General Chemistry I（SQ） | 4 | $\square$ |  |  |  |
| 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 265：Calculus for Engineers I | 3 | $\square$ |  | Grade of C |  |
| Humanities，Fine Arts \＆Design（HU）AND Cultural Diversity in the US（C），Global Awareness（G）or Historical Awareness（H） | 3 | $\square$ |  |  |  |
| TERM TWO： 1630 CREDIT HOURS |  |  |  |  |  |
| 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 | －Complete CHE 100；CHM 116 <br> －Complete MAT 266 and ENG 101 or 107 or 105 with a minimum grade of＂$C$＂ |
| CHM 116：General Chemistry II（SQ） | 4 | $\square$ |  |  |  |
| MAT 266：Calculus for Engineers II | 3 | $\square$ |  | Grade of C |  |
| PHY 121／122：University PhysicsI／Laboratory I | 3／1 | $\square$ |  |  |  |
| TERM THREE： 3145 CREDIT HOURS |  |  |  |  |  |
| \＃CHE 211：Introduction to Chemical Processing | 3 | $\square$ |  |  | －Complete CHE 211；PHY 121 \＆ 122 <br> －Complete ENG 102 or 108 with a minimum grade of＂C＂ <br> －2．0 ASU Cumulative GPA required <br> －Complete First－Year Composition requirement： ENG 101 \＆ 102 or ENG 107 \＆ 108 or ENG 105 <br> \＃Designates Major Course：A minimum cumulative GPA of 2.0 required． |
| MAT 242：Elementary Linear Algebra | 2 | $\square$ |  |  |  |
| MAT 275：Modern Differential Equations（MA） | 3 | $\square$ |  |  |  |
| Humanities，Fine Arts \＆Design（HU）AND Cultural Diversity in the US（C），Global Awareness（G）or Historical Awareness（H）： | 3 | $\square$ |  |  |  |
| 200 Level Engineering Elective： | 3 | $\square$ |  |  |  |
| TERM FOUR： $46 \mathbf{6 0}$ CREDIT HOURS |  |  |  |  |  |
| \＃CHE 231：Introduction to Transport I：Fluids | 3 | $\square$ |  |  | －Complete CHE 231 <br> －Complete MAT 267 with a minimum grade of ＂C＂ <br> －2．0 ASU Cumulative GPA required <br> \＃Designates Major Course：A minimum cumulative GPA of 2.0 required． |
| MAT 267：Calculus for Engineers III | 3 | $\square$ |  | Grade of C |  |
| \＃MAE 384：Numerical Methods for Engineers（CS） | 3 | $\square$ |  |  |  |
| PHY 131：University Physics II：Electricity and Magnetism | 3 | $\square$ |  |  |  |
| Social Behavioral Science（SB）AND Cultural Diversity in the US（C）， Global Awareness（G）or Historical Awareness（H）： | 3 | $\square$ |  |  |  |
| TERM FIVE： 6175 CREDIT HOURS |  |  |  |  |  |
| \＃CHE 334：Introduction to Transport Phenomena II：Heat and Mass | 3 | 区 |  |  | \＃Designates Major Course：A minimum cumulative GPA of 2.0 required． |
| \＃CHE 342：Introduction to Applied Chemical Thermodynamics | 3 | 区 |  |  |  |
| CHM 233：General Organic Chemistry I | 3 | $\square$ |  |  |  |
| CHM 237：General Organic Chemistry Laboratory I | 1 | $\square$ |  |  |  |
| Bioscience Elective： | 3 | $\square$ |  |  |  |
| \＃Chemistry Content Technical Elective： | 3 | 区 |  |  |  |
| TERM SIX： $76 \mathbf{9 0}$ CREDIT HOURS |  |  |  |  |  |
| \＃CHE 352：Transport Laboratories（L） | 3 | 区 |  |  | \＃Designates Major Course：A minimum cumulative GPA of 2.0 required． |
| \＃CHE 433：Modern Separations | 3 | 区 |  |  |  |
| \＃CHE 442：Introduction to Chemical Reactor Design | 3 | 区 |  |  |  |
| CHM 234：General Organic Chemistry II | 3 | $\square$ |  |  |  |
| IEE 220：Business Industrial Engineering | 3 | $\square$ |  |  |  |
| TERM SEVEN： 91105 CREDIT HOURS |  |  |  |  |  |
| \＃CHE 432：Principles of Chemical Engineering Design | 3 | 区 |  |  | \＃Designates Major Course：A minimum cumulative GPA of 2.0 required． |
| \＃CHE 451：Chemical Engineering Laboratory | 3 | 区 |  |  |  |
| \＃CHE 461：Process Dynamic Control | 3 | 区 |  |  |  |
| \＃Chemistry Content Technical Elective： | 3 | 区 |  |  |  |
| Social \＆Behavioral Science（SB）AND Cultural Diversity in the US （C），Global Awareness（G）or Historical Awareness（H）： | 3 | $\square$ |  |  |  |
| TERM EIGHT： $106 \mathbf{1 2 0}$ CREDIT HOURS |  |  |  |  |  |
| \＃CHE 462：Process Design（L） | 3 | 区 |  |  | \＃Designates Major Course：A minimum cumulative GPA of 2.0 required． |
| \＃CHE Technical Elective： | 3 | 区 |  |  |  |
| \＃CHE Technical Elective： | 3 | 区 |  |  |  |
| UD Humanities，Fine Arts \＆Design（HU）OR Social \＆Behavioral Science（SB）： | 3 | 区 |  |  |  |
| \＃Natural Science or MSE Technical Elective： | 3 | 区 |  |  |  |

## Graduation Requirements Summary:

| Total Hours Regular <br> Curriculum (120) | Total Hrs at ASU (30 <br> $\mathrm{min})$ | Hrs Resident Credit for Academic <br> Recognition <br> $(56 \mathrm{~min})$ | Major GPA (2.000 <br> Min. CUM GPA ) | Total UD Hrs (45 <br> $\mathrm{min})$ | Total Comm. College <br> Hrs. (64 Max) |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |

## 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:

Major Map: Civil Engineering -<br>Bachelor of Science in Engineering (B.S.E.)<br>Ira A. Fulton School of Engineering, Tempe Campus<br>Catalog Year: 2008-2009



Major Map: Civil Engineering -<br>Bachelor of Science in Engineering (B.S.E.)<br>Ira A. Fulton School of Engineering, Tempe Campus<br>Catalog Year: 2008-2009

| Course Subject and Title <br> (courses in bold/shading are critical) | Hrs. | Upper <br> Division | Transfer <br> Course/Grade | Minimum Grade if <br> Required | Additional Critical Requirement Notes |
| :--- | :---: | :---: | :---: | :---: | :---: |

Graduation Requirements Summary:

| Total Hours Regular <br> Curriculum (120) | Total Hrs at ASU (30 <br> $\mathrm{min})$ | Hrs Resident Credit for Academic <br> Recognition <br> $(56 \mathrm{~min})$ | Major GPA (2.30 <br> Min. CUM GPA in <br> CEE 3XX, 2.30 min | Total UD Hrs (45 <br> $\mathrm{min})$ | Total Comm. College <br> Hrs. (64 Max) <br> CUM GPA in CEE |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

## 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:

Major Map: Civil Engineering (Construction Engineering) Bachelor of Science in Engineering (B.S.E.)
Ira A. Fulton School of Engineering, Tempe Campus
Catalog Year: 2008-2009


Major Map: Civil Engineering (Construction Engineering) Bachelor of Science in Engineering (B.S.E.)<br>Ira A. Fulton School of Engineering, Tempe Campus<br>Catalog Year: 2008-2009

| Course Subject and Title <br> (courses in bold/shading are critical) | Hrs. | Upper <br> Division | Transfer <br> Course/Grade | Minimum Grade if <br> Required | Additional Critical Requirement Notes |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| TERM EIGHT: 106 120 CREDIT HOURS |  |  |  |  |  |
| Select remaining 2 <br> \# CEE 281: Surveying (3 hrs) <br> \# CEE 412: Pavement Analysis and Design (3 hrs) OR \# CEE 483: <br> Highway Materials, Construction and Quality (3 hrs) <br> \# CEE 420: Steel Structures (3 hrs) OR \# CEE 421: Concrete <br> Structures (3 hrs) <br> \# CEE 452: Foundation (3 hrs) <br> \# CEE 481: Civil Engineering Project (3 hrs) <br> \# Approved technical elective (3 hrs) |  |  |  |  |  |
| \#CEE 400: Earth Systems Engineering and Management (HU, H) OR <br> Social \& Behavioral Science (SB) AND Cultural Diversity in the US <br> (C) or Global Awareness (G) if CEE 400 completed |  |  |  | \# Designates Major Course: A minimum cumulative <br> GPA of 2.30 required in all CEE 3XX courses, a <br> minimum cumulative GPA of 2.30 required in all CEE <br> 4XX courses. |  |
| \# CEE 486: Integrated Civil Engineering Design (L) | 3 |  |  |  |  |
| Humanities, Fine Arts \& Design (HU) AND Cultural Diversity in the <br> US (C) or Global Awareness (G) |  |  |  |  |  |

Graduation Requirements Summary:

| Total Hours Regular <br> Curriculum (120) | Total Hrs at ASU (30 <br> $\mathrm{min})$ | Hrs Resident Credit for Academic <br> Recognition <br> $(56 \mathrm{~min})$ | Major GPA (2.30 <br> Min. CUM GPA in <br> CEE 3XX, 2.30 min <br> CUM GPA in CEE <br> $4 X X)$ | Total UD Hrs (45 <br> min) | Total Comm. College <br> Hrs. (64 Max) |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |

## General University Requirements: Legend

- General Studies Core Requirements:

$$
\begin{array}{ll}
\circ & \text { Literacy and Critical Inquiry (L) } \\
\circ & \text { Mathematical Studies (MA) } \\
\circ & \text { Computer/Statistics/Quantitative applications (CS) } \\
\circ & \text { Humanities, Fine Arts, and Design (HU) } \\
\circ & \text { Social and Behavioral Sciences (SB) } \\
\circ & \text { Natural Science-Quantitative (SQ) } \\
\circ & \text { Natural Science-General (SG) }
\end{array}
$$

- General Studies Awareness Requirements
- Cultural Diversity in the US (C)
- Global Awareness (G)
- Historical Awareness (H)
- First Year Composition


## Additional Notes:

## Major Map: Civil Engineering (Environmental Engineering) Bachelor of Science in Engineering (B.S.E.) <br> Ira A. Fulton School of Engineering, Tempe Campus <br> Catalog Year: 2008-2009



| Course Subject and Title <br> (courses in bold/shading are critical) | Hrs. | Upper <br> Division | Transfer <br> Course/Grade | Minimum Grade if <br> Required | Additional Critical Requirement Notes |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| TERM EIGHT: 106 120 CREDIT HOURS |  |  |  |  |  |
| Select remaining 2 Design/Technical Electives <br> \# CEE 440: Engineering Hydrology (3 hrs) <br> \# CEE 441: Water Resource Hydrology ( h hrs) <br> \# CEE 462: Unit Ops in Environmental Engineering (3 hrs) <br> \# CEE 466: San System Design (3 hrs) <br> \# CEE 467: Environmental Microbiology (3 hrs) <br> \# Approved Technical Elective (3 hrs) |  |  |  |  |  |
| \# CEE 400: Earth Systems Engineering and Management (HU, H) <br> OR |  |  |  |  |  |
| Social \& Behavioral Science (SB) AND Cultural Diversity in the US <br> (C) or Global Awareness (G) if CEE 400 completed |  |  |  | \# Designates Major Course: A minimum cumulative <br> GPA of 2.30 required in all CEE 3XX courses, a <br> minimum cumulative GPA of 2.30 required in all CEE <br> 4XX courses. |  |
| \# CEE 486: Integrated Civil Engineering Design (L) |  |  |  |  |  |
| Humanities, Fine Arts \& Design (HU) AND Cultural Diversity in the <br> US (C) or Global Awareness (G) |  |  |  |  |  |

Graduation Requirements Summary:

| Total Hours Regular <br> Curriculum (120) | Total Hrs at ASU (30 <br> min) | Hrs Resident Credit for Academic <br> Recognition <br> $(56 \mathrm{~min})$ | Major GPA (2.30 <br> Min. CUM GPA in <br> CEE 3XX, 2.30 min <br> CUM GPA in CEE <br> 4XX)) | Total UD Hrs (45 <br> min) |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  | Total Comm. College |
| Hrs. (64 Max) |  |  |  |  |

## 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:

Major Map：Computer Science－
Bachelor of Science（B．S．）
Ira A．Fulton School of Engineering，Tempe Campus
Catalog Year：2008－2009

|  |  |  | Completed ATP：$\square$ Yes $\square$ No |  | Completed AGEC：$\square$ Yes $\square$ No |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 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： 015 CREDIT HOURS |  |  |  |  |  |
| ASU 101：The ASU Experience | 1 | $\square$ |  |  | －Complete CSE 100 or 110；MAT 265 each with a minimum grade of＂C＂ <br> －General Elective：cannot include CSE，MAT， PHY，BIO，CHM or other Science course <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> ＊＊If ENG 105 a 3 hr applicable elective must also be taken prior to graduation．See Advisor． <br> \＃Designates Major Course：A minimum cumulative GPA of 2.0 required． |
| \＃CSE 100：Principles of Programming with C＋＋（CS）OR <br> \＃CSE 110：Principles of Programming with Java（CS） | 3 | $\square$ |  | Grade of C |  |
| MAT 265：Calculus for Engineers 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 | $\square$ |  | Grade of C |  |
| Social \＆Behavioral Science（SB）AND Cultural Diversity in the US （C），Global Awareness（G）or Historical Awareness（H） | 3 | $\square$ |  |  |  |
| General Elective | 3 | $\square$ |  |  |  |
| TERM TWO： 1630 CREDIT HOURS |  |  |  |  |  |
| \＃CSE 120：Digital Design Fundamentals | 3 | $\square$ |  | Grade of C | －Complete CSE 120，205；MAT 266 each with a minimum grade of＂C＂ <br> \＃Designates Major Course：A minimum cumulative GPA of 2.0 required． |
| \＃CSE 205：Concepts of Computer Science \＆Data Structures（CS） | 3 | $\square$ |  | Grade of C |  |
| MAT 266：Calculus for Engineers II | 3 | $\square$ |  | Grade of C |  |
| BIO 187：General Biology I（SQ）or BIO 188：General Biology II（SQ） | 4 | $\square$ |  |  |  |
| 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： 3145 CREDIT HOURS |  |  |  |  |  |
| \＃CSE 230：Computer Organization and Assembly Language Programming | 3 | $\square$ |  | Grade of C | －Complete CSE 230；MAT 243， 267 each with a minimum grade of＂C＂ <br> －Complete First Year Composition requirement： ENG 101 \＆ 102 or ENG 107 \＆ 108 or ENG 105 <br> －See Advisor for approved Laboratory Science sequence courses <br> \＃Designates Major Course：A minimum cumulative GPA of 2.0 required． |
| MAT 243：Discrete Mathematical Structures | 3 | $\square$ |  | Grade of C |  |
| MAT 267：Calculus for Engineers III | 3 | $\square$ |  | Grade of C |  |
| Humanities，Fine Arts \＆Design（H）AND Cultural Diversity in the US （C），Global Awareness（G），or Historical Awareness（H） | 3 | $\square$ |  |  |  |
| Laboratory Science I（SQ） | 4 | $\square$ |  |  |  |
| TERM FOUR： 4660 CREDIT HOURS |  |  |  |  |  |
| \＃CSE 240：Introduction to Programming Languages | 3 | $\square$ |  | Grade of C | －Complete CSE 240 with a minimum grade of ＂C＂ <br> －See Advisor for approved Laboratory Science sequence courses <br> －General Elective：cannot include CSE，MAT， PHY，BIO，CHM or other Science course <br> \＃Designates Major Course：A minimum cumulative GPA of 2.0 required． |
| \＃MAT 343：Applied Linear Algebra | 3 | 区 |  |  |  |
| Laboratory Science II（SQ） | 4 | $\square$ |  |  |  |
| Social \＆Behavioral Science（SB）AND Cultural Diversity in the US （C），Global Awareness（G），or Historical Awareness（H） | 3 | $\square$ |  |  |  |
| General Elective | 3 | $\square$ |  |  |  |
| TERM FIVE： 6175 CREDIT HOURS |  |  |  |  |  |
| \＃IEE 380：Probability and Statistics for Engineering Problem Solving | 3 | 区 |  |  | \＃Designates Major Course：A minimum cumulative GPA of 2.0 required． |
| \＃CSE 301：Computing Ethics | 1 | 区 |  | Grade of C |  |
| \＃CSE 310：Data Structures and Algorithms | 3 | 区 |  | Grade of C |  |
| \＃CSE 360：Introduction to Software Engineering | 3 | 区 |  | Grade of C |  |
| Humanities，Fine Arts \＆Design（HU）AND Cultural Diversity in the US（C），Global Awareness（G），or Historical Awareness（H） | 3 | $\square$ |  |  |  |
| TERM SIX： $76 \mathbf{9 0}$ CREDIT HOURS |  |  |  |  |  |
| \＃CSE 340：Principles of Programming Languages | 3 | 区 |  | Grade of C | －See Advisor for approved list of Technical Electives <br> \＃Designates Major Course：A minimum cumulative GPA of 2.0 required． |
| \＃CSE 355：Introduction to Theoretical Computer Science | 3 | 区 |  | Grade of C |  |
| \＃CSE 4＊＊Computer Science Elective | 3 | 区 |  | Grade of C |  |
| Computer Science Technical Elective | 3 | 区 |  | Grade of C |  |
| UD Humanities，Fine Arts \＆Design（HU）OR Social \＆Behavioral Science（SB） | 3 | 区 |  |  |  |
| TERM SEVEN： 91105 CREDIT HOURS |  |  |  |  |  |
| \＃CSE 430：Operating Systems | 3 | 区 |  | Grade of C | －See Advisor for approved list of Computer Science Electives <br> －General Elective：cannot include CSE，MAT， PHY，BIO，CHM or other Science course <br> \＃Designates Major Course：A minimum cumulative GPA of 2.0 required． |
| \＃CSE 485：Computer Science Capstone Project I（L） | 3 | 区 |  | Grade of C |  |
| \＃CSE 4＊＊Computer Science Elective | 3 | 区 |  | Grade of C |  |
| \＃CSE 4＊＊Computer Science Elective | 3 | 区 |  | Grade of C |  |
| General Elective | 1 | $\square$ |  |  |  |


| Course Subject and Title <br> (courses in bold/shading are critical) | Hrs. | Upper <br> Division | Transfer <br> Course/Grade | Minimum Grade if <br> Required | Additional Critical Requirement Notes |
| :--- | :---: | :---: | :--- | :--- | :--- | :--- |

## Graduation Requirements Summary:

| Total Hours Regular <br> Curriculum (120) | Total Hrs at ASU (30 <br> $\mathrm{min})$ | Hrs Resident Credit for Academic <br> Recognition <br> $(56 \mathrm{~min})$ | Major GPA (2.000 <br> Min. CUM GPA $)$ | Total UD Hrs (45 <br> $\mathrm{min})$ | Total Comm. College <br> Hrs. (64 Max) |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |

## 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:

Major Map：Computer Systems Engineering－ Bachelor of Science in Engineering（B．S．E．）
Ira A．Fulton School of Engineering，Tempe Campus
Catalog Year：2008－2009

|  |  |  | Completed ATP：$\square$ Yes $\square$ No |  | Completed AGEC：$\square$ Yes $\square$ No |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 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： 015 CREDIT HOURS |  |  |  |  |  |
| ASU 101：The ASU Experience | 1 | $\square$ |  |  | －Complete CSE 100 or 110，101；MAT 265 each with a minimum grade of＂C＂ <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> ＊＊If ENG 105 a 3 hr applicable elective must also be taken prior to graduation．See Advisor． <br> \＃Designates Major Course：A minimum cumulative GPA of 2.0 required． |
| \＃CSE 100：Principles of Programming with C＋＋（CS）OR <br> \＃CSE 110：Principles of Programming with Java（CS） | 3 | $\square$ |  | Grade of C |  |
| \＃CSE 101：Introduction to Engineering Design | 2 | $\square$ |  | Grade of C |  |
| MAT 265：Calculus for Engineers I（MA） | 3 | $\square$ |  | Grade of C |  |
| 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）AND Cultural Diversity in the US （C），Global Awareness（G）or Historical Awareness（H） | 3 | $\square$ |  |  |  |
| TERM TWO： 1630 CREDIT HOURS |  |  |  |  |  |
| \＃CSE 120：Digital Design Fundamentals | 3 | $\square$ |  | Grade of C | －Complete CSE 120，205；MAT 266 each with a minimum grade of＂C＂ <br> \＃Designates Major Course：A minimum cumulative GPA of 2.0 required． |
| \＃CSE 205：Concepts of Computer Science \＆Data Structures（CS） | 3 | $\square$ |  | Grade of C |  |
| MAT 266：Calculus for Engineers II | 3 | $\square$ |  | Grade of C |  |
| BIO 187：General Biology I（SQ）OR <br> BIO 188：General Biology Laboratory II（SQ） | 4 | $\square$ |  |  |  |
| 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： 3145 CREDIT HOURS |  |  |  |  |  |
| \＃CSE 230：Computer Organization and Assembly Language Programming | 3 | $\square$ |  | Grade of C | －Complete CSE 230；MAT 243， 267 each with a minimum grade of＂C＂ <br> －Complete First－Year Composition requirement： <br> ENG 101 \＆ 102 or ENG 107 \＆ 108 or ENG 105 <br> \＃Designates Major Course：A minimum cumulative GPA of 2.0 required． |
| MAT 243：Discrete Mathematical Structures | 3 | $\square$ |  | Grade of C |  |
| MAT 267：Calculus for Engineers III | 3 | $\square$ |  | Grade of C |  |
| PHY 121／122：University Physics I／Laboratory I（SQ） | 3／1 | $\square$ |  |  |  |
| TERM FOUR： $46 \mathbf{6 0}$ CREDIT HOURS |  |  |  |  |  |
| \＃CSE 220：Programming for Computer Engineering | 3 | $\square$ |  | Grade of C | －Complete CSE 220 with a minimum grade of ＂C＂ <br> \＃Designates Major Course：A minimum cumulative GPA of 2.0 required． |
| MAT 275：Modern Differential Equations | 3 | $\square$ |  |  |  |
| PHY 131／132：University Physics II Electricity and Magnetism／Laboratory II（SQ） | 3／1 | $\square$ |  |  |  |
| 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 Diversity in the US （C），Global Awareness（G）or Historical Awareness（H） | 3 | $\square$ |  |  |  |
| TERM FIVE： 6175 CREDIT HOURS |  |  |  |  |  |
| \＃EEE 202：Circuits I | 4 | $\square$ |  |  | \＃Designates Major Course：A minimum cumulative GPA of 2.0 required． |
| \＃IEE 380：Probability and Statistics for Engineering Problem Solving | 3 | 区 |  |  |  |
| \＃CSE 301：Computing Ethics | 1 | 区 |  | Grade of C |  |
| \＃CSE 310：Data Structures and Algorithms | 3 | 区 |  | Grade of C |  |
| \＃CSE 360：Introduction to Software Engineering | 3 | 区 |  | Grade of C |  |
| TERM SIX： $76 \mathbf{9 0}$ CREDIT HOURS |  |  |  |  |  |
| \＃EEE 334：Circuits II | 4 | 区 |  |  | \＃Designates Major Course：A minimum cumulative GPA of 2.0 required． |
| \＃CSE 320：Design and Synthesis of Digital Hardware | 3 | 区 |  | Grade of C |  |
| \＃CSE 325：Embedded Micro Systems | 3 | 区 |  | Grade of C |  |
| \＃MAT 343：Applied Linear Algebra | 3 | 区 |  |  |  |
| Humanities，Fine Arts \＆Design（HU）AND Cultural Diversity in the US（C），Global Awareness（G）or Historical Awareness（H） | 3 | $\square$ |  |  |  |
| TERM SEVEN： 91105 CREDIT HOURS |  |  |  |  |  |
| \＃CSE 423：Systems Capstone Project I（L） | 3 | 区 |  | Grade of C | －See Advisor for approved list of CSE Technical Electives <br> \＃Designates Major Course：A minimum cumulative GPA of 2.0 required． |
| \＃CSE 430：Operating Systems | 3 | 区 |  | Grade of C |  |
| \＃CSE Technical Elective | 3 | 区 |  | Grade of C |  |
| \＃CSE Technical Elective | 3 | 区 |  | Grade of C |  |
| UD Humanities，Fine Arts \＆Design（HU）OR Social \＆Behavioral Science（SB） | 3 | 区 |  |  |  |
| TERM EIGHT： $106 \mathbf{1 2 0}$ CREDIT HOURS |  |  |  |  |  |
| \＃CSE 420：Computer Architecture I | 3 | 区 |  | Grade of C | －See Advisor for approved list of CSE Technical Electives <br> \＃Designates Major Course：A minimum cumulative GPA of 2.0 required． |
| \＃CSE 424：Systems Capstone Project II（L） | 3 | 区 |  | Grade of C |  |
| \＃CSE 434：Computer Networks | 3 | 区 |  | Grade of C |  |
| \＃CSE Technical Elective | 3 | 区 |  | Grade of C |  |
| \＃CSE Technical Elective | 3 | 区 |  | Grade of C |  |

Major Map: Computer Systems Engineering Bachelor of Science in Engineering (B.S.E.)
Ira A. Fulton School of Engineering, Tempe Campus
Catalog Year: 2008-2009

Graduation Requirements Summary:

| Total Hours Regular <br> Curriculum (120) | Total Hrs at ASU (30 <br> $\mathrm{min})$ | Hrs Resident Credit for Academic <br> Recognition <br> $(56 \mathrm{~min})$ | Major GPA (2.000 <br> Min. CUM GPA ) | Total UD Hrs (45 <br> $\mathrm{min})$ | Total Comm. College <br> Hrs. (64 Max) |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |

## 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:

Major Map: Construction (Concrete Industry Management)

- Bachelor of Science (B.S.)

Ira A. Fulton School of Engineering, Tempe Campus
Catalog Year: 2008-2009


## Graduation Requirements Summary:

| Total Hours Regular <br> Curriculum (120) | Total Hrs at ASU (30 <br> $\mathrm{min})$ | Hrs Resident Credit for Academic <br> Recognition <br> $(56 \mathrm{~min})$ | Major GPA (2.000 <br> Min. CUM GPA $)$ | Total UD Hrs (45 <br> $\mathrm{min})$ | Total Comm. College <br> Hrs. (64 Max) |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |

## 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:

Major Map: Construction (General Building Construction)

- Bachelor of Science (B.S.)

Ira A. Fulton School of Engineering, Tempe Campus
Catalog Year: 2008-2009


Major Map：Construction（General Building Construction）
－Bachelor of Science（B．S．）
Ira A．Fulton School of Engineering，Tempe Campus
Catalog Year：2008－2009

| Course Subject and Title （courses in bold／shading are critical） | Hrs． | $\begin{aligned} & \hline \text { Upper } \\ & \text { Division } \end{aligned}$ | Transfer Course／Grade | Minimum Grade if Required | Additional Critical Requirement Notes |
| :---: | :---: | :---: | :---: | :---: | :---: |
| TERM SEVEN： 91105 CREDIT HOURS |  |  |  |  |  |
| CON 450：Geotechnical Applications for Construction | 4 | 区 |  | Grade of C |  |
| CON 453：Construction Project Management I | 3 | 区 |  | Grade of C |  |
| CON 495：Construction Planning and Scheduling（L） | 4 | 区 |  | Grade of C |  |
| Select 1 additional course from： <br> CON 472：Development Feasibility Reports（3 hrs） <br> CON 483：Advanced Building Estimating（ 3 hrs ） <br> REA 380：Real Estate Fundamentals（3 hrs） <br> Upper division Elective（3 hrs） | 3 | 区 |  | Grade of C in CON courses |  |
| TERM EIGHT： 106120 CREDIT HOURS |  |  |  |  |  |
| CON 424：Structural Design | 3 | 区 |  | Grade of C |  |
| CON 455：Construction Project Management II | 4 | 区 |  | Grade of C |  |
| CON 496：Construction Contract Administration（L） | 3 | 区 |  | Grade of C |  |
| Select remaining course from： <br> CON 472：Development Feasibility Reports（3 hrs） <br> CON 483：Advanced Building Estimating（ 3 hrs ） REA 380：Real Estate Fundamentals（3 hrs） UD Elective（ 3 hrs ） | 3 | 囚 |  | Grade of C in CON courses |  |

Graduation Requirements Summary：

| Total Hours Regular <br> Curriculum（120） | Total Hrs at ASU（30 <br> $\mathrm{min})$ | Hrs Resident Credit for Academic <br> Recognition <br> $(56 \mathrm{~min})$ | Major GPA（2．000 <br> Min．CUM GPA ） | Total UD Hrs（45 <br> min） | Total Comm．College <br> Hrs．（64 Max） |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |

## 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：

Major Map: Construction (Heavy Construction) -<br>Bachelor of Science (B.S.)

Ira A. Fulton School of Engineering, Tempe Campus
Catalog Year: 2008-2009


Major Map：Construction（Heavy Construction）－ Bachelor of Science（B．S．）
Ira A．Fulton School of Engineering，Tempe Campus
Catalog Year：2008－2009

| 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 SUMMER ${ }^{\text {rd }}$ Year： 1 CREDIT HOUR |  |  |  |  |  |
| CON 484：Internship | 1 | 区 |  | Grade of C |  |
| TERM SEVEN： 91105 CREDIT HOURS |  |  |  |  |  |
| CON 450：Geotechnical Applications for Construction | 4 | 区 |  | Grade of C |  |
| CON 453：Construction Project Management I | 3 | 区 |  | Grade of C |  |
| CON 495：Construction Planning and Scheduling | 4 | 区 |  | Grade of C |  |
| Select 1 additional： <br> CON 394：Special Topics：Advanced Heavy Equipment Operations（3 hrs） <br> CON 394：Special Topics：Environmental Aspects of Heavy <br> Construction（3 hrs） <br> CON 486：Heavy Construction Estimating（ 3 hrs ） <br> CON 494：Special Topics：Heavy Construction Earthworks（3 hrs） <br> CON 494：Special Topics：Heavy Construction Project Management（3 hrs）： | 3 | 区 |  | Grade of C |  |
| TERM EIGHT： 106120 CREDIT HOURS |  |  |  |  |  |
| CON 424：Structural Design | 3 | 区 |  | Grade of C |  |
| CON 455：Construction Project Management II | 4 | 区 |  | Grade of C |  |
| CON 496：Construction Contract Administration（L） | 3 | 区 |  | Grade of C |  |
| Select remaining course： <br> CON 394：Special Topics：Advanced Heavy Equipment Operations（3 hrs） <br> CON 394：Special Topics：Environmental Aspects of Heavy <br> Construction（3 hrs） <br> CON 486：Heavy Construction Estimating（3 hrs） <br> CON 494：Special Topics：Heavy Construction Earthworks（3 hrs） <br> CON 494：Special Topics：Heavy Construction Project Management（3 hrs）： |  | 区 |  | Grade of C |  |

## Graduation Requirements Summary：

| Total Hours Regular <br> Curriculum（120） | Total Hrs at ASU（30 <br> $\mathrm{min})$ | Hrs Resident Credit for Academic <br> Recognition <br> $(56 \mathrm{~min})$ | Major GPA（2．000 <br> Min．CUM GPA ） | Total UD Hrs（45 <br> $\mathrm{min})$ | Total Comm．College <br> Hrs．（64 Max） |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |

## General University Requirements：Legend <br> －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） |  |
| al Studies Awareness Requirements |  |
|  | Cultural Diversity in the US（C） |
| Global Awareness（G） |  |
| Historical Awareness（H） |  |

－First－Year Composition
Additional Notes：

Major Map: Construction (Residential Construction) Bachelor of Science (B.S.)
Ira A. Fulton School of Engineering, Tempe Campus
Catalog Year: 2008-2009


| 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： 91105 CREDIT HOURS |  |  |  |  |  |
| CON 450：Geotechnical Applications for Construction | 4 | 区 |  | Grade of C |  |
| CON 453：Construction Project Management I | 3 | 区 |  | Grade of C |  |
| CON 495：Construction Planning and Scheduling | 4 | 区 |  | Grade of C |  |
| Select 1 additional course from： <br> CON 377：Residential Construction Production Procedures（3 hrs） <br> CON 477：Residential Construction Business Practices（3 hrs） <br> MKT 395：Essentials of Advertising and Marketing Communication （3 hrs） <br> REA 380：Real Estate Fundamentals（3 hrs） | 3 | 区 |  | Grade of C in CON courses |  |
| TERM EIGHT： 106120 CREDIT HOURS |  |  |  |  |  |
| CON 424：Structural Design | 3 | 区 |  | Grade of C |  |
| CON 455：Construction Project Management II | 4 | 区 |  | Grade of C |  |
| CON 496：Construction Contract Administration（L） | 3 | 区 |  | Grade of C |  |
| Select remaining course from： <br> CON 377：Residential Construction Production Procedures（3 hrs） <br> CON 477：Residential Construction Business Practices（3 hrs） <br> MKT 395：Essentials of Advertising and Marketing Communication （3 hrs） <br> REA 380：Real Estate Fundamentals（3 hrs | 3 | 区 |  | Grade of C in CON courses |  |

Graduation Requirements Summary：

| Total Hours Regular <br> Curriculum（120） | Total Hrs at ASU（30 <br> $\mathrm{min})$ | Hrs Resident Credit for Academic <br> Recognition <br> $(56 \mathrm{~min})$ | Major GPA（2．000 <br> Min．CUM GPA $)$ | Total UD Hrs（45 <br> $\mathrm{min})$ | Total Comm．College <br> Hrs．（64 Max） |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |

## 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） |
| $\circ$ | Natural Science－General（SG） |
| ral | Studies Awareness Requirements |
| $\circ$ | Cultural Diversity in the US（C） |
| $\circ$ | Global Awareness（G） |
| $\circ$ | Historical Awareness（H） |

－First Year Composition
Additional Notes：

Major Map：Construction（Specialty Construction）－ Bachelor of Science（B．S．）
Ira A．Fulton School of Engineering，Tempe Campus
Catalog Year：2008－2009

|  |  |  | Completed ATP：$\square$ Yes $\square$ No |  | Completed AGEC：$\square$ Yes $\square$ No |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 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： 015 CREDIT HOURS |  |  |  |  |  |
| ASU 101：The ASU Experience | 1 | $\square$ |  |  | －Complete MAT 265；PHY 111， 113 each with a minimum grade of＂ C ＂ <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> ＊＊If ENG 105 a 3 hr applicable elective must also be taken prior to graduation．See Advisor． |
| MAT 265：Calculus for Engineers I（MA） | 3 | $\square$ |  | Grade of C |  |
| PHY 111／113：General Physics I／Laboratory I（SQ） | 3／1 | $\square$ |  | Grade of C |  |
| CON 101：Construction and Culture：A Built Environment（HU，G，H） | 3 | $\square$ |  |  |  |
| CON 194：Special Topics：Introduction to Construction | 2 | $\square$ |  |  |  |
| 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 TWO： 1630 CREDIT HOURS |  |  |  |  |  |
| COM 225：Public Speaking（L） | 3 | $\square$ |  |  | －Complete COM 225，CON 252 |
| CON 252：Building Construction Methods，Materials，Equipment | 3 | $\square$ |  |  |  |
| ECN 211：Macroeconomic Principles（SB） | 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 |  |
| TERM THREE： 3145 CREDIT HOURS |  |  |  |  |  |
| CON 221：Applied Statics | 3 | $\square$ |  | Grade of C | －Complete CON 221， 243 with a minimum grade of＂C＂；CON 251；ECN 212；ENG 102 or 108 or 105 with a minimum grade of＂C＂；STP 226 <br> －Complete First Year Composition requirement： ENG 101 \＆ 102 or ENG 107 \＆ 108 or ENG 105 |
| CON 243：Heavy Construction Equipment，Methods，Materials | 3 | $\square$ |  | Grade of C |  |
| CON 251：Microcomputer Applications for Construction | 3 | $\square$ |  |  |  |
| ECN 212：Microeconomic Principles（SB） | 3 | $\square$ |  |  |  |
| STP 226：Elements of Statistics（CS） | 3 | $\square$ |  |  |  |
| TERM FOUR： 4660 CREDIT HOURS |  |  |  |  |  |
| CON 223：Strength of Materials | 3 | $\square$ |  | Grade of C | －Complete CON 223 with a minimum grade of ＂C＂ |
| CON 241：Surveying | 3 | $\square$ |  |  |  |
| CON 273：Electrical Construction Fundamental and Project Management | 3 | $\square$ |  |  |  |
| Humanities，Fine Arts \＆Design（HU）AND Cultural Diversity in the US（C） | 3 | $\square$ |  |  |  |
| Science Quantitative（SQ）or Science General（SG） | 4 | $\square$ |  |  |  |
| TERM SUMMER ${ }^{\text {nd }}$（ Year： 1 CREDIT HOUR |  |  |  |  |  |
| CON 296：Field Internship | 1 | $\square$ |  |  |  |
| TERM FIVE： 6175 CREDIT HOURS |  |  |  |  |  |
| CON 310：Testing and Materials for Construction | 3 | 区 |  | Grade of C |  |
| CON 345：Mechanical Systems | 4 | 区 |  | Grade of C |  |
| CON 371：Construction Safety | 3 | 囚 |  | Grade of C |  |
| CON 383：Construction Estimating | 4 | 区 |  | Grade of C |  |
| Select 1 <br> CON 468：Mechanical and Electrical Estimating（3 hrs） <br> CON 471：Mechanical and Electrical Project（3 hrs） <br> CON 494：Special Topics：Cleanroom Construction（3 hrs） <br> Upper division elective（3 hrs） | 3 | 区 |  | Grade of C in CON Courses |  |
| TERM SIX： $76 \mathbf{9 0}$ CREDIT HOURS |  |  |  |  |  |
| CON 389：Construction Cost Accounting and Control（CS） | 3 | 区 |  | Grade of C |  |
| LES 305：Legal，Ethical，Regulatory Issues in Business | 3 | 区 |  | Grade of C |  |
| Select 1 additional course from： <br> CON 468：Mechanical and Electrical Estimating（ 3 hrs ） <br> CON 471：Mechanical and Electrical Project（3 hrs） <br> CON 494：Special Topics：Cleanroom Construction（3 hrs） <br> Upper division elective（3 hrs） | 3 | 囚 |  | Grade of C in CON Courses |  |
| Humanities，Fine Arts \＆Design（HU）OR Social \＆Behavioral Science（SB） | 3 | 囚 |  |  |  |
| Upper division elective | 3 | 区 |  |  |  |
| TERM SUMMER $3^{\text {rd }}$ Year： 1 CREDIT HOUR |  |  |  |  |  |
| CON 484：Internship | 1 | 区 |  | Grade of C |  |

Major Map：Construction（Specialty Construction）－ Bachelor of Science（B．S．）<br>Ira A．Fulton School of Engineering，Tempe Campus<br>Catalog Year：2008－2009

| Course Subject and Title （courses in bold／shading are critical） | Hrs． | $\begin{aligned} & \hline \text { Upper } \\ & \text { Division } \end{aligned}$ | Transfer Course／Grade | $\begin{aligned} & \text { Minimum Grade if } \\ & \text { Required } \end{aligned}$ | Additional Critical Requirement Notes |
| :---: | :---: | :---: | :---: | :---: | :---: |
| TERM SEVEN： 91105 CREDIT HOURS |  |  |  |  |  |
| CON 450：Geotechnical Applications for Construction | 4 | 区 |  | Grade of C |  |
| CON 453：Construction Project Management I | 3 | 区 |  | Grade of C |  |
| CON 495：Construction Planning and Scheduling | 4 | 区 |  | Grade of C |  |
| Select 1 additional course from： <br> CON 468：Mechanical and Electrical Estimating（3 hrs） <br> CON 471：Mechanical and Electrical Project（3 hrs） <br> CON 494：Special Topics：Cleanroom Construction（3 hrs） <br> Upper division elective（3 hrs） | 3 | 区 |  | Grade of C in CON Courses |  |
| TERM EIGHT： $106 \mathbf{1 2 0}$ CREDIT HOURS |  |  |  |  |  |
| CON 424：Structural Design | 3 | 区 |  | Grade of C |  |
| CON 455：Construction Project Management II | 4 | 区 |  | Grade of C |  |
| CON 496：Construction Contract Administration | 3 | 区 |  | Grade of C |  |
| Select remaining course from： <br> CON 468：Mechanical and Electrical Estimating（3 hrs） <br> CON 471：Mechanical and Electrical Project（3 hrs） <br> CON 494：Special Topics：Cleanroom Construction（3 hrs） Upper division elective（ 3 hrs ） | 3 | 区 |  | Grade of C in CON Courses |  |

## Graduation Requirements Summary：

| Total Hours Regular <br> Curriculum（120） | Total Hrs at ASU（30 <br> $\mathrm{min})$ | Hrs Resident Credit for Academic <br> Recognition <br> $(56 \mathrm{~min})$ | Major GPA（2．000 <br> Min．CUM GPA ） | Total UD Hrs（45 <br> $\mathrm{min})$ | Total Comm．College <br> Hrs．（64 Max） |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |

## 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：

## 1 TiArizona State <br> University

Major Map：Electrical Engineering－
Bachelor of Science in Engineering（B．S．E．）
Ira A．Fulton School of Engineering，Tempe Campus
Catalog Year：2008－2009

|  |  |  | Completed ATP：$\square$ Yes $\square$ No |  | Completed AGEC：$\square$ Yes $\square$ No |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 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： 015 CREDIT HOURS |  |  |  |  |  |
| ASU 101：The ASU Experience | 1 | $\square$ |  |  | －Complete MAT 265 with a minimum grade of C． <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> ＊CHM 113 is a prerequisite and does not apply towards degree credit <br> ＊＊If ENG 105 a 3 hr applicable elective must also be taken prior to graduation．See Advisor． <br> \＃Designates Major Course：A minimum cumulative GPA of 2.0 required． |
| CHM 114：General Chemistry for Engineers（SQ）OR CHM 116：General Chemistry II＊（SQ） | 4 | $\square$ |  |  |  |
| \＃CSE 100：Principles of Programming with C＋＋（CS）OR <br> \＃EEE 120：Digital Design Fundamentals | 3 | $\square$ |  |  |  |
| \＃EEE 101：Introduction to Engineering Design OR BME 111：Engineering Perspectives on Biological Systems | $\begin{gathered} \hline 2 \text { or } \\ 3 \\ \hline \end{gathered}$ | $\square$ |  |  |  |
| MAT 265：Calculus for Engineers I | 3 | $\square$ |  | Grade of C |  |
| ENG 101 and 102：First－Year Composition OR ENG 107 and 108：English for Foreign Students OR ENG 105：Advanced First－Year Composition＊＊ | 3 | $\square$ |  | Grade of C |  |
| TERM TWO： 1630 CREDIT HOURS |  |  |  |  |  |
| \＃CSE 100：Principles of Programming with C＋＋（CS）OR \＃EEE 120：Digital Design Fundamentals | 3 | $\square$ |  |  | －Complete EEE 101 <br> －Complete MAT 266；PHY 121 \＆ 122 each with a minimum grade of＂C＂ <br> \＃Designates Major Course：A minimum cumulative GPA of 2.0 required． |
| \＃EEE 101：Introduction to Engineering Design OR BME 111：Engineering Perspectives on Biological Systems | $\begin{gathered} \hline 2 \text { or } \\ 3 \\ \hline \end{gathered}$ | $\square$ |  |  |  |
| MAT 266：Calculus for Engineers II | 3 | $\square$ |  | Grade of C |  |
| PHY 121／122：University Physics I／Laboratory I（SQ） | 3／1 | $\square$ |  | Grade of C |  |
| ENG 101 and 102：First－Year Composition OR ENG 107 and 108：English for Foreign Students OR ENG 105：Advanced First－Year Composition＊＊ | 3 | $\square$ |  | Grade of C |  |
| TERM THREE： 3145 CREDIT HOURS |  |  |  |  |  |
| \＃EEE 202：Circuits I | 4 | $\square$ |  |  | －Complete EEE 202；MAT 267， 274 or 275 and PHY 131， 132 with a minimum grade of＂C＂ <br> －Complete First Year Composition requirement： ENG 101 \＆ 102 or ENG 107 \＆ 108 or ENG 105 <br> \＃Designates Major Course：A minimum cumulative GPA of 2.0 required． |
| MAT 267：Calculus for Engineers III | 3 | $\square$ |  | Grade of C |  |
| MAT 274：Elementary Differential Equations（MA）OR MAT 275：Modern Differential Equations（MA） | 3 | $\square$ |  | Grade of C |  |
| PHY 131／132：University Physics II Electricity and Magnetism／ Laboratory II（SQ） | 3／1 | $\square$ |  | Grade of C |  |
| TERM FOUR： $46 \mathbf{6 0}$ CREDIT HOURS |  |  |  |  |  |
| \＃EEE 203：Signals and Systems I | 3 | $\square$ |  |  | －Complete EEE 203 and EEE 241 <br> \＃Designates Major Course：A minimum cumulative GPA of 2.0 required． |
| \＃EEE 241：Fundamentals of Electromagnetics | 3 | $\square$ |  |  |  |
| MAT 342：Linear Algebra（MA）OR MAT 343：Applied Linear Algebra | 3 | ® |  | Grade of C |  |
| PHY 241：University Physics III | 3 | $\square$ |  | Grade of C |  |
| Humanities，Fine Arts \＆Design（HU）AND Cultural Diversity in the US（C），Global Awareness（G）or Historical Awareness（H） | 3 | $\square$ |  |  |  |
| TERM FIVE： 6175 CREDIT HOURS |  |  |  |  |  |
| \＃EEE 334：Circuits II | 4 | 区 |  |  | －Area Pathway Courses：（choose 4）EEE 304，333， 335，341，352，360．Area Pathway courses are prerequisites for Technical Electives．See Advisor for guidance in selection． <br> \＃Designates Major Course：A minimum cumulative GPA of 2.0 required． |
| \＃EEE 350：Random Signal Analysis | 3 | 区 |  |  |  |
| \＃EEE 230：Computer Organization and Assembly Language Programming | 3 | $\square$ |  |  |  |
| \＃Area Pathway Course | 4 | 区 |  |  |  |
| TERM SIX： 7690 CREDIT HOURS |  |  |  |  |  |
| ECN 211／212（SB）：Macroeconomic Principles／Microeconomic Principles or ECN 201：Economic Issues \＆Analysis（SB） | 3 | $\square$ |  |  | －Area Pathway Courses：（choose 4）EEE 304，333， 335，341，352，360．Area Pathway courses are prerequisites for Technical Electives．See Advisor for guidance in selection． <br> \＃Designates Major Course：A minimum cumulative GPA of 2.0 required． |
| \＃Area Pathway Course | 4 | 区 |  |  |  |
| \＃Area Pathway Course | 4 | 区 |  |  |  |
| \＃Area Pathway Course | 4 | 区 |  |  |  |
| TERM SEVEN： 91105 CREDIT HOURS |  |  |  |  |  |
| \＃EEE 488：Senior Design Laboratory I（L） | 3 | 区 |  |  | －See Degree Audit Reporting System（DARS）for approved list of Technical Electives \＃Designates Major Course：A minimum cumulative GPA of 2.0 required． |
| 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 Diversity in the US （C），Global Awareness（G）or Historical Awareness（H） | 3 | $\square$ |  |  |  |
| \＃Technical Elective | 3 | 囚 |  |  |  |
| \＃Technical Elective | 3 | 区 |  |  |  |
| TERM EIGHT： $106 \mathbf{1 2 0}$ CREDIT HOURS |  |  |  |  |  |
| \＃EEE 489：Senior Design Laboratory II（L） | 3 | 区 |  |  | －See Degree Audit Reporting System（DARS）for approved list of Technical Electives <br> \＃Designates Major Course：A minimum cumulative GPA of 2.0 required． |
| \＃Technical Elective | 3 | 区 |  |  |  |
| \＃Technical Elective | 3 | 区 |  |  |  |
| \＃Technical Elective | 3 | 囚 |  |  |  |
| UD Humanities，Fine Arts \＆Design（HU）OR Social Behavioral \＆ Science（SB） | 3 | 区 |  |  |  |

Major Map: Electrical Engineering Bachelor of Science in Engineering (B.S.E.) Ira A. Fulton School of Engineering, Tempe Campus
Catalog Year: 2008-2009

Graduation Requirements Summary:

| Total Hours Regular <br> Curriculum (120) | Total Hrs at ASU (30 <br> $\mathrm{min})$ | Hrs Resident Credit for Academic <br> Recognition <br> $(56 \mathrm{~min})$ | Major GPA (2.000 <br> Min. CUM GPA $)$ | Total UD Hrs (45 <br> $\mathrm{min})$ | Total Comm. College <br> Hrs. (64 Max) |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |

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:

Major Map：Electrical Engineering
（Electric Power and Energy Systems）－
Bachelor of Science in Engineering（B．S．E．）
Ira A．Fulton School of Engineering，Tempe Campus
Catalog Year：2008－2009

|  |  |  | Completed ATP：$\square$ Yes $\square$ No |  | Completed AGEC：$\square$ Yes $\square$ No |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 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： 015 CREDIT HOURS |  |  |  |  |  |
| ASU 101：The ASU Experience | 1 | $\square$ |  |  | －Complete MAT 265 with a minimum grade of ＂C＂ <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> ＊CHM 113 is a prerequisite and does not apply towards degree credit <br> ＊＊If ENG 105 a 3 hr applicable elective must also be taken prior to graduation．See Advisor． <br> \＃Designates Major course：A minimum cumulative GPA of 2.0 required． |
| CHM 114：General Chemistry for Engineers OR CHM 116：General Chemistry II＊ | 4 | $\square$ |  |  |  |
| \＃CSE 100：Principles of Programming with C＋＋（CS）OR <br> \＃EEE 120：Digital Design Fundamentals | 3 | $\square$ |  |  |  |
| \＃EEE 101：Introduction to Engineering Design OR <br> BME 111：Engineering Perspectives on Biological Systems | 2 or 3 | $\square$ |  |  |  |
| MAT 265：Calculus for Engineers I | 3 | $\square$ |  | Grade of C |  |
| 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 |  |
| TERM TWO： 1630 CREDIT HOURS |  |  |  |  |  |
| \＃CSE 100：Principles of Programming with C＋＋（CS）OR <br> \＃EEE 120：Digital Design Fundamentals | 3 | $\square$ |  |  | －Complete EEE 101 <br> －Complete MAT 266；PHY 121 \＆ 122 each with a minimum grade of＂C＂ <br> \＃Designates Major Course：A minimum cumulative GPA of 2.0 required． |
| \＃EEE 101：Introduction to Engineering Design OR BME 111：Engineering Perspectives on Biological Systems | $\begin{gathered} \hline 2 \text { or } \\ 3 \\ \hline \end{gathered}$ |  |  |  |  |
| MAT 266：Calculus for Engineers II | 3 | $\square$ |  | Grade of C |  |
| PHY 121／122：University Physics I／Laboratory I（SQ） | 3／1 | $\square$ |  | Grade of C |  |
| 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 |  |
| TERM THREE： 3145 CREDIT HOURS |  |  |  |  |  |
| \＃EEE 202：Circuits I | 4 | $\square$ |  |  | －Complete EEE 202；MAT 267， 274 or 275 and PHY 131， 132 with a minimum grade of＂C＂ <br> －Complete First Year Composition requirement： ENG 101 \＆ 102 or ENG 107 \＆ 108 or ENG 105 <br> \＃Designates Major Course：A minimum cumulative GPA of 2.0 required． |
| MAT 267：Calculus for Engineers III | 3 | $\square$ |  | Grade of C |  |
| MAT 274：Elementary Differential Equations（MA）OR MAT 275：Modern Differential Equations（MA） | 3 | $\square$ |  | Grade of C |  |
| PHY 131／132：University Physics II Electricity and Magnetism／ Laboratory II（SQ） | 3／1 | $\square$ |  | Grade of C |  |
| TERM FOUR： 4660 CREDIT HOURS |  |  |  |  |  |
| \＃EEE 203：Signals and Systems I | 3 | $\square$ |  |  | －Complete EEE 203 and EEE 241 <br> \＃Designates Major Course：A minimum cumulative GPA of 2.0 required． |
| \＃EEE 241：Fundamentals of Electromagnetics | 3 | $\square$ |  |  |  |
| MAT 342：Linear Algebra OR <br> MAT 343：Applied Linear Algebra | 3 | 囚 |  | Grade of C |  |
| PHY 241：University Physics III | 3 | $\square$ |  | Grade of C |  |
| Humanities，Fine Arts \＆Design（HU）AND Cultural Diversity in the US（C），or Historical Awareness（H） | 3 | $\square$ |  |  |  |
| TERM FIVE： 6175 CREDIT HOURS |  |  |  |  |  |
| \＃EEE 230：Computer Organization and Assembly Language Programming | 3 | $\square$ |  |  | \＃Designates Major Course：A minimum cumulative GPA of 2.0 required． |
| \＃EEE 334：Circuits II | 4 | 区 |  |  |  |
| \＃EEE 350：Random Signal Analysis | 3 | 区 |  |  |  |
| \＃EEE 360：Energy Systems and Power Electronics | 4 | 囚 |  |  |  |
| TERM SIX： $76 \mathbf{9 0}$ CREDIT HOURS |  |  |  |  |  |
| ECN 211／212（SB）：Macroeconomic Principles／Microeconomic Principles or ECN 201：Economic Issues \＆Analysis（SB） | 3 | $\square$ |  |  | －Area Pathway Courses：（choose 3）EEE 304，333， 335，341，352．Area Pathway courses are prerequisites for Technical Electives．See Advisor for guidance in selection． <br> \＃Designates Major Course：A minimum cumulative GPA of 2.0 required． |
| \＃Area Pathway Course | 4 | 囚 |  |  |  |
| \＃Area Pathway Course | 4 | 区 |  |  |  |
| \＃Area Pathway Course | 4 | 区 |  |  |  |
| TERM SEVEN： 91105 CREDIT HOURS |  |  |  |  |  |
| \＃EEE 488：Senior Design Laboratory I（L） | 3 | 囚 |  |  | \＃Designates Major Course：A minimum cumulative GPA of 2.0 required． |
| Select 2   <br> \＃EEE 460：Nuclear Concepts for the 21 ${ }^{\text {st }}$ Century（3 hrs）   <br> \＃EEE 463：Electrical Power Plant（3 hrs）   <br> \＃EEE 470：Electric Power Devices（3 hrs）   <br> \＃EEE 471：Power System Analysis（3 hrs）   <br> \＃EEE 473：Electrical Machinery（3 hrs）   <br> \＃EEE 498：Pro－Seminar（Power Elec．） 3 hrs ）   <br> \＃EEE 498：Pro－Seminar（Solar Energy）$(3 \mathrm{hrs})$   |  |  |  |  |  |
| GCU 364：Energy in the Global Arena（SB，G） | 3 | 囚 |  |  |  |
| Humanities，Fine Arts \＆Design（HU）AND Cultural Diversity in the US（C），or Historical Awareness（H） | 3 | $\square$ |  |  |  |

Major Map：Electrical Engineering （Electric Power and Energy Systems）－
Bachelor of Science in Engineering（B．S．E．）
Ira A．Fulton School of Engineering，Tempe Campus
Catalog Year：2008－2009

| Course Subject and Title （courses in bold／shading are critical） | Hrs． | Upper <br> Division | Transfer Course／Grade | Minimum Grade if Required | Additional Critical Requirement Notes |
| :---: | :---: | :---: | :---: | :---: | :---: |
| TERM EIGHT： $106 \mathbf{1 2 0}$ CREDIT HOURS |  |  |  |  | －See Degree Audit Reporting System（DARS）for approved list of Technical Electives <br> \＃Designates Major Course：A minimum cumulative GPA of 2.0 required． |
| \＃EEE 489：Senior Design Laboratory II（L） | 3 | 区 |  |  | －See Degree Audit Reporting System（DARS）for approved list of Technical Electives <br> \＃Designates Major Course：A minimum cumulative GPA of 2.0 required． |
| ```Select 1 not previously selected: \# EEE 460: Nuclear Concepts for the \(21^{\text {st }}\) Century ( 3 hrs ) \# EEE 463: Electrical Power Plant (3 hrs) \# EEE 470: Electric Power Devices (3 hrs) \# EEE 471: Power System Analysis (3 hrs) \# EEE 473: Electrical Machinery ( 3 hrs ) \# EEE 498: Pro-Seminar (Power Elec.) (3 hrs) \# EEE 498: Pro-Seminar (Solar Energy) (3 hrs)``` |  | 区 |  |  |  |
| \＃Technical Elective | 3 | 区 |  |  |  |
| \＃Technical Elective | 3 | 区 |  |  |  |
| Humanities，Fine Arts \＆Design（HU）OR Social \＆Behavioral Science（SB） | 3 | $\square$ |  |  |  |

\＃Designates Major Course：A minimum cumulative GPA of 2.0 required．
Graduation Requirements Summary：

| Total Hours Regular <br> Curriculum（120） | Total Hrs at ASU（30 <br> $\mathrm{min})$ | Hrs Resident Credit for Academic <br> Recognition <br> $(56 \mathrm{~min})$ | Major GPA（2．000 <br> Min．CUM GPA $)$ | Total UD Hrs（45 <br> $\mathrm{min})$ | Total Comm．College <br> Hrs．（64 Max） |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |

## 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：

Major Map：Engineering Special Studies
（Pre－medical Engineering）－
Bachelor of Science in Engineering（B．S．E．）
Ira A．Fulton School of Engineering，Tempe Campus
Catalog Year：2008－2009

|  |  |  | Completed ATP：$\square$ Yes $\square$ No |  | Completed AGEC：$\square$ Yes $\square$ No |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 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： 015 CREDIT HOURS |  |  |  |  |  |
| ASU 101：The ASU Experience | 1 | $\square$ |  |  | －Complete BME 100 with a minimum grade of ＂C＂or BIO 188 <br> －Complete MAT 265 with a minimum grade of ＂C＂ <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> ＊＊If ENG 105 a 3 hr applicable elective must also be taken prior to graduation．See Advisor． |
| BME 100：Introduction to Bioengineering OR BIO 188：General Biology II（CS） | $\begin{gathered} \hline 2 \text { or } \\ 4 \\ \hline \end{gathered}$ | $\square$ |  | Grade of C in BME $100$ |  |
| MAT 265：Calculus for Engineers I | 3 | $\square$ |  | Grade of C |  |
| CHM 113：General Chemistry I（SQ） | 4 | $\square$ |  |  |  |
| 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 TWO： 1630 CREDIT HOURS |  |  |  |  |  |
| BME 100：Introduction to Bioengineering OR BIO 188：General Biology II（SQ） | $\begin{gathered} 2 \text { or } \\ 4 \\ \hline \end{gathered}$ | $\square$ |  | $\begin{aligned} & \text { Grade of } \mathrm{C} \text { in } \mathrm{BME} \\ & 100 \\ & \hline \end{aligned}$ | －Complete BIO 188；BME 100 with a minimum grade of＂C＂；CHM 116；MAT 266 with a minimum grade of＂C＂；PHY 121 \＆ 122 |
| CHM 116：General Chemistry II（SQ） | 4 | $\square$ |  |  |  |
| MAT 266：Calculus for Engineers II | 3 | $\square$ |  | Grade of C |  |
| PHY 121／122：University Physics I／Laboratory I（SQ） | 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： 3145 CREDIT HOURS |  |  |  |  |  |
| BME 235：Physiology for Engineers | 4 | $\square$ |  | Grade of C | －Complete PHY 131 \＆ 132 <br> －Complete First Year Composition requirement： ENG 101 \＆ 102 or ENG 107 \＆ 108 or ENG 105 |
| PHY 131／132：University Physics II Electricity and Magnetism／Laboratory II（SQ） | 3／1 | $\square$ |  |  |  |
| CHM 233／237：General Organic Chemistry I／Laboratory I | 3／1 | $\square$ |  |  |  |
| CSE 100：Principles of Programming with C＋＋（CS） | 3 | $\square$ |  |  |  |
| TERM FOUR： $46 \mathbf{6 0}$ CREDIT HOURS |  |  |  |  |  |
| BME 200：Conservation Principles in Bioengineering | 3 | $\square$ |  | Grade of C | －Complete BME 200， 235 each with a minimum grade of＂C＂ |
| EEE 202：Circuits I | 4 | $\square$ |  |  |  |
| MAE 212：Engineering Mechanics | 4 | $\square$ |  |  |  |
| MAT 275：Modern Differential Equations（MA） | 3 | $\square$ |  |  |  |
| CHM 234／238：General Organic Chemistry II／Laboratory II OR Humanities，Fine Arts \＆Design（HU）AND Cultural Diversity in the US（C），Global Awareness（G）or Historical Awareness（H） | $\begin{gathered} 4 \text { or } \\ 3 \end{gathered}$ | $\square$ |  |  |  |
| TERM FIVE： 6175 CREDIT HOURS |  |  |  |  |  |
| \＃BME 318：Biomaterials | 4 | 区 |  | Grade of C | \＃Designates Major Course：A minimum cumulative GPA of 2.0 required． |
| \＃BME 350：Signals and Systems for Bioengineering | 3 | 区 |  | Grade of C |  |
| \＃CHM 341：Elementary Physical Chemistry | 3 | 区 |  |  |  |
| \＃MAT 343：Applied Linear Algebra | 3 | 区 |  |  |  |
| Social \＆Behavioral Science（SB）AND Cultural Diversity in the US （C），Global Awareness（G）or Historical Awareness（H） | 3 | $\square$ |  |  |  |
| TERM SIX： $76 \mathbf{9 0}$ CREDIT HOURS |  |  |  |  |  |
| \＃BME 300：Bioengineering Product Design | 3 | 区 |  | Grade of C | \＃Designates Major Course：A minimum cumulative GPA of 2.0 required． |
| \＃BME 331：Bioengineering Transport Phenomena | 3 | 区 |  | Grade of C |  |
| \＃BME 370：Microcomputer Applications in Bioengineering | 3 | 区 |  | Grade of C |  |
| CHM 234／238：General Organic Chemistry II／Laboratory II OR Humanities，Fine Arts \＆Design（HU）AND Cultural Diversity in the US（C），Global Awareness（G）or Historical Awareness（H）if CHM 234／238 completed | $\begin{gathered} 4 \text { or } \\ 3 \\ \hline \end{gathered}$ | $\square$ |  |  |  |
| \＃IEE 380：Probability and Statistics for Engineering Problem Solving | 3 | $\square$ |  |  |  |
| TERM SEVEN： 91105 CREDIT HOURS |  |  |  |  |  |
| \＃BME 413：Biomedical Instrumentation（BME 413 ＋ 423 ＝L） | 3 | 区 |  | Grade of C | \＃Designates Major Course：A minimum cumulative GPA of 2.0 required． |
| \＃BME 417：Biomedical Engineering Capstone Design I（L） | 4 | 区 |  | Grade of C |  |
| \＃BME 423：Biomedical Instrumentation Laboratory | 1 | 区 |  | Grade of C |  |
| \＃BME 434：Applications of Bioengineering OR <br> \＃BME 416：Biomechanics OR <br> \＃BME 419：Biocontrol Systems | 3 | 区 |  | Grade of C |  |
| Social \＆Behavioral Science（SB）AND Cultural Diversity in the US （C），Global Awareness（G）or Historical Awareness（H） | 3 | $\square$ |  |  |  |
| TERM EIGHT： 106120 CREDIT HOURS |  |  |  |  |  |
| \＃BME 490：Biomedical Engineering Capstone Design II | 4 | 区 |  | Grade of C | \＃Designates Major Course：A minimum cumulative GPA of 2.0 required． |
| Humanities，Fine Arts \＆Design（HU）AND Cultural Diversity in the US（C），Global Awareness（G）or Historical Awareness（H） | 3 | 区 |  |  |  |
| \＃Technical Elective | 1 | 区 |  | Grade of C |  |
| UD Humanities，Fine Arts \＆Design（HU）OR Social Behavioral Science（SB） | 3 | 囚 |  |  |  |

Major Map: Engineering Special Studies
(Pre-medical Engineering) -
Bachelor of Science in Engineering (B.S.E.)
Ira A. Fulton School of Engineering, Tempe Campus
Catalog Year: 2008-2009

## Graduation Requirements Summary:

| Total Hours Regular <br> Curriculum (120) | Total Hrs at ASU (30 <br> $\mathrm{min})$ | Hrs Resident Credit for Academic <br> Recognition <br> $(56 \mathrm{~min})$ | Major GPA (2.000 <br> Min. CUM GPA $)$ | Total UD Hrs (45 <br> $\mathrm{min})$ | Total Comm. College <br> Hrs. (64 Max) |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |

## 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:

Major Map：Industrial Engineering－ Bachelor of Science in Engineering（B．S．E．）
Ira A．Fulton School of Engineering，Tempe Campus
Catalog Year：2008－2009

| 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 EIGHT： 106120 CREDIT HOURS |  |  |  |  |  |
| IEE 461：Production Control | 3 | ® |  | Grade of C |  |
| IEE 490：Project in Design／Development（L） | 3 | 区 |  | Grade of C |  |
| IEE Technical Elective | 3 | 区 |  | Grade of C |  |
| Career Focused Elective | 3 | 囚 |  |  |  |
| Career Focused Elective | 3 | 囚 |  |  |  |

## Graduation Requirements Summary：

| Total Hours Regular <br> Curriculum（120） | Total Hrs at ASU（30 <br> $\mathrm{min})$ | Hrs Resident Credit for Academic <br> Recognition <br> $(56 \mathrm{~min})$ | Major GPA（2．000 <br> Min．CUM GPA $)$ | Total UD Hrs（45 <br> $\mathrm{min})$ | Total Comm．College <br> Hrs．（64 Max） |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |

## 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：

# Major Map：Materials Science and Engineering－ Bachelor of Science in Engineering（B．S．E．） <br> Ira A．Fulton School of Engineering，Tempe Campus <br> Catalog Year：2008－2009 

|  |  |  | Completed ATP：$\square$ Yes $\quad \square$ No |  | Completed AGEC：$\square$ Yes $\square$ No |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 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 Requirement Notes |
| TERM ONE： 015 CREDIT HOURS |  |  |  |  |  |
| ASU 101：The ASU Experience | 1 | $\square$ |  |  | －Complete MAT 265 with a minimum grade of ＂C＂；CHM 113 or 114；MSE 100. <br> －Minimum CUM ASU 2．0 GPA required <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> ＊＊If ENG 105 a 3 hr applicable elective must also be taken prior to graduation．See Advisor． <br> \＃Designates Major Course：A minimum cumulative GPA of 2.0 required． |
| CHM 114：General Chemistry for Engineers（SQ）OR CHM 113／116 ：General Chemistry I／General Chemistry II（SQ） | 4 | $\square$ |  |  |  |
| MAT 265：Calculus for Engineers I | 3 | $\square$ |  | Grade of C |  |
| \＃MSE 100：Introduction of Materials Engineering | 2 | $\square$ |  |  |  |
| 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 |  |
| Social \＆Behavioral Science（SB）AND Cultural Diversity in the US （C），Global Awareness（G）or Historical Awareness（H） | 3 | $\square$ |  |  |  |
| TERM TWO： 1630 CREDIT HOURS |  |  |  |  |  |
| MAT 266：Calculus for Engineers II | 3 | $\square$ |  | Grade of C | －MSE 250 must be completed by the end of the $4^{\text {th }}$ semester <br> －CHM 116 must be completed for those who took CHM 113 <br> －Complete MAT 266 with a minimum grade of ＂C＂；and PHY 121 \＆ 122 <br> －Minimum CUM ASU 2．0 GPA required <br> \＃Designates Major Course：A minimum cumulative GPA of 2.0 required． |
| \＃MSE 250：Structure and Properties of Materials | 3 | $\square$ |  | Grade of C |  |
| PHY 121／122：University Physics I／Laboratory I（SQ） | 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 |  |
| Humanities，Fine Arts \＆Design（HU）AND Cultural Diversity in the US（C），Global Awareness（G）or Historical Awareness（H） | 3 | $\square$ |  |  |  |
| TERM THREE： 3145 CREDIT HOURS |  |  |  |  |  |
| MAT 267：Calculus for Engineers III | 3 | $\square$ |  | Grade of C | －Complete MAT 267 with a minimum grade of ＂C＂；and PHY 131 \＆ 132 <br> －Complete First Year Composition requirement： ENG 101 \＆ 102 OR ENG 107 \＆ 108 or ENG 105 <br> －Minimum CUM ASU 2．0 GPA required <br> \＃Designates Major Course：A minimum cumulative GPA of 2.0 required． |
| PHY 131／132：University Physics II Electricity and Magnetism／Laboratory II（SQ） | 3／1 | $\square$ |  |  |  |
| BME 111：Engineering Perspectives on Biological Systems | 3 | $\square$ |  |  |  |
| \＃MSE 215：Materials Synthesis | 3 | $\square$ |  |  |  |
| TERM FOUR： 4660 CREDIT HOURS |  |  |  |  |  |
| MAT 275：Modern Differential Equations（MA） | 3 | $\square$ |  |  | －Minimum CUM ASU 2．0 GPA required <br> －MSE 250 must be completed with a minimum grade of＂C＂． <br> \＃Designates Major Course：A minimum cumulative GPA of 2.0 required． |
| MAT 343：Applied Linear Algebra | 3 | $\square$ |  |  |  |
| \＃MSE 211：Introduction to Mechanics of Materials | 3 | $\square$ |  |  |  |
| IEE 220：Business／Industrial Engineering | 3 | $\square$ |  |  |  |
| Social \＆Behavioral Science（SB）AND Cultural Diversity in the US （C），Global Awareness（G）or Historical Awareness（H） | 3 | $\square$ |  |  |  |
| TERM FIVE： 6175 CREDIT HOURS |  |  |  |  |  |
| Math or Science Elective | 3 | $\square$ |  |  | \＃Designates Major Course：A minimum cumulative GPA of 2.0 required． |
| \＃MSE 315：Mathematical and Computer Methods in Materials（CS） | 3 | 区 |  |  |  |
| \＃MSE 330：Thermodynamics of Materials | 3 | 囚 |  |  |  |
| \＃MSE 355：Materials Structure and Microstructure | 3 | 区 |  |  |  |
| \＃MSE 356：Materials Structure and Microstructure Laboratory | 1 | 区 |  |  |  |
| Humanities，Fine Arts \＆Design（HU）AND Cultural Diversity in the US（C），Global Awareness（G）or Historical Awareness（H） | 3 | $\square$ |  |  |  |
| TERM SIX： $76 \mathbf{9 0}$ CREDIT HOURS |  |  |  |  |  |
| \＃MSE 335：Materials Kinetics and Processing | 3 | 区 |  |  | \＃Designates Major Course：A minimum cumulative GPA of 2.0 required． |
| \＃MSE 358：Introduction to Electronic，Magnetic，\＆Optical Properties | 3 | 区 |  |  |  |
| \＃MSE 420：Physical Metallurgy | 3 | 囚 |  |  |  |
| \＃MSE 421：Physical Metallurgy Laboratory | 1 | 囚 |  |  |  |
| \＃MSE 450：Introduction to Materials Characterization | 3 | 区 |  |  |  |
| \＃MSE 451：Introduction to Materials Characterization Laboratory | 1 | 区 |  |  |  |
| TERM SEVEN： 91105 CREDIT HOURS |  |  |  |  |  |
| \＃MSE 440：Mechanical Properties of Solids | 3 | 区 |  |  | \＃Designates Major Course：A minimum cumulative GPA of 2.0 required． |
| \＃MSE 470：Polymers and Composites | 3 | 囚 |  |  |  |
| \＃MSE 471：Introduction to Ceramics | 3 | 区 |  |  |  |
| \＃MSE 482：Materials Engineering Design（L） | 3 | 区 |  |  |  |
| \＃Advanced Science Elective | 3 | 区 |  |  |  |
| TERM EIGHT： 106120 CREDIT HOURS |  |  |  |  |  |
| \＃MSE 490：Capstone Design Project（L） | 3 | 区 |  |  | \＃Designates Major Course：A minimum cumulative GPA of 2.0 required． |
| \＃MSE Technical Elective | 3 | $\square$ |  |  |  |
| \＃MSE Technical Elective | 3 | $\square$ |  |  |  |
| \＃Advanced Science Elective | 3 | 区 |  |  |  |
| UD Humanities，Fine Arts \＆Design（HU）OR Social \＆Behavioral Science（SB） | 3 | 区 |  |  |  |

## Graduation Requirements Summary:

| Total Hours <br> $(120$ minimum $)$ | Total Hrs at ASU <br> $(30$ minimum $)$ | Hrs Resident Credit for Academic <br> Recognition $(56$ minimum $)$ | Major GPA <br> $(2.00$ Min. $)$ | Total UD Hrs <br> $(45$ 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:

## Major Map：Mechanical Engineering－ Bachelor of Science in Engineering（B．S．E．） <br> Ira A．Fulton School of Engineering，Tempe Campus <br> Catalog Year：2008－2009

|  |  |  | Completed ATP：$\square$ Yes $\square$ No |  | Completed AGEC：$\square$ Yes $\square$ No |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 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： 015 CREDIT HOURS |  |  |  |  |  |
| ASU 101：The ASU Experience | 1 | $\square$ |  |  | －Complete CHM 114 or 116 or 115 or MAE 100 with a minimum grade of＂C＂ <br> －Complete MAT 265 with a min grade of＂C＂ <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> ＊CHM 113 is a prerequisite and does not apply towards degree credit <br> ＊＊If ENG 105 a 3 hr applicable elective must also be taken prior to graduation．See Advisor． <br> \＃Designates Major Course：A minimum cumulative GPA of 2.0 required． |
| CHM 114：General Chemistry for Engineers（SQ）OR <br> CHM 115：General Chemistry with Qualitative Analysis（SQ）OR <br> CHM 116：General Chemistry II＊（SQ） | 4 | $\square$ |  | Grade of C |  |
| \＃MAE 100：Intro to Mechanical and Aerospace Engineering OR Humanities，Fine Arts \＆Design（HU）AND Cultural Diversity in the US（C），Global Awareness（G），or Historical Awareness（H） | $\begin{gathered} 2 \text { or } \\ 3 \\ \hline \end{gathered}$ | $\square$ |  | Grade of C in MAE 100 |  |
| MAT 265：Calculus for Engineers 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 | $\square$ |  | Grade of C |  |
| Social \＆Behavioral Science（SB）AND Cultural Diversity in the US （C），Global Awareness（G），or Historical Awareness（H） | 3 | $\square$ |  |  |  |
| TERM TWO： 1630 CREDIT HOURS |  |  |  |  |  |
| \＃MAE 100：Introduction to Mechanical and Aerospace Engineering or，if completed take <br> Humanities，Fine Arts \＆Design（HU）AND Cultural Diversity in the US（C），Global Awareness（G），or Historical Awareness（H） | $\begin{gathered} 2 \text { or } \\ 3 \end{gathered}$ | $\square$ |  | Grade of C in MAE 100 | －Complete CHM 114 or 116 or 115；MAE 100； MAT 266；PHY 121， 122 with a minimum grade of＂C <br> \＃Designates Major Course：A minimum cumulative GPA of 2.0 required． |
| MAT 266：Calculus for Engineers II | 3 | $\square$ |  | Grade of C |  |
| PHY 121／122：University Physics I／Laboratory I（SQ） | 3／1 | $\square$ |  | 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 |  |
| TERM THREE： 3145 CREDIT HOURS |  |  |  |  |  |
| \＃MAE 212： Engineering Mechanics | 4 | $\square$ |  | Grade of C | －Complete ENG 102 or 108 or 105；MAE 212； MAT 275；PHY 131， 132 with a minimum grade of＂C＂ <br> －Complete First Year Composition requirement： <br> ENG 101 \＆ 102 or ENG 107 \＆ 108 or ENG 105 <br> \＃Designates Major Course：A minimum cumulative GPA of 2.0 required． |
| MAT 275：Modern Differential Equations | 3 | $\square$ |  | Grade of C |  |
| PHY 131／132：University Physics II Electricity and Magnetism／ Laboratory II | 3／1 | $\square$ |  | Grade of C |  |
| \＃MAE 214：Computer－Aided Engineering I | 1 | $\square$ |  |  |  |
| MAT 267：Calculus for Engineers III | 3 | $\square$ |  | Grade of C |  |
| TERM FOUR： $46 \mathbf{6 0}$ CREDIT HOURS |  |  |  |  |  |
| \＃MAE 213：Solid Mechanics | 3 | $\square$ |  |  | －Complete MAE 213， 240 <br> \＃Designates Major Course：A minimum cumulative GPA of 2.0 required． |
| \＃MAE 240：Thermofluids I | 4 | $\square$ |  |  |  |
| CHM 231：Elementary Organic Chemistry OR CHM 240：Intro to Physical Chemistry | 3 | $\square$ |  | Grade of C |  |
| MAT 343：Applied Linear Algebra | 3 | 区 |  | Grade of C |  |
| \＃MSE 250：Structure and Properties of Materials | 3 | $\square$ |  |  |  |
| TERM FIVE： 6175 CREDIT HOURS |  |  |  |  |  |
| BME 111：Engineering Perspectives on Biological Systems（or dept approved BIO）OR <br> \＃MAE 340：Thermofluids II | 3 | $\square$ |  |  | \＃Designates Major Course：A minimum cumulative GPA of 2.0 required |
| \＃EEE 202：Circuits I | 4 | $\square$ |  |  |  |
| \＃MAE 322：Structural Mechanics | 4 | 囚 |  |  |  |
| \＃MAE 323：Computer－Aided Engineering II | 2 | 区 |  |  |  |
| \＃MAE 384：Numerical Methods for Engineers（CS） | 3 | 区 |  |  |  |
| TERM SIX： $76 \mathbf{9 0}$ CREDIT HOURS |  |  |  |  |  |
| BME 111：Engineering Perspectives on Biological Systems（or dept approved BIO）or，if completed take <br> \＃MAE 340：Thermofluids II | 3 | 区 |  |  | \＃Designates Major Course：A minimum cumulative GPA of 2.0 required |
| \＃MAE 318：Sensors and Controls | 5 | 区 |  |  |  |
| \＃MAE 342：Principles of Mechanical Design | 3 | 区 |  |  |  |
| \＃Technical Elective OR <br> Social \＆Behavioral Science（SB）AND Cultural Diversity in the US <br> （C），Global Awareness（G），or Historical Awareness（H） | 3 | 区 |  |  |  |
| TERM SEVEN： 91105 CREDIT HOURS |  |  |  |  |  |
| \＃MAE 488：Mechanical Engineering Design I | 3 | 区 |  |  | \＃Designates Major Course：A minimum cumulative GPA of 2.0 required |
| Social \＆Behavioral Science（SB）AND Cultural Diversity in the US （C），Global Awareness（G），or Historical Awareness（H）；or if completed take \＃Technical Elective | 3 | $\square$ |  |  |  |
| Humanities，Fine Arts \＆Design（HU）AND Cultural Diversity in the US（C），Global Awareness（G），or Historical Awareness（H） | 3 | $\square$ |  |  |  |
| \＃Technical Elective | 3 | 区 |  |  |  |
| \＃Technical Elective | 3 | 囚 |  |  |  |


| 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 EIGHT： 106120 CREDIT HOURS |  |  |  |  |  |
| \＃MAE 400：Engineering Profession（L） | 3 | 区 |  |  | \＃Designates Major Course：A minimum cumulative GPA of 2.0 required |
| \＃MAE 489：Mechanical Engineering Design II | 3 | 区 |  |  |  |
| \＃MAE 491：Experimental Mechanical Engineering（L） | 3 | 区 |  |  |  |
| \＃Technical Elective | 3 | 囚 |  |  |  |
| UD Humanities，Fine Arts \＆Design（HU）OR Social \＆Behavioral Science（SB） | 3 | 囚 |  |  |  |

Graduation Requirements Summary：

| Total Hours Regular <br> Curriculum（120） | Total Hrs at ASU（30 <br> $\mathrm{min})$ | Hrs Resident Credit for Academic <br> Recognition <br> $(56 \mathrm{~min})$ | Major GPA（2．000 <br> Min．CUM GPA $)$ | Total UD Hrs（45 <br> $\mathrm{min})$ | Total Comm．College <br> Hrs．（64 Max） |
| :--- | :--- | :--- | :--- | :--- | :--- |
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## 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：

## Major Map: Mechanical Engineering (Computational and Mathematical Mechanics) Bachelor of Science in Engineering (B.S.E.) <br> Ira A. Fulton School of Engineering, Tempe Campus <br> Catalog Year: 2008-2009



Major Map：Mechanical Engineering （Computational and Mathematical Mechanics）－ Bachelor of Science in Engineering（B．S．E．）
Ira A．Fulton School of Engineering，Tempe Campus
Catalog Year：2008－2009

| Course Subject and Title （courses in bold／shading are critical） | Hrs． | $\begin{aligned} & \hline \text { Upper } \\ & \text { Division } \end{aligned}$ | Transfer Course／Grade | Minimum Grade if Required | Additional Critical Requirement Notes |
| :---: | :---: | :---: | :---: | :---: | :---: |
| TERM EIGHT： 106120 CREDIT HOURS |  |  |  |  |  |
| \＃MAE 400：Engineering Profession，or if completed take \＃Technical Elective | 3 | 区 |  |  | \＃Designates Major Course：A minimum cumulative GPA of 2.0 required |
| \＃MAE 489：Mechanical Engineering Design II | 3 | 区 |  |  |  |
| \＃MAE 491：Experimental Mechanical Engineering（L） | 3 | 区 |  |  |  |
| \＃Technical Elective | 3 | $\square$ |  |  |  |
| UD Humanities，Fine Arts \＆Design（HU）OR Social \＆Behavioral Science（SB） | 3 | 区 |  |  |  |

Graduation Requirements Summary：

| Total Hours <br> $(120$ minimum $)$ | Total Hrs at ASU <br> $(30$ minimum $)$ | Hrs Resident Credit for Academic <br> Recognition $(56$ minimum $)$ | Major GPA <br> $(2.00$ Min．$)$ | Total UD Hrs <br> $(45$ 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：

## Major Map：Mechanical Engineering <br> （Energy and Environment）－ <br> Bachelor of Science in Engineering（B．S．E．） <br> Ira A．Fulton School of Engineering，Tempe Campus <br> Catalog Year：2008－2009

|  |  | Upper Division | Completed ATP：$\square$ Yes $\square$ No |  | Completed AGEC：$\square$ Yes $\square$ No |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Course Subject and Title （courses in bold／shading are critical） | Hrs． |  | Transfer Course／Grade | Minimum Grade if Required | Additional Critical Requirement Notes |
| TERM ONE： 015 CREDIT HOURS |  |  |  |  |  |
| ASU 101：The ASU Experience | 1 | $\square$ |  |  | －Complete CHM 114 or 116 or 115 or MAE 100 with a minimum grade of＂C＂ <br> －Complete MAT 265 with a min grade of＂C＂ <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> ＊CHM 113 is a prerequisite and does not apply towards degree credit <br> ＊＊If ENG 105 a 3 hr applicable elective must also be taken prior to graduation．See Advisor． <br> \＃Designates Major Course：A minimum cumulative GPA of 2.0 required． |
| CHM 114：General Chemistry for Engineers（SQ）OR <br> CHM 115：General Chemistry with Qualitative Analysis（SQ）OR <br> CHM 116：General Chemistry II＊（SQ） | 4 | $\square$ |  | Grade of C |  |
| \＃MAE 100：Introduction to Mechanical and Aerospace Engineering OR | $\begin{gathered} 2 \text { or } \\ 3 \\ \hline \end{gathered}$ | $\square$ |  | Grade of C in MAE 100 |  |
| Humanities，Fine Arts \＆Design（HU）AND Cultural Diversity in the US（C），Global Awareness，（G），or Historical Awareness（H |  |  |  |  |  |
| MAT 265：Calculus for Engineers I | 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 | $\square$ |  | Grade of C |  |
| Social \＆Behavioral Science（SB）AND Cultural Diversity in the US （C），Global Awareness（G），or Historical Awareness（H） | 3 | $\square$ |  |  |  |
| TERM TWO： 1630 CREDIT HOURS |  |  |  |  |  |
| \＃MAE 100：Intro to Mechanical and Aerospace Engineering，or if completed take <br> Humanities，Fine Arts \＆Design（HU）AND Cultural Diversity in the US（C），Global Awareness，（G），or Historical Awareness（H） | $\begin{gathered} 2 \text { or } \\ 3 \end{gathered}$ | $\square$ |  | Grade of C in MAE 100 | －Complete CHM 114 or 116 or 115；MAE 100； MAT 266；PHY 121， 122 with a minimum grade of＂C＂ <br> \＃Designates Major Course：A minimum cumulative GPA of 2.0 required． |
| MAT 266：Calculus for Engineers II | 3 | $\square$ |  | Grade of C |  |
| PHY 121／122：University PhysicsI／Laboratory I（SQ） | 3／1 | $\square$ |  | 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 |  |
| TERM THREE： 3145 CREDIT HOURS |  |  |  |  |  |
| \＃MAE 212：Engineering Mechanics | 4 | $\square$ |  | Grade of C | －Complete ENG 102 or 108 or 105 ；MAT 275； PHY 131，132；MAE 212 with a minimum grade of＂C＂ <br> －Complete First Year Composition requirement： <br> ENG 101 \＆ 102 or ENG 107 \＆ 108 or ENG 105 <br> \＃Designates Major Course：A minimum cumulative GPA of 2.0 required． |
| MAT 275：Modern Differential Equations（MA） | 3 | $\square$ |  | Grade of C |  |
| PHY 131／132：University Physics II Electricity and Magnetism／ <br> Laboratory（SQ） | 3／1 | $\square$ |  | Grade of C |  |
| \＃MAE 214：Computer－Aided Engineering I | 1 | $\square$ |  |  |  |
| MAT 267：Calculus for Engineers III | 3 | $\square$ |  | Grade of C |  |
| TERM FOUR： $46 \mathbf{6 0}$ CREDIT HOURS |  |  |  |  |  |
| \＃MAE 213：Solid Mechanics | 3 | $\square$ |  |  | －Complete MAE 213， 240. <br> \＃Designates Major Course：A minimum cumulative GPA of 2.0 required． |
| \＃MAE 240：Thermofluids I | 4 | $\square$ |  |  |  |
| CHM 231：Elementary Organic Chemistry | 3 | $\square$ |  | Grade of C |  |
| MAT 343：Applied Linear Algebra | 3 | 区 |  | Grade of C |  |
| \＃MSE 250：Structure and Properties of Materials | 3 | $\square$ |  |  |  |
| TERM FIVE： 6175 CREDIT HOURS |  |  |  |  |  |
| BIO 319 Environmental Science（G）or BIO 320：Fundamentals of Ecology；OR <br> \＃MAE 340：Thermofluids II | 3 | 区 |  |  | \＃Designates Major Course：A minimum cumulative GPA of 2.0 required． |
| \＃EEE 202：Circuits I | 4 | $\square$ |  |  |  |
| \＃MAE 322：Structural Mechanics | 4 | 区 |  |  |  |
| \＃MAE 323：Computer－Aided Engineering II | 2 | 区 |  |  |  |
| \＃MAE 384：Numerical Methods for Engineers（CS） | 3 | 区 |  |  |  |
| TERM SIX： $76 \mathbf{9 0}$ CREDIT HOURS |  |  |  |  |  |
| BIO 319 Environmental Science（G）or BIO 320：Fundamentals of Ecology；OR if completed take \＃MAE 340：Thermofluids II | 3 | 区 |  |  | \＃Designates Major Course：A minimum cumulative GPA of 2.0 required． |
| \＃MAE 318：Sensors and Controls | 5 | 区 |  |  |  |
| \＃MAE 342：Principles of Mechanical Design | 3 | 囚 |  |  |  |
| GCU 364：Energy in the Global Arena（SB，G）or PUP 190： Sustainable Cities（HU，G or SB，G）；OR \＃Technical Elective | 3 | $\square$ |  |  |  |
| TERM SEVEN： 91105 CREDIT HOURS |  |  |  |  |  |
| \＃MAE 382：Thermodynamics | 3 | 囚 |  |  | \＃Designates Major Course：A minimum cumulative GPA of 2.0 required． |
| \＃MAE 400：Engineering Profession（L）OR \＃Technical Elective | 3 | 囚 |  |  |  |
| \＃MAE 491：Experimental Mechanical Engineering（L）OR <br> \＃Technical Elective | 3 | 区 |  |  |  |
| GCU 364：Energy in the Global Arena（SB，G）or PUP 190：Sustainable Cities（HU，G or SB，G）；OR if completed take \＃Technical Elective | 3 | 区 |  |  |  |
| GPH 314：Global Change（HU，G）or PHI 310：Environmental Ethics（HU） | 3 | 区 |  |  |  |

Major Map：Mechanical Engineering
（Energy and Environment）－
Bachelor of Science in Engineering（B．S．E．）
Ira A．Fulton School of Engineering，Tempe Campus
Catalog Year：2008－2009

| 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 EIGHT： 106120 CREDIT HOURS |  |  |  |  |  |
| \＃MAE 400：Engineering Profession（L）if completed take <br> \＃Technical Elective | 3 | 区 |  |  | \＃Designates Major Course：A minimum cumulative GPA of 2.0 required． |
| \＃MAE 446：Energy Systems Design | 3 | 区 |  |  |  |
| \＃MAE 491：Experimental Mechanical Engineering（L）if completed take \＃Technical Elective | 3 | 区 |  |  |  |
| \＃Technical Elective | 3 | 区 |  |  |  |
| Humanities，Fine Arts \＆Design（HU）OR Social \＆Behavioral Science（SB） | 3 | $\square$ |  |  |  |

## Graduation Requirements Summary：

| Total Hours Regular <br> Curriculum（120） | Total Hrs at ASU（30 <br> $\mathrm{min})$ | Hrs Resident Credit for Academic <br> Recognition <br> $(56 \mathrm{~min})$ | Major GPA（2．000 <br> Min．CUM GPA $)$ | Total UD Hrs（45 <br> $\mathrm{min})$ | Total Comm．College <br> Hrs．（64 Max） |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |

## 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：

Major Map : Journalism \& Mass Communication -<br>Bachelor of Arts (B.A.)<br>Walter Cronkite School of Journalism, Tempe Campus<br>Catalog Year: 2008-2009


***Track Classes:
Broadcast
JMC 330 AND
JMC 475 (3-9 hours) OR
JMC 437 and Broadcast Elective OR JMC 494: CNS Broadcast (3-9 hours)

## Print Journalism

MC 420 or 440 or 470 AND
Cronkite News Service (3-9 hrs) OR
2 Paired journalism/online electives
(Chosen in cooperation with adviser)

## Public Relations

JMC 310 AND
JMC 415 AND
JMC 417

## Digital Journalism

JMC 494: Digital Media II AND
JMC 494: Digital Media Entrepreneurship AND
JMC 494: Multimedia Reporting OR Knight
Center Independent Study OR New Media Innovation Lab

Walter Cronkite School of Journalism, Tempe Campus
Catalog Year: 2008-2009

## Graduation Requirements Summary:

| Total Hours <br> $(120$ minimum $)$ | Total Hrs at ASU <br> $(30$ minimum $)$ | Hrs Resident Credit for Academic <br> Recognition $(56$ minimum $)$ | Major GPA <br> $(2.50$ Min. $)$ | Total UD Hrs <br> $(45$ minimum $)$ | Total Comm. College <br> Hrs. ( 64 maximum $)$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
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## 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:

Students other than first time freshmen may take the English Grammar Exam one time to attempt to test out of JMC 194 Grammar for Journalists Majors must maintain at least a 2.5 ASU cumulative GPA and a 2.5 JMC cumulative GPA to take JMC courses beyond JMC 201
Students must complete at least 12 hours of upper division coursework outside the major
Students must complete a minimum of 56 hours of ASU coursework to qualify for ASU honors at graduation

| I. First Year Composition (3-6 hours) ${ }^{1}$ | Total Hours | UD Hours | 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. 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: |  |  |  |  |
| Natural Sciences (8 hours) |  |  |  |  |
| SQ: |  |  |  |  |
| SG: |  |  |  |  |
| Literacy and Critical Inquiry (6 hours) |  |  |  |  |
| L: BIS 301: Foundations of Interdis. Studies |  | atisfied by | by majo |  |
| L: BIS 402: Senior Seminar |  | atisfied by | by majo |  |
| Mathematics \& Statistics/Computer Applicatio | hours |  |  |  |
| 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): |  |  |  |  |

Required for all incoming Freshmen (1 hour)

| ASU 101: The ASU Experience |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |


| 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 BIS please go to: http://ss.asu.edu/bis/
- This check sheet is for reference only; please consult your ASU DARS report for official information about your requirements.
${ }^{1}$ Grades of " $C$ " or better are required for all courses within these categories.
${ }^{2}$ 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. 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.


## Bachelor of Interdisciplinary Studies

Catalog: 2004-2005, 2005-2006, 2006-2007, 2007-2008

| III. BIS Core (12 hours) | Total <br> Hours | UD <br> Hours | Res <br> Hours | Grade |
| :--- | :---: | :---: | :---: | :---: |
| BIS 301: Foundations of Interdis. Studies (L) | 3 | 3 | 3 |  |
| BIS 302: Interdisciplinary Inquiry | 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) ${ }^{1}$

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## V. Concentration II (18-30 hours) ${ }^{1}$

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VI. Electives (6-40 or more hours) ${ }^{2}$

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## 1\% Arizona State UNIVERSITY

| I. First Year Composition (3-6 hours) |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
|  | 1 | ASU <br> Hours | Trans <br> Hours | Grade | | Upp |
| :---: |
| Div |

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: |  |  |  |  |
| 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)

| 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): |


| 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 Transer Hours <br> Alowed | Max. 2-yr Transer <br> Hours <br> AGEC Cowed w with | AGEC Completed? | AA Completed? |  |
| 90 | 75 | Y $\square$ or N $\square$ | Y $\square$ or $\mathrm{N} \square$ |  |

- For more information about the BIS degree in Organizational Studies, please go to: http://uc.asu.edu/sis
- Course pre-requisites are available online at: http://www.asu.edu/catalogs
- This check sheet is for reference only; please consult your DARS report for official information about your requirements.


## Bachelor of Interdisciplinary Studies (BIS) Organizational Studies Concentration 2008-2009

|  | ASU <br> III. BIS Core (15 hours) | Trans | Upp <br> Hours | Grade |
| :--- | :---: | :---: | :---: | :---: | | Div |
| :--- |

Sub Total (III): 15

| IV. Organizational Studies Concentration (30 hours) |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
| Organizational \& Management Theory (3 hours) <br> TMC 346: Management Dynamics | 3 |  |  | X |
| Social Processes \& Human Interaction (3 hours) <br> FAS 330: Pers. Growth in Human Relationships | 3 |  |  | X |
| Information Management \& Organizational <br> Technology (3 hours) <br> COM 394: Communication in the Electronic Age | 3 |  |  |  |
| Diversity (3 hours) <br> BIS 394: Topics in Diversity | 3 |  |  | X |
| Organizational Contexts (9 hours) <br> POS 360: World Politics | 3 |  |  | X |
| SOC 321: Sociology of Work <br> REL 320: American Religious Traditions (or) <br> REL 321: Religion in America | 3 |  |  | X |
| Ethics (3 hours) <br> PHI 306: Applied Ethics | 3 |  |  | X |
| Quantitative Methods (3 hours) <br> PAF 401: Statistics | 3 |  | X |  |
| Organizational Tools/Skills (3 hours) <br> ENG 301: Writing for the Professions (or) <br> TWC 301: General Principles of Multimedia | 3 |  | X |  | Sub Total IV: 30

## V. Electives (38-40 hours) ${ }^{2}$

|  |  |  |  |  |
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[^7]Major Map: African \& African American Studies -
Bachelor of Arts (B.A.)
College of Liberal Arts \& Sciences, Tempe Campus
Catalog Year: 2008-2009


## Graduation Requirements Summary:

| Total Hours <br> $(120$ minimum $)$ | Total Hrs at ASU <br> $(30$ minimum $)$ | Hrs Resident Credit for Academic <br> Recognition $(56$ minimum $)$ | Major GPA <br> $(2.00$ Min. $)$ | Total UD Hrs <br> $(45$ 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:

There is room in this roadmap to add a concurrent degree, a minor or a certificate.

Major Map: American Indian Studies -
Bachelor of Science (B.S.)
College of Liberal Arts \& Sciences, Tempe Campus
Catalog Year: 2008-2009


## Graduation Requirements Summary:

| Total Hours <br> $(120$ minimum $)$ | Total Hrs at ASU <br> $(30$ minimum $)$ | Hrs Resident Credit for Academic <br> Recognition $(56$ minimum $)$ | Major GPA <br> $(2.00$ Min. $)$ | Total UD Hrs <br> $(45$ 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:

There is room in this roadmap to add a concurrent degree, a minor or a certificate.

Major Map：Anthropology－Bachelor of Arts（B．A．）
College of Liberal Arts \＆Sciences，Tempe Campus
Catalog Year：2008－2009

|  |  |  | Completed ATP：$\square$ Yes $\quad \square$ No |  | Completed AGEC：$\square$ Yes $\square$ No |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 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： 015 CREDIT HOURS |  |  |  |  |  |
| ASB 102：Introduction to Cultural \＆Social Anthropology（SB，G）OR ASM 104：Bones，Stones and Human Evolution（SB or SG）OR ASB 222：Buried Cities and Lost Tribes（HU／SB，G，H） | 3－4 | $\square$ |  | Grade of C | －An SAT，ACT，Accuplacer，or TOEFL score determines placement into first－year composition courses |
| MAT 142：College Mathematics or higher（MA） | 3 | $\square$ |  | Grade of C | －ASU Math Placement Exam score determines |
| ENG 101 and 102：First－Year Composition OR ENG 107 and 108：English for Foreign Students OR ENG 105：Advanced First－Year Composition | 3 | $\square$ |  | Grade of C | placement in Mathematics course <br> － 6 credits each required in Archaeology，Physical Anthropology，Sociocultural Anthropology． |
| Second Language： | 4 | $\square$ |  |  | －Complete Mathematical Studies（MA）by semester 4. |
| Humanities，Fine Arts，and Design（HU）： | 3 | $\square$ |  |  | －Field School Opportunities：（Archaeological， Physical or Ethnographic）can be used toward the distribution requirements in place of on campus courses． <br> － 2.5 cumulative GPA in critical courses recommended． <br> －Consult an academic advisor for Learning Community，Academic Success Clusters and First Year Seminar options |
| TERM TWO： 1630 CREDIT HOURS |  |  |  |  |  |
| ASB 102：Introduction to Cultural \＆Social Anthropology（SB，G）OR ASM 104：Bones，Stones and Human Evolution（SB or SG）OR ASB 222：Buried Cities and Lost Tribes（HU／SB，G，H） | 3－4 | $\square$ |  | Grade of C | － 2.5 cumulative GPA in critical courses recommended． |
| ENG 101 and 102：First－Year Composition OR ENG 107 and 108：English for Foreign Students OR ENG 105：Advanced First－Year Composition | 3 | $\square$ |  | Grade of C |  |
| Second Language： | 4 | $\square$ |  |  |  |
| Natural Science－Quantitative（SQ）： | 4 | $\square$ |  |  |  |
| TERM THREE： 3145 CREDIT HOURS |  |  |  |  |  |
| ASB 102：Introduction to Cultural \＆Social Anthropology（SB，G）OR ASM 104：Bones，Stones and Human Evolution（SB or SG）OR ASB 222：Buried Cities and Lost Tribes（HU／SB，G，H） | 3－4 | $\square$ |  | Grade of C | －Complete First Year Composition requirement： ENG 101 \＆ 102 OR ENG 107 \＆ 108 or 105 <br> － 2.5 cumulative GPA in critical courses |
| STP＊＊＊（CS） | 3 | $\square$ |  | Grade of C | recommended． |
| Awareness Area－Cultural（C）： | 3 | $\square$ |  |  |  |
| Second Language： | 4 | $\square$ |  |  |  |
| Elective： | 3 | $\square$ |  |  |  |
| TERM FOUR： $46 \mathbf{6 0}$ CREDIT HOURS |  |  |  |  |  |
| Geographic Area Course：Either Archy／Physical or Ethnographic Course | 3 | 区 |  | Grade of C | －Complete second language <br> －Complete Mathematical Studies（MA） |
| ASB（Soc／Cult）Upper Division Elective | 3 | 区 |  | Grade of C | requirement |
| Second Language： | 4 | $\square$ |  |  |  |
| Upper Division Elective ： | 3 | 区 |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| TERM FIVE： 6175 CREDIT HOURS |  |  |  |  |  |
| Geographic Area Course：Archy／Physical or Ethnographic Course | 3 | 区 |  | Grade of C |  |
| ASM（Physical）Upper Division Elective | 3 | 区 |  | Grade of C |  |
| Literacy and Critical Inquiry（L） | 3 | $\square$ |  |  |  |
| Natural Science－Qualitative or General（SQ or SG）： | 4 | $\square$ |  |  |  |
| Elective | 2 | $\square$ |  |  |  |
| TERM SIX： 7690 CREDIT HOURS |  |  |  |  |  |
| ASM（Physical）Elective | 3 | 区 |  | Grade of C |  |
| ASB／ASM（Archaeology）Upper Division Elective | 3 | 区 |  | Grade of C |  |
| ASB（Soc／Cult）Upper Division Elective | 3 | 区 |  | Grade of C |  |
| Upper Division Literacy and Critical Inquiry（L） | 3 | 区 |  |  |  |
| Elective ： | 3 | $\square$ |  |  |  |
| TERM SEVEN： 91105 CREDIT HOURS |  |  |  |  |  |
| ASB 480：Principles of Linguistics OR（SB） <br> ASB 481：Language and Culture OR（SB） <br> ASB 483：Sociolinguistics and the Ethnography of Communication（SB） | 3 | 区 |  | Grade of C |  |
| ASB／ASM Elective | 3 | $\square$ |  | Grade of C |  |
| ASB（Archaeology）Upper Division Elective | 3 | 区 |  | Grade of C |  |
| Upper Division Elective ： | 3 | 区 |  |  |  |
| Elective | 3 | $\square$ |  |  |  |


| 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： $106 \mathbf{1 2 0}$ CREDIT HOURS |  |  |  |  |  |
| Upper Division Elective ： | 3 | 囚 |  |  |  |
| Upper Division Elective ： | 3 | 囚 |  |  |  |
| Upper Division Elective ： | 3 | 区 |  |  |  |
| Elective | 3 | $\square$ |  |  |  |

## Graduation Requirements Summary：

| Total Hours <br> $(120$ minimum $)$ | Total Hrs at ASU <br> $(30$ minimum $)$ | Hrs Resident Credit for Academic <br> Recognition $(56$ minimum $)$ | Major GPA <br> $(2.00 \mathrm{Min})$. | Total UD Hrs <br> $(45$ 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：

There is room in this roadmap to add a concurrent degree，a minor or a certificate．

# Major Map: Asian Languages - Chinese - <br> Bachelor of Arts (B.A.) 

College of Liberal Arts and Sciences, Tempe Campus
Catalog Year: 2008-2009


| Course Subject and Title <br> (courses in bold/shading are critical) | Hrs. | Upper <br> Division | Transfer <br> Course/Grade | Minimum Grade if <br> Required | Additional Critical Tracking Notes |
| :--- | :---: | :--- | :--- | :--- | :--- | :--- |

## Graduation Requirements Summary:

| Total Hours (120 <br> minimum) | Total Hrs at ASU (30 <br> minimum) | Hrs Resident Credit for Academic <br> Recognition ( 56 minimum) | Major GPA <br> $(2.00$ Min. $)$ | Total UD Hrs <br> $(45$ 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:
Minimum grade of "C" in all CHI, FLA, SLC, JPN/KOR, and East-Asian Related Fields courses.

# Major Map：Asian Languages－Japanese－ <br> Bachelor of Arts（B．A．） 

College of Liberal Arts and Sciences，Tempe Campus
Catalog Year：2008－2009

|  |  |  | Completed ATP：$\square$ Yes $\square$ No |  | Completed AGEC：$\square$ Yes $\square$ No |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 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： 015 CREDIT HOURS |  |  |  |  |  |
| JPN 101：First－Year Japanese I（or higher level JPN course depending on placement） | 5 | $\square$ |  | Grade of C | －An SAT，ACT，Accuplacer，or TOEFL score determines placement into first－year |
| ENG 101 and 102：First－Year Composition OR ENG 107 and 108：English for Foreign Students OR ENG 105：Advanced First－Year Composition | 3 | $\square$ |  | Grade of C | composition courses <br> －ASU Math Placement Exam score determines placement in Mathematics course |
| MAT 142：College Mathematics or higher（MA） | 3 | $\square$ |  | Grade of C | －Minimum 2．34 GPA required in all critical |
| Social and Behavioral Sciences（SB） | 3 | $\square$ |  |  | －Consult academic advisor for Learning |
| Elective－ $1^{\text {st }}$ Year Seminar | 1 | $\square$ |  |  | Community，Academic Success Clusters and First Year Seminar options． |
| TERM TWO： 16 30 CREDIT HOURS |  |  |  |  |  |
| JPN 102：First－Year Japanese II（or higher） | 5 | $\square$ |  | Grade of C | －Minimum 2．34 GPA required in all critical |
| ENG 101 and 102：First－Year Composition OR ENG 107 and 108：English for Foreign Students OR ENG 105：Advanced First－Year Composition | 3 | $\square$ |  | Grade of C |  |
| Computer／Statistics／Quantitative applications（CS） | 3 | $\square$ |  |  |  |
| Social and Behavioral Sciences（SB）（APA 200：Introduction to Asian Pacific American Studies［SB，C］recommended） | 3 | $\square$ |  |  |  |
| Elective（recommend＊JPN 206：Calligraphy） | 1 | $\square$ |  | Grade of C |  |
| TERM THREE： 3145 CREDIT HOURS |  |  |  |  |  |
| JPN 201：Second－Year Japanese I（or higher）（G） | 5 | $\square$ |  | Grade of C | －Minimum 2．34 GPA required in all critical |
| Complete one course from： <br> SLC 201：Introduction to Linguistics OR <br> SLC 202：Introduction to Literacy and Cultural Theory（G） | 3 | $\square$ |  | Grade of C | －Complete First Year Composition requirement： ENG 101 \＆ 102 OR ENG 107 \＆ 108 or 105 |
| Natural Science－Quantitative（SQ） | 4 | $\square$ |  |  | Complete Mathematical Studies（MA） |
| Humanities／Fine Arts／Design（HU）and Awareness Area（C） | 3 | $\square$ |  |  |  |
| TERM FOUR： 4660 CREDIT HOURS |  |  |  |  |  |
|  | 5 | $\square$ |  | Grade of C | －Minimum 2．34 GPA required in all critical courses． |
| Complete remaining course from： <br> SLC 201：Introduction to Linguistics OR <br> SLC 202：Introduction to Literacy and Cultural Theory（G） | 3 | $\square$ |  | Grade of C |  |
|  | 4 | $\square$ |  |  |  |
| Literacy（L） | 3 | $\square$ |  |  |  |
| TERM FIVE： 6175 CREDIT HOURS |  |  |  |  |  |
| JPN 313：Third－Year Japanese I（G） | 3 | 区 |  | Grade of C | －Enroll in＂IPO＂Study Abroad Program credits or listed courses <br> －Minimum grade of＂C＂in all JPN，FLA，SLC and East－Asian Related Fields courses． |
| JPN 3＊＊ | 3 | 区 |  | Grade of C |  |
| SLC 421：Japanese Literature in Translation（L or HU，G） | 3 | 区 |  | Grade of C |  |
| CHI／KOR Related Field | 3 | $\boxtimes$ |  | Grade of C |  |
| Elective | 3 | $\square$ |  |  |  |
| TERM SIX： 7690 CREDIT HOURS |  |  |  |  |  |
| JPN 314：Third－Year Japanese II（G） | 3 | 区 |  | Grade of C | －Enroll in＂IPO＂Study Abroad Program credits or listed courses <br> －Minimum grade of＂C＂in all JPN，FLA，SLC and East－Asian Related Fields courses． |
| JPN 3＊＊ | 3 | 区 |  | Grade of C |  |
| CHI／KOR Related Field | 3 | $\square$ |  | Grade of C |  |
| Historical overview of Japan（ARS 473：Art of Japan，HST 303： Studies in Asian History，HST 387：Japan，HST 388：Japan，REL 355： Japanese Cities and Cultures to 1800 or REL 444：Religion in Japan ［recommend $\mathrm{HU} / \mathrm{H}$ or $\mathrm{SB} / \mathrm{H}$ ］） | 3 | $\square$ |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| TERM SEVEN： 91105 CREDIT HOURS |  |  |  |  |  |
| JPN 321：Japanese Literature（L or HU，G） | 3 | 区 |  | Grade of C | －Enroll in＂IPO＂Study Abroad Program credits or listed courses <br> －Minimum grade of＂C＂in all JPN，FLA，SLC and East－Asian Related Fields courses． |
| JPN 414：Introduction to Classical Japanese | 3 | 区 |  | Grade of C |  |
| East－Asian Related Field（list in DARS） | 3 | 区 |  | Grade of C |  |
| Upper Division Elective | 3 | 区 |  |  |  |
| Humanities／Fine Arts／Design（HU） | 3 | $\square$ |  |  |  |
| TERM EIGHT： $106 \mathbf{1 2 0}$ CREDIT HOURS |  |  |  |  |  |
| JPN 4＊＊ | 3 | 区 |  | Grade of C | －Enroll in＂IPO＂Study Abroad Program credits or listed courses <br> －Minimum grade of＂C＂in all JPN，FLA，SLC and East－Asian Related Fields courses． |
| SLC 498：Pro－Seminar | 3 | 区 |  | Grade of C |  |
| East－Asian Related Field | 3 | 区 |  | Grade of C |  |
| Upper Division Humanities，Fine Arts \＆Design（HU）or if completed， Upper division Elective | 3 | 区 |  |  |  |
| Upper Division Elective | 3 | 区 |  |  |  |

## Graduation Requirements Summary:

| Total Hours (120 <br> minimum) | Total Hrs at ASU (30 <br> minimum) | Hrs Resident Credit for Academic <br> Recognition ( 56 minimum) | Major GPA <br> $(2.00 \mathrm{Min})$. | Total UD Hrs <br> $(45$ 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:

Minimum grade of "C" in all JPN, FLA, SLC, CHI/KOR and East-Asian Related Fields courses.

Major Map：Biochemistry－Bachelor of Arts（B．A．）
College of Liberal Arts and Sciences，Tempe Campus
Catalog Year：2008－2009

|  |  |  | Completed ATP：$\square$ Yes $\quad \square$ No |  | Completed AGEC：$\square$ Yes $\square$ No |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 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： 015 CREDIT HOURS |  |  |  |  |  |
| CHM 113：General Chemistry I（SQ） | 4 | $\square$ |  | Grade of 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> －Maintain 2．0 GPA in all critical courses <br> －Consult an academic advisor for Learning Community，Academic Success Clusters and First Year Seminar options |
| MAT 170：Precalculus（MA）OR MAT 251：Calculus for Life Science（MA）（depending on math placement score） | 3 | $\square$ |  | Grade of C |  |
| 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 |  |
| Second language | 4 | $\square$ |  | Grade of C in 202 |  |
| Social \＆Behavioral Science（SB）AND Cultural Awareness in the US （C），Global Awareness（G）OR Historical Awareness（H） | 3 | $\square$ |  |  |  |
| TERM TWO： 1630 CREDIT HOURS |  |  |  |  |  |
| CHM 116：General Chemistry II（SQ） | 4 | $\square$ |  | Grade of C | －Maintain 2．0 GPA in all critical courses <br> －MAT 251 complete by end of Term 2 |
| BIO 187：General Biology I（SG） | 4 | $\square$ |  | Grade of C |  |
| MAT 251：Calculus for Life Science or if completed，take Elective | 3 | $\square$ |  | $\begin{aligned} & \text { Grade of C in MAT } \\ & 251 \end{aligned}$ |  |
| 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 |  |
| Second language，if needed or Elective | 4 | $\square$ |  | Grade of C in 202 |  |
| TERM THREE： 3145 CREDIT HOURS |  |  |  |  |  |
| CHM 233：General Organic Chemistry I | 3 | $\square$ |  | Grade of C | －Maintain 2．0 GPA in all critical courses <br> －First Year Composition completed by the end of semester 3 |
| CHM 237：General Organic Chemistry Laboratory I | 1 | $\square$ |  | Grade of C |  |
| BIO 188：General Biology II（SQ） | 4 | $\square$ |  |  |  |
| PHY 101：Introduction to Physics | 4 | $\square$ |  | Grade of C |  |
| Second language，if needed or Elective | 4 | $\square$ |  | Grade of C in 202 |  |
| TERM FOUR： $46 \mathbf{6 0}$ CREDIT HOURS |  |  |  |  |  |
| CHM 234：General Organic Chemistry II | 3 | $\square$ |  | Grade of C | －Maintain 2．0 GPA in all critical courses |
| BIO 340：General Genetics | 4 | 区 |  |  |  |
| CHM 302：Environmental Chemistry | 3 | 区 |  | Grade of C |  |
| CHM 238：Organic Chemistry Laboratory for Majors II | 1 | $\square$ |  | Grade of C |  |
| Second Language if needed or elective | 4 | $\square$ |  | Grade of C in 202 |  |
| TERM FIVE： 6175 CREDIT HOURS |  |  |  |  |  |
| BCH 461：General Biochemistry | 3 | 区 |  | Grade of C |  |
| CHM 341：Elementary Physical Chemistry | 3 | $\boxtimes$ |  | Grade of C |  |
| Humanities，Fine Arts \＆Design（HU）AND Cultural Awareness in the US（C），Global Awareness（G）OR Historical Awareness（H） | 3 | $\square$ |  |  |  |
| Literacy and Critical Inquiry（L） | 3 | $\square$ |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| TERM SIX： 7690 CREDIT HOURS |  |  |  |  |  |
| BCH 462：General Biochemistry | 3 | 区 |  | Grade of C |  |
| BCH 467 ：Analytical Biochemistry Laboratory（L） | 3 | 区 |  | Grade of C |  |
| Humanities，Fine Arts \＆Design（HU） | 3 | $\square$ |  |  |  |
| Social \＆Behavioral Science（SB）AND Cultural Awareness in the US （C），Global Awareness（G）OR Historical Awareness（H） | 3 | $\square$ |  |  |  |
| TERM SEVEN： 91105 CREDIT HOURS |  |  |  |  |  |
| Upper division BCH／CHM Elective | 3 | 区 |  | Grade of C |  |
| Computer／Statistics／Quantitative Science（CS） | 3 | 区 |  |  |  |
| Upper division Humanities，Fine Arts \＆Design（HU）or Social \＆Behavioral Science（SB） | 3 | 区 |  |  |  |
| Upper division elective | 3 | 区 |  |  |  |
| Upper division elective | 3 | 区 |  |  |  |
| TERM EIGHT： $106 \mathbf{1 2 0}$ CREDIT HOURS |  |  |  |  |  |
| Upper division CHM or BCH Elective | 3 | 区 |  | Grade of C |  |
| Upper division elective | 3 | 区 |  |  |  |
| Upper division elective | 3 | 区 |  |  |  |
| Upper division elective | 3 | 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:

Major Map：Biochemistry－Bachelor of Science（B．S．）
College of Liberal Arts and Sciences，Tempe Campus
Catalog Year：2008－2009

|  |  |  | Completed ATP：$\square$ Yes $\square$ No |  | Completed AGEC：$\square$ Yes $\square$ No |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 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： 015 CREDIT HOURS |  |  |  |  |  |
| CHM 117：General Chemistry for Majors I（SQ）or CHM 113：General Chemistry I（SQ） | 4 | $\square$ |  | Grade of C | －An SAT，ACT，Accuplacer，or TOEFL score determines placement into first－year composition |
| MAT 170：Precalculus（MA）OR MAT 270：Calculus \＆ Analytical Geometry I（MA）（depending on math placement score） | $\begin{gathered} 3 \text { or } \\ 4 \\ \hline \end{gathered}$ | $\square$ |  | Grade of C | courses <br> －ASU Math Placement Exam score determines |
| 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 | placement in Mathematics course <br> －Maintain 2．0 GPA in all critical courses <br> －Consult an academic advisor for Learning |
| Social \＆Behavioral Science（SB）AND Cultural Awareness in the US（C），Global Awareness（G）OR Historical Awareness（H） | 3 | $\square$ |  |  | Community，Campus Match and First Year Seminar options |
| TERM TWO： 1630 CREDIT HOURS |  |  |  |  |  |
| BIO 187：General Biology I（SG） | 4 | $\square$ |  | Grade of C | －Maintain 2．0 GPA in all critical courses |
| CHM 118：General Chemistry for Majors II（SQ）or CHM 116：General Chemistry II（SQ） | 4 | $\square$ |  | Grade of C |  |
| MAT 271：Calculus with Analytic Geometry II or MAT 270： Calculus \＆Analytical Geometry I | 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 |  |
| TERM THREE： 3145 CREDIT HOURS |  |  |  |  |  |
| BIO 188：General Biology II（SQ） | 4 | $\square$ |  |  |  |
| CHM 333：Organic Chemistry for Majors or CHM 233：General Organic Chemistry I | 3 | $\square$ |  | Grade of C | －First Year Composition completed by the end of semester 3 |
| MAT 271：Calculus with Analytic Geometry II or if completed， take Elective | 4 | $\square$ |  | $\begin{aligned} & \text { Grade of C in MAT } \\ & 271 \\ & \hline \end{aligned}$ |  |
| CHM 337：Organic Chemistry for Majors I Laboratory or CHM 237：General Organic Chemistry Laboratory I | 1 | $\square$ |  | Grade of C |  |
| PHY 111：General Physics \＆PHY 113：Laboratory | 3／1 | $\square$ |  |  |  |
| TERM FOUR： $46 \mathbf{6 0}$ CREDIT HOURS |  |  |  |  |  |
| BIO 340：General Genetics | 4 | 区 |  |  | －Maintain 2．0 GPA in all critical courses |
| CHM 334：Organic Chemistry for Majors II or <br> CHM 234：General Organic Chemistry II | 3 | $\square$ |  | Grade of C |  |
| CHM 338：Organic Chemistry for Majors II Laboratory or CHM 238：Organic Chemistry Laboratory for Majors II | 1 | $\square$ |  | Grade of C |  |
| PHY 112：General Physics \＆PHY 114：Laboratory | 3／1 | $\square$ |  |  |  |
| Literacy and Critical Inquiry（L） | 3 | $\square$ |  |  |  |
| TERM FIVE： 6175 CREDIT HOURS |  |  |  |  |  |
| BCH 461：General Biochemistry | 3 | 区 |  | Grade of C |  |
| BIO 353：Cell Biology | 3 | 区 |  |  |  |
| CHM 341：Elementary Physical Chemistry | 3 | 区 |  | Grade of C |  |
| Humanities，Fine Arts \＆Design（HU） | 3 | $\square$ |  |  |  |
| Social \＆Behavioral Science（SB）AND Cultural Awareness in the US（C），Global Awareness（G）OR Historical Awareness（H） | 3 | $\square$ |  |  |  |
| TERM SIX： $76 \mathbf{9 0}$ CREDIT HOURS |  |  |  |  |  |
| BCH 462：General Biochemistry | 3 | 区 |  | Grade of C |  |
| BCH 463：Biophysical Chemistry | 3 | 区 |  | Grade of C |  |
| BCH 467：Analytical Biochemistry Laboratory（L） | 3 | 区 |  | Grade of C |  |
| Upper division CLAS Science and Society | 3 | 区 |  | Grade of C |  |
| Humanities，Fine Arts \＆Design（HU）AND Cultural Awareness in the US（C），Global Awareness（G）OR Historical Awareness（H） | 3 | $\square$ |  |  |  |
| TERM SEVEN： 91105 CREDIT HOURS |  |  |  |  |  |
| BCH 464：Biophysical Chemistry Laboratory | 2 | 区 |  | Grade of C |  |
| Upper division CLAS Science and Society | 3 | 区 |  | Grade of C |  |
| Computer／Statistics／Quantitative Science（CS） | 3 | $\square$ |  |  |  |
| Upper division Elective | 4 | 区 |  |  |  |
| Humanities，Fine Arts \＆Design（HU）AND Cultural Awareness in the US（C），Global Awareness（G）OR Historical Awareness（H） | 3 | $\square$ |  |  |  |
| TERM EIGHT： $106 \mathbf{1 2 0}$ CREDIT HOURS |  |  |  |  |  |
| Upper division CHM or BCH Elective | 3 | 区 |  | Grade of C |  |
| Upper division Humanities，Fine Arts \＆Design（HU）or Social \＆Behavioral Science（SB） | 3 | 区 |  |  |  |
| Elective | 3－4 | $\square$ |  |  |  |
| Upper division elective | 3 | 区 |  |  |  |
| Upper division elective | 3 | 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:

# Major Map: Biochemistry (Medicinal Chemistry) Bachelor of Science (B.S.) <br> College of Liberal Arts and Sciences, Tempe Campus <br> Catalog Year: 2008-2009 



## 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:

Major Map：Biological Sciences－<br>Bachelor of Science（B．S．）<br>College of Liberal Arts and Sciences，Tempe Campus<br>Catalog Year：2008－2009

|  |  |  | Completed ATP：$\square$ Yes $\square$ No |  | Completed AGEC：$\square$ Yes $\square$ No <br> Additional Critical Requirement Notes |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Course Subject and Title （courses in bold／shading are critical） | Hrs． | Upper Division | Transfer Course／Grade | Minimum Grade if Required |  |
| TERM ONE： 015 CREDIT HOURS |  |  |  |  |  |
| BIO 187：General Biology I OR <br> BIO 188：General Biology II OR <br> Social \＆Behavioral Science（SB）and Cultural Diversity in the US（C）， <br> Global Awareness（G）or Historical Awareness（H） | $\begin{gathered} 4 \text { or } \\ 3 \\ \hline \end{gathered}$ | $\square$ |  | $\begin{aligned} & \text { Grade of C in BIO } \\ & 187 \text { or } 188 \\ & \hline \end{aligned}$ | －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 critical courses must be completed by the end of semester 4 <br> －Maintain 2.0 GPA in all critical courses，major courses，and related fields <br> －BIO 187 and 188 to be completed within first three semesters <br> －MAT 251 or equivalent to be completed by end of term 2 <br> －Consult an academic advisor for Learning Community，Academic Success Clusters and First Year Seminar options |
| BIO 189：Life Sciences Career Paths | 1 | $\square$ |  | Grade of C |  |
| CHM 113：General Chemistry I | 4 | $\square$ |  | Grade of C |  |
| ENG 101 and 102：First－Year Composition OR ENG 107 and 108：English for Foreign Students OR ENG 105：Advanced First－Year Composition | 3 | $\square$ |  | Grade of C |  |
| MAT 251：Calculus for Life Sciences（MA） | 3 | $\square$ |  | Grade of C |  |
| TERM TWO： 1630 CREDIT HOURS |  |  |  |  |  |
| BIO 187：General Biology I OR <br> BIO 188：General Biology II | 4 | $\square$ |  | Grade of C | －All critical courses must be completed by the end of semester 4 <br> －Maintain 2．0 GPA in all critical courses，major courses，and related fields <br> －BIO 187 and 188 to be completed within first three semesters <br> －MAT 251 or equivalent to be completed by end of term 2 |
| CHM 116：General Chemistry | 4 | $\square$ |  | Grade of C |  |
| ENG 101 and 102：First－Year Composition OR ENG 107 and 108：English for Foreign Students OR ENG 105：Advanced First－Year Composition | 3 | $\square$ |  | Grade of C |  |
| 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 Diversity in the US（C）， Global Awareness（G）or Historical Awareness（H） | 3 | $\square$ |  |  |  |
| TERM THREE： 3145 CREDIT HOURS |  |  |  |  |  |
| BIO 187：General Biology I OR <br> BIO 188：General Biology II OR，if BIO 187 \＆ 188 completed take Social \＆Behavioral Science（SB）and Cultural Diversity in the US（C）， Global Awareness（G）or Historical Awareness（H） | $\begin{gathered} 4 \text { or } \\ 3 \\ \hline \end{gathered}$ | $\square$ |  | $\begin{aligned} & \text { Grade of C in BIO } \\ & 187 \text { or } 188 \end{aligned}$ | －All critical courses must be completed by the end of semester 4 <br> －BIO 187 and 188 must be completed <br> －First－year composition must be completed <br> －Maintain 2．0 GPA in all critical courses，major courses，and related fields |
| CHM 231 Elem Organic Chemistry \＆CHM 235 Laboratory OR CHM 233 Gen Organic Chemistry I \＆CHM 237 Laboratory | 3／1 | $\square$ |  | Grade of C |  |
| Complete either： <br> MIC 220：Biology of Microorganisms AND MIC 206：Microbiology <br> Laboratory（if BIO $\mathbf{1 8 7} \& \mathbf{1 8 8}$ completed；otherwise take： <br> STP 226：Elements of Statistics（CS）OR <br> STP 231：Statistics for Life Science（CS） | 3or 4 | $\square$ |  | Grade of C |  |
|  | 3 | $\square$ |  | Grade of C |  |
| TERM FOUR： 4660 CREDIT HOURS |  |  |  |  |  |
| BIO 320：Fundamentals of Ecology OR BIO 345：Organic Evolution | 3 | 区 |  | Grade of C | －All critical courses must be completed by the end of semester 4 <br> －Maintain 2．0 GPA in all critical courses，major courses，and related fields |
| Complete remaining course（s）from： <br> MIC 220：Biology of Microorganisms AND MIC 206：Microbiology <br> Laboratory OR <br> STP 226：Elements of Statistics（CS）OR <br> STP 231：Statistics for Life Science（CS） | 3 | $\square$ |  | Grade of C |  |
| CHM 234 Gen Organic Chemistry II \＆CHM 238 Laboratory OR if CHM 231／235 completed，take Elective | $\begin{gathered} 4 \text { or } \\ 3 \end{gathered}$ | $\square$ |  | Grade of C in CHM <br> 234 \＆ 238 |  |
| Humanities，Fine Arts \＆Design（HU） | 3 | $\square$ |  |  |  |
| Literacy and Critical Inquiry（L） | 3 | $\square$ |  |  |  |
| TERM FIVE： 6175 CREDIT HOURS |  |  |  |  |  |
| BIO 320：Fundamentals of Ecology OR BIO 345：Organic Evolution | 3 | 区 |  | Grade of C |  |
| BIO 340：General Genetics（4 hrs）OR <br> BIO 353：Cell Biology（3 hrs）OR <br> BIO 360：Animal Physiology（3 hrs） | $\begin{gathered} 3 \text { or } \\ 4 \\ \hline \end{gathered}$ | 区 |  | Grade of C |  |
| PHY 101：Introduction to Physics OR <br> PHY 111：General Physics \＆PHY 113：Laboratory | $\begin{gathered} \hline 4 \text { or } \\ 3 / 1 \\ \hline \end{gathered}$ | $\square$ |  | Grade of C |  |
| Upper division CLAS Science and Society | 3 | 区 |  |  |  |
| Upper division elective | 3 | 囚 |  |  |  |


| 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 SIX： $76 \mathbf{9 0}$ CREDIT HOURS |  |  |  |  |  |
| BIO 340：General Genetics（4 hrs）OR <br> BIO 353：Cell Biology（ 3 hrs ）OR <br> BIO 360：Animal Physiology（3 hrs）OR <br> PLB 308：Plant Physiology（4 hrs） | $\begin{gathered} 3 \text { or } \\ 4 \\ \hline \end{gathered}$ | 囚 |  | Grade of C |  |
| PHY 112：General Physics／Laboratory \＆PHY 114：Laboratory OR，if PHY 101 completed，take Elective： | $\begin{gathered} \hline 4 \text { or } \\ 3 \\ \hline \end{gathered}$ | $\square$ |  | Grade of C in PHY 112 \＆ 114 |  |
| Upper division Major Elective（Lab） | 4 | 区 |  | Grade of C |  |
| Upper division Humanities，Fine Arts \＆Design（HU）or Social \＆ Behavioral Science（SB） | 3 | 区 |  |  |  |
| TERM SEVEN： 91105 CREDIT HOURS |  |  |  |  |  |
| Organismal Diversity Course | 4 | 区 |  | Grade of C |  |
| Upper division Major Elective（Lab） | 4 | 区 |  | Grade of C |  |
| Upper division elective | 3 | 区 |  |  |  |
| Upper division Literacy and Critical Inquiry（L） | 3 | 区 |  |  |  |
| TERM EIGHT： $106 \mathbf{1 2 0}$ CREDIT HOURS |  |  |  |  |  |
| Upper division Major Elective | 3 | 区 |  | Grade of C |  |
| Upper division Major Elective | 3 | 囚 |  | Grade of C |  |
| Upper division elective | 3 | 囚 |  |  |  |
| Upper division elective | 3 | 区 |  |  |  |
| Elective | 3 | $\square$ |  |  |  |

## 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：

－Humanities，Literacy and Critical Inquiry，Social Behavioral Sciences，and Science and Society courses are interchangeable in sequencing

Major Map：Biological Sciences
（Animal Physiology \＆Behavior）－ Bachelor of Science（B．S．）
College of Liberal Arts and Sciences，Tempe Campus
Catalog Year：2008－2009

| Course Subject and Title （courses in bold／shading are critical） | Hrs． | $\begin{aligned} & \hline \text { Upper } \\ & \text { Division } \end{aligned}$ | Transfer Course／Grade | $\begin{aligned} & \text { Minimum Grade if } \\ & \text { Required } \end{aligned}$ | Additional Critical Requirement Notes |
| :---: | :---: | :---: | :---: | :---: | :---: |
| TERM SIX： $76 \mathbf{9 0}$ CREDIT HOURS |  |  |  |  |  |
| Complete one additional course from： <br> BIO 331：Animal Behavioral（3 hrs）OR <br> BIO 340：General Genetics（4 hrs）OR <br> BIO 345：Organic Evolution（3 hrs）OR <br> BIO 360：Animal Physiology（3 hrs） | $\begin{gathered} 3 \text { or } \\ 4 \\ \hline \end{gathered}$ | 区 |  | Grade of C |  |
| PHY 112：General Physics／Laboratory \＆PHY 114：Laboratory OR，if PHY 101 completed，take Elective | $\begin{gathered} 4 \text { or } \\ 3 \\ \hline \end{gathered}$ | $\square$ |  | $\begin{aligned} & \text { Grade of C in PHY } \\ & 112 \& 114 \\ & \hline \end{aligned}$ |  |
| Complete one additional course from： BIO 331：Animal Behavior（3 hrs）OR BIO 340：General Genetics（4 hrs）OR BIO 345：Organic Evolution（3 hrs）OR BIO 360：Animal Physiology（3 hrs） | $\begin{gathered} 3 \text { or } \\ 4 \end{gathered}$ | 囚 |  | Grade of C |  |
| Complete one course from： <br> BIO 436：Sociobiology \＆Behavioral Ecology <br> BIO 461：Comparative Animal Physiology <br> BIO 462：Endocrine Physiology <br> BIO 467：Neurobiology | 3 | 区 |  | Grade of C |  |
| Upper division Humanities，Fine Arts \＆Design（HU）or Social \＆Behavioral Science（SB） | 3 | 区 |  |  |  |
| TERM SEVEN： 91105 CREDIT HOURS |  |  |  |  |  |
| BCH 361：Principles of Biochemistry OR <br> BCH 461：General Biochemistry | 3 | 区 |  | Grade of C | －Choose between BCH 361 OR BCH 461 \＆ 462 |
| Complete one course from： <br> BIO 436：Sociobiology \＆Behavioral Ecology <br> BIO 461：Comparative Animal Physiology <br> BIO 462：Endocrine Physiology <br> BIO 467：Neurobiology | 3 | 区 |  | Grade of C |  |
| Upper division Major Elective | $\begin{gathered} 3 \text { or } \\ 4 \end{gathered}$ | 区 |  | Grade of C |  |
| Upper division Major Elective（Lab） | 4 | 区 |  | Grade of C |  |
| Upper division elective | 3 | 区 |  |  |  |
| TERM EIGHT： $106 \mathbf{1 2 0}$ CREDIT HOURS |  |  |  |  |  |
| BCH 462：General Biochemistry OR if BCH 361 completed，take Upper division elective | 3 | 区 |  | Grade of C | －Choose between BCH 361 OR BCH 461 \＆ 462 |
| Upper division Major Elective | $\begin{gathered} \hline 3 \text { or } \\ 4 \\ \hline \end{gathered}$ | 区 |  | Grade of C |  |
| Upper division elective | $\begin{gathered} \hline 3 \text { or } \\ 4 \\ \hline \end{gathered}$ | 区 |  | Grade of C |  |
| Upper division elective | 3 | 区 |  |  |  |
| Upper division Literacy and Critical Inquiry（L） | 3 | 囚 |  |  |  |

## 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：

| $\circ$ | 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） |
| $\circ$ | Natural Science－General（SG） |
| eral | Studies Awareness Requirements |
| $\circ$ | Cultural Diversity in the US（C） |
| $\circ$ | Global Awareness（G） |
| $\circ$ | Historical Awareness（H） |

－First Year Composition

## Additional Notes：

－Humanities，Literacy and Critical Inquiry，Social Behavioral Sciences，and Science and Society courses are interchangeable in sequencing

Major Map: Biological Sciences (Biology and Society) Bachelor of Science (B.S.)<br>College of Liberal Arts and Sciences, Tempe Campus<br>Catalog Year: 2008-2009



| Course Subject and Title （courses in bold／shading are critical） | Hrs． | Upper <br> Division | Transfer Course／Grade | $\begin{aligned} & \text { Minimum Grade if } \\ & \text { Required } \\ & \hline \end{aligned}$ | Additional Critical Requirement Notes |
| :---: | :---: | :---: | :---: | :---: | :---: |
| TERM SEVEN： 91105 CREDIT HOURS |  |  |  |  |  |
| Research | 3 | 囚 |  | Grade of C |  |
| Upper division Life Science s Elective | $\begin{gathered} \hline 3 \text { or } \\ 4 \\ \hline \end{gathered}$ | 区 |  | Grade of C |  |
| Upper division Major Interface | 3 | 区 |  | Grade of C |  |
| Upper division elective | 3 | 区 |  |  |  |
| Upper division elective | 3 | 区 |  |  |  |
| TERM EIGHT： $106 \mathbf{1 2 0}$ CREDIT HOURS |  |  |  |  |  |
| BIO 414：Research Colloquium in Biology and Society II | 1 | 区 |  | Grade of C | －BIO 314 and BIO 414 must be completed for Literacy \＆Critical Inquiry（L）credit |
| Upper division Life Sciences Elective | $\begin{gathered} 3 \text { or } \\ 4 \\ \hline \end{gathered}$ | 囚 |  | Grade of C |  |
| Upper division Major Interface | 3 | 囚 |  | Grade of C |  |
| Upper division elective | 3 | 区 |  |  |  |
| Upper division elective | 4 | 区 |  |  |  |
| Elective | 3 | $\square$ |  |  |  |

## 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：

－Humanities，Literacy and Critical Inquiry，Social Behavioral Sciences，and Science and Society courses are interchangeable in sequencing

Major Map：Biological Sciences
（Conservation Biology and Ecological Sustainability）－
Bachelor of Science（B．S．）
College of Liberal Arts and Sciences，Tempe Campus
Catalog Year：2008－2009

| Course Subject and Title （courses in bold／shading are critical） | Hrs． | Upper Division | Transfer Course／Grade | $\begin{aligned} & \text { Minimum Grade if } \\ & \text { Required } \\ & \hline \end{aligned}$ | Additional Critical Requirement Notes |
| :---: | :---: | :---: | :---: | :---: | :---: |
| TERM SEVEN： 91105 CREDIT HOURS |  |  |  |  |  |
| Upper division Major Elective | $\begin{gathered} 3 \text { or } \\ 4 \\ \hline \end{gathered}$ | 区 |  | Grade of C |  |
| Upper division Major Elective | $\begin{gathered} \hline 3 \text { or } \\ 4 \\ \hline \end{gathered}$ | 区 |  | Grade of C |  |
| Upper division Literacy and Critical Inquiry（L） | 3 | 区 |  |  |  |
| Upper division elective | 3 | 区 |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| TERM EIGHT： 106120 CREDIT HOURS |  |  |  |  |  |
| Upper division Major Elective | $\begin{gathered} 3 \text { or } \\ 4 \end{gathered}$ | 区 |  | Grade of C |  |
| Upper division Major Elective | $\begin{gathered} 3 \text { or } \\ 4 \\ \hline \end{gathered}$ | 区 |  | Grade of C |  |
| Upper division Major Elective | 3 | 区 |  | Grade of C |  |
| Upper division elective | 3 | 区 |  |  |  |
| 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：

| $\circ$ | 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） |
| $\circ$ | Natural Science－General（SG） |
| eral | Studies Awareness Requirements |
| $\circ$ | Cultural Diversity in the US（C） |
| $\circ$ | Global Awareness（G） |
| $\circ$ | Historical Awareness（H） |

－First Year Composition

## Additional Notes：

－Humanities，Literacy and Critical Inquiry，Social Behavioral Sciences，and Science and Society courses are interchangeable in sequencing

Major Map：Biological Sciences（Ecology and Evolution）－ Bachelor of Science（B．S．）
College of Liberal Arts and Sciences，Tempe Campus
Catalog Year：2008－2009

|  |  |  | Completed ATP：$\square$ Yes $\square$ No |  | Completed AGEC：$\square$ Yes $\square$ No |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \begin{array}{l} \text { Course Subject and Title } \\ \text { (courses in bold/shading are critical) } \end{array} \end{aligned}$ | Hrs． | Upper Division | Transfer Course／Grade | Minimum Grade if Required | Additional Critical Requirement Notes |
| TERM ONE： 015 CREDIT HOURS |  |  |  |  |  |
| BIO 187：General Biology I OR <br> BIO 188：General Biology II OR <br> Social \＆Behavioral Science（SB）and Cultural Diversity in the US（C）， <br> Global Awareness（G）or Historical Awareness（H） | $\begin{gathered} 4 \text { or } \\ 3 \\ \hline \end{gathered}$ | $\square$ |  | Grade of C in BIO 187 or 188 | －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 critical courses must be completed by the end of semester 4 <br> －Maintain 2．0 GPA in all critical courses，major courses，and related fields <br> －BIO 187 and 188 to be completed within first three semesters <br> －MAT 251 or equivalent to be completed by end of term 2 <br> －Consult an academic advisor for Learning Community，Academic Success Clusters and First Year Seminar options |
| CHM 113：General Chemistry I | 4 | $\square$ |  | Grade of C |  |
| ENG 101 and 102：First－Year Composition OR ENG 107 and 108：English for Foreign Students OR ENG 105：Advanced First－Year Composition | 3 | $\square$ |  | Grade of C |  |
| MAT 251：Calculus for Life Sciences（MA） | 3 | $\square$ |  | Grade of C |  |
| TERM TWO： 1630 CREDIT HOURS |  |  |  |  |  |
| BIO 187：General Biology I OR BIO 188：General Biology II | 4 | $\square$ |  | Grade of C | －All critical courses must be completed by the end of semester 4 <br> －Maintain 2．0 GPA in all critical courses，major courses，and related fields <br> －BIO 187 and 188 to be completed within first three semesters <br> －MAT 251 or equivalent to be completed by end of term 2 |
| CHM 116：General Chemistry II | 4 | $\square$ |  | Grade of C |  |
| ENG 101 and 102：First－Year Composition OR ENG 107 and 108：English for Foreign Students OR ENG 105：Advanced First－Year Composition | 3 | $\square$ |  | Grade of C |  |
| 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 Diversity in the US（C）， Global Awareness（G）or Historical Awareness（H） | 3 | $\square$ |  |  |  |
| TERM THREE： 3145 CREDIT HOURS |  |  |  |  |  |
| BIO 187：General Biology I OR <br> BIO 188：General Biology II OR，if BIO 187 \＆ 188 completed take <br> Social \＆Behavioral Science（SB）and Cultural Diversity in the US（C）， <br> Global Awareness（G）or Historical Awareness（H） | $\begin{gathered} 4 \text { or } \\ 3 \\ \hline \end{gathered}$ | $\square$ |  | Grade of C | －All critical courses must be completed by the end of semester 4 <br> －BIO 187 and 188 must be completed <br> －First year composition must be completed <br> －Maintain 2．0 GPA in all critical courses，major courses，and related fields |
| CHM 231 Elem Organic Chemistry \＆CHM 235 Laboratory OR CHM 233 Gen Organic Chemistry I \＆CHM 237 Laboratory | 3／1 | $\square$ |  | Grade of C |  |
| CLAS Science and Society | 3 | $\square$ |  | Grade of C |  |
| Elective | 3 | $\square$ |  |  |  |
| TERM FOUR： $46 \mathbf{6 0}$ CREDIT HOURS |  |  |  |  |  |
| BIO 320：Fundamentals of Ecology | 3 | 区 |  | Grade of C | －All critical courses must be completed by the end of semester 4 <br> －Maintain 2．0 GPA in all critical courses，major courses，and related fields |
| STP 226：Elements of Statistics（CS）OR <br> STP 231：Statistics for Life Science（CS） | 3 | $\square$ |  | Grade of C |  |
| CHM 234 Gen Organic Chemistry II \＆CHM 238 Laboratory OR if CHM 231／235 completed，take Elective | $\begin{gathered} 4 \text { or } \\ 3 \end{gathered}$ | $\square$ |  | Grade of C in CHM 234 \＆ 238 |  |
| Humanities，Fine Arts \＆Design（HU） | 3 | $\square$ |  |  |  |
| Literacy and Critical Inquiry（L） | 3 | $\square$ |  |  |  |
| TERM FIVE： 6175 CREDIT HOURS |  |  |  |  |  |
| BIO 321：Introductory Ecology Laboratory OR Upper Division Major Concentration | $\begin{gathered} 2 \text { or } \\ 4 \\ \hline \end{gathered}$ | 囚 |  | Grade of C |  |
| Complete one course from： <br> BIO 340：General Genetics（4 hrs）OR <br> BIO 345：Organic Evolution（3 hrs） | $\begin{gathered} 3 \text { or } \\ 4 \end{gathered}$ | 区 |  | Grade of C |  |
| PHY 101：Introduction to Physics OR PHY 111：General Physics \＆PHY 113：Laboratory | $\begin{aligned} & \hline 4 \text { or } \\ & 3 / 1 \\ & \hline \end{aligned}$ | $\square$ |  | Grade of C |  |
| Upper division CLAS Science and Society | 3 | 区 |  | Grade of C |  |
| Upper division elective | 3 | 区 |  |  |  |
| TERM SIX： $76 \mathbf{9 0}$ CREDIT HOURS |  |  |  |  |  |
| BIO 321：Introductory Ecology Laboratory OR Upper Division Major Concentration | $\begin{gathered} 2 \text { or } \\ 4 \\ \hline \end{gathered}$ | 区 |  | Grade of C |  |
| Complete one additional course from： BIO 340：General Genetics（4 hrs）OR BIO 345：Organic Evolution（3 hrs） | $\begin{gathered} 3 \text { or } \\ 4 \\ \hline \end{gathered}$ | 囚 |  | Grade of C |  |
| PHY 112：General Physics／Laboratory \＆PHY 114：Laboratory OR，if PHY 101 completed，take Elective | $\begin{gathered} 4 \text { or } \\ 3 \\ \hline \end{gathered}$ | $\square$ |  | $\begin{aligned} & \text { Grade of C in PHY } \\ & 112 \& 114 \\ & \hline \end{aligned}$ |  |
| Upper division Major Elective | $\begin{gathered} 3 \text { or } \\ 4 \end{gathered}$ | 区 |  | Grade of C |  |
| Upper division Humanities，Fine Arts \＆Design（HU）or Social \＆Behavioral Science（SB） | 3 | 囚 |  |  |  |

Major Map：Biological Sciences（Ecology and Evolution）－
Bachelor of Science（B．S．）
College of Liberal Arts and Sciences，Tempe Campus
Catalog Year：2008－2009

| 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： 91105 CREDIT HOURS |  |  |  |  |  |
| Approved course with BIO，MBB，MIC，or PLB prefix（see advisor） | 4 | $\square$ |  | Grade of C |  |
| Upper division Major Concentration | $\begin{gathered} \hline 3 \text { or } \\ 4 \\ \hline \end{gathered}$ | 区 |  | Grade of C |  |
| Upper division Major Concentration | $\begin{gathered} \hline 3 \text { or } \\ 4 \\ \hline \end{gathered}$ | 区 |  | Grade of C |  |
| Upper division Literacy and Critical Inquiry（L） | 3 | 区 |  |  |  |
| Upper division elective | 3 | 区 |  |  |  |
| TERM EIGHT： 106120 CREDIT HOURS |  |  |  |  |  |
| Approved course with ASM，BCH，MAT or STP prefix（see advisor） | 4 | $\square$ |  | Grade of C |  |
| Upper division Major Concentration | $\begin{gathered} \hline 3 \text { or } \\ 4 \\ \hline \end{gathered}$ | 区 |  | Grade of C |  |
| Upper division Major Elective | $\begin{gathered} \hline 3 \text { or } \\ 4 \\ \hline \end{gathered}$ | 区 |  | Grade of C |  |
| Upper division Major Elective（if needed） | 3 | 区 |  | Grade of C |  |
| Upper division elective | 2 | 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：

－Humanities，Literacy and Critical Inquiry，Social Behavioral Sciences，and Science and Society courses are interchangeable in sequencing

Major Map：Biological Sciences （Genetics，Cell \＆Developmental Biology）－ Bachelor of Science（B．S．）
College of Liberal Arts and Sciences，Tempe Campus Catalog Year：2008－2009

|  |  |  | Completed ATP：$\square$ Yes $\quad \square$ No |  | Completed AGEC：$\square$ Yes $\square$ No |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Course Subject and Title （courses in bold／shading are critical） | Hrs． | Upper Division | Transfer Course／Grade | $\begin{aligned} & \text { Minimum Grade if } \\ & \text { Required } \end{aligned}$ | Additional Critical Requirement Notes |
| TERM ONE： 015 CREDIT HOURS |  |  |  |  |  |
| BIO 187：General Biology I OR <br> BIO 188：General Biology II OR <br> Social \＆Behavioral Science（SB）and Cultural Diversity in the US （C），Global Awareness（G）or Historical Awareness（H） | $\begin{gathered} 4 \text { or } \\ 3 \end{gathered}$ | $\square$ |  | Grade of C in BIO <br> 187 or 188 | －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 critical courses must be completed by the end of semester 4 <br> －Maintain 2．0 GPA in all critical courses，major courses，and related fields <br> －BIO 187 and 188 to be completed within first three semesters <br> －MAT 251 or equivalent to be completed by end of term 2 <br> －Consult an academic advisor for Learning Community，Academic Success Clusters and First Year Seminar options |
| CHM 113：General Chemistry I | 4 | $\square$ |  | Grade of C |  |
| ENG 101 and 102：First－Year Composition OR ENG 107 and 108：English for Foreign Students OR ENG 105：Advanced First－Year Composition | 3 | $\square$ |  | Grade of C |  |
| MAT 251：Calculus for Life Sciences（MA） | 3 | $\square$ |  | Grade of C |  |
| TERM TWO： 1630 CREDIT HOURS |  |  |  |  |  |
| BIO 187：General Biology I OR BIO 188：General Biology II | 4 | $\square$ |  | Grade of C | －All critical courses must be completed by the end of semester 4 <br> －Maintain 2.0 GPA in all critical courses，major courses，and related fields <br> －BIO 187 and 188 to be completed within first three semesters <br> －MAT 251 or equivalent to be completed by end of term 2 |
| CHM 116：General Chemistry II | 4 | $\square$ |  | Grade of C |  |
| ENG 101 and 102：First－Year Composition OR ENG 107 and 108：English for Foreign Students OR ENG 105：Advanced First－Year Composition | 3 | $\square$ |  | Grade of C |  |
| 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 Diversity in the US （C），Global Awareness（G）or Historical Awareness（H） | 3 | $\square$ |  |  |  |
| TERM THREE： 3145 CREDIT HOURS |  |  |  |  |  |
| BIO 187：General Biology I OR <br> BIO 188：General Biology II OR，if BIO 187 \＆ 188 completed take Social \＆Behavioral Science（SB）and Cultural Diversity in the US （C），Global Awareness（G）or Historical Awareness（H） | $\begin{gathered} 4 \text { or } \\ 3 \\ \hline \end{gathered}$ | $\square$ |  | Grade of C | －All critical courses must be completed by the end of semester 4 <br> －BIO 187 and must be completed <br> －First year composition must be completed <br> －Maintain 2.0 GPA in all critical courses，major courses，and related fields |
| CHM 231 Elem Organic Chemistry \＆CHM 235 Laboratory OR CHM 233 Gen Organic Chemistry I \＆CHM 237 Laboratory | 3／1 | $\square$ |  | Grade of C |  |
| CLAS Science and Society | 3 | $\square$ |  | Grade of C |  |
| Elective | 3 | $\square$ |  |  |  |
| TERM FOUR： $46 \mathbf{6 0}$ CREDIT HOURS |  |  |  |  |  |
| BIO 353：Cell Biology | 3 | 区 |  | Grade of C | －All critical courses must be completed by the end of semester 4 <br> －Maintain 2．0 GPA in all critical courses，major courses，and related fields |
| STP 226：Elements of Statistics（CS）OR STP 231：Statistics for Life Science（CS） | 3 | $\square$ |  | Grade of C |  |
| CHM 234 Gen Organic Chemistry II \＆CHM 238 Laboratory OR if CHM 231／235 completed，take Elective | $\begin{gathered} 4 \text { or } \\ 3 \\ \hline \end{gathered}$ | 区 |  | $\begin{aligned} & \text { Grade of C in CHM } \\ & 234 \& 238 \\ & \hline \end{aligned}$ |  |
| Humanities，Fine Arts \＆Design（HU） | 3 | $\square$ |  |  |  |
| Literacy and Critical Inquiry（L） | 3 | $\square$ |  |  |  |
| TERM FIVE： 6175 CREDIT HOURS |  |  |  |  |  |
| BIO 351：Developmental Anatomy | 3 | 囚 |  | Grade of C |  |
| Complete one course from： <br> BIO 340：General Genetics（4 hrs）OR <br> BIO 345：Organic Evolution（3 hrs） | $\begin{gathered} 3 \text { or } \\ 4 \\ \hline \end{gathered}$ | 区 |  | Grade of C |  |
| PHY 101：Introduction to Physics OR PHY 111：General Physics \＆PHY 113：Laboratory | $\begin{gathered} 4 \text { or } \\ 3 / 1 \\ \hline \end{gathered}$ | $\square$ |  | Grade of C |  |
| Upper division CLAS Science and Society | 3 | 区 |  | Grade of C |  |
| Upper division elective | 3 | 区 |  |  |  |
| TERM SIX： $76 \mathbf{9 0}$ CREDIT HOURS |  |  |  |  |  |
| Complete one additional course from： BIO 340：General Genetics（4 hrs）OR BIO 345：Organic Evolution（3 hrs） | $\begin{gathered} 3 \text { or } \\ 4 \\ \hline \end{gathered}$ | 区 |  | Grade of C |  |
| Complete one course from： <br> BIO 446：Principles of Human Genetics（3）（L） <br> MBB／PLB 350：Applied Genetics（4） <br> MBB 343：Genetic Engineering \＆Society（4） | $\begin{gathered} 3 \text { or } \\ 4 \end{gathered}$ | 区 |  | Grade of C |  |
| PHY 112：General Physics／Laboratory \＆PHY 114：Laboratory OR，if PHY 101 completed，take Elective | $\begin{gathered} \hline 4 \text { or } \\ 3 \\ \hline \end{gathered}$ | $\square$ |  | $\begin{aligned} & \text { Grade of C in PHY } \\ & 112 \& 114 \\ & \hline \end{aligned}$ |  |
| Upper division Humanities，Fine Arts \＆Design（HU）or Social \＆Behavioral Science（SB） | 3 | 囚 |  |  |  |
| Elective | 3 | $\square$ |  |  |  |

# Major Map：Biological Sciences 

 （Genetics，Cell \＆Developmental Biology）－ Bachelor of Science（B．S．）College of Liberal Arts and Sciences，Tempe Campus Catalog Year：2008－2009

| $\begin{aligned} & \text { Course Subject and Title } \\ & \text { (courses in bold/shading are critical) } \end{aligned}$ | Hrs． | Upper Division | Transfer Course／Grade | Minimum Grade if Required | Additional Critical Requirement Notes |
| :---: | :---: | :---: | :---: | :---: | :---: |
| TERM SEVEN： 91105 CREDIT HOURS |  |  |  |  |  |
| Complete one course from： <br> BIO 456：Bioinformatics \＆Molecular Evolution <br> BIO 455：Intro to Comparative Genomics | 3 | 区 |  | Grade of C |  |
| Upper division Major elective | 3 | 区 |  | Grade of C |  |
| Upper division elective | 3 | 区 |  |  |  |
| Upper division Literacy and Critical Inquiry（L） | 3 | 区 |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| TERM EIGHT： $106 \mathbf{1 2 0}$ CREDIT HOURS |  |  |  |  |  |
| BIO 495：Undergraduate Thesis | 3 | 区 |  | Grade of C |  |
| Upper division Major Elective | 3 | 区 |  | Grade of C |  |
| Upper division Major Elective | 2 | 区 |  | Grade of C |  |
| Upper division elective | 3 | 区 |  |  |  |
| Upper division elective | 3 | 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：

－Humanities，Literacy and Critical Inquiry，Social Behavioral Sciences，and Science and Society courses are interchangeable in sequencing

# Major Map: Biological Sciences (Genomics and 

 Bioinformatics) - Bachelor of Science (B.S.)College of Liberal Arts and Sciences, Tempe Campus
Catalog Year: 2008-2009


Major Map：Biological Sciences（Genomics and
Bioinformatics）－Bachelor of Science（B．S．）
College of Liberal Arts and Sciences，Tempe Campus
Catalog Year：2008－2009

| $\begin{aligned} & \hline \text { Course Subject and Title } \\ & \text { (courses in bold/shading are critical) } \end{aligned}$ | Hrs． | Upper Division | Transfer Course／Grade | Minimum Grade if Required | Additional Critical Requirement Notes |
| :---: | :---: | :---: | :---: | :---: | :---: |
| TERM SEVEN： 91105 CREDIT HOURS |  |  |  |  |  |
| MBB 440：Functional Genomics | 3 | 区 |  | Grade of C |  |
| Upper division Major Elective | $\begin{gathered} \hline 3 \text { or } \\ 4 \\ \hline \end{gathered}$ | 囚 |  | Grade of C |  |
| Upper division Major Elective | $\begin{gathered} \hline 3 \text { or } \\ 4 \\ \hline \end{gathered}$ | 区 |  | Grade of C |  |
| Upper division Literacy and Critical Inquiry（L） | 3 | 区 |  |  |  |
| Upper division Humanities，Fine Arts \＆Design（HU）or Social \＆Behavioral Science（SB） | 3 | 区 |  |  |  |
| TERM EIGHT： $106 \mathbf{1 2 0}$ CREDIT HOURS |  |  |  |  |  |
| Upper division Major Concentration | 3 | 区 |  | Grade of C |  |
| Upper division Major Elective | 3 | 区 |  | Grade of C |  |
| Upper division Major Elective | 3 | 区 |  | Grade of C |  |
| Upper division elective | 3 | 区 |  |  |  |
| Upper division 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：
－Humanities，Literacy and Critical Inquiry，Social Behavioral Sciences，and Science and Society courses are interchangeable in sequencing

Major Map：Biological Sciences（Plant Biology）－ Bachelor of Science（B．S．）<br>College of Liberal Arts and Sciences，Tempe Campus Catalog Year：2008－2009

| 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 SIX： $76 \mathbf{9 0}$ CREDIT HOURS |  |  |  |  |  |
| Complete one additional course from： BIO 340：General Genetics（4 hrs）OR BIO 345：Organic Evolution（3 hrs） | $\begin{gathered} 3 \text { or } \\ 4 \end{gathered}$ | 区 |  | Grade of C |  |
| PHY 112：General Physics／Laboratory \＆PHY 114：Laboratory OR，if PHY 101 completed，take Elective | $\begin{gathered} 4 \text { or } \\ 3 \end{gathered}$ | $\square$ |  | $\begin{aligned} & \text { Grade of C in PHY } \\ & 112 \& 114 \end{aligned}$ |  |
| Upper division Major Elective | $\begin{gathered} 3 \text { or } \\ 4 \\ \hline \end{gathered}$ | 区 |  | Grade of C |  |
| Complete one additional course from： <br> －PLB 300：Comparative Plant Diversity（4）（L or SG） <br> －PLB 306：Plant Anatomy（4）or PLB 308 Plant Physiology（4） <br> －BIO 320：Fundamentals of Ecology（3） <br> －BIO 353：Cell Biology（3）or MBB 247：Applied Biosciences： Biotechnology（4） | $\begin{gathered} 3 \text { or } \\ 4 \end{gathered}$ | 区 |  | Grade of C |  |
| TERM SEVEN： 91105 CREDIT HOURS |  |  |  |  |  |
| Complete two additional courses from： <br> －PLB 300：Comparative Plant Diversity（4）（L or SG） <br> －PLB 306：Plant Anatomy（4）or PLB 308 Plant Physiology（4） <br> －BIO 320：Fundamentals of Ecology（3） <br> －BIO 353：Cell Biology（3）or MBB 247：Applied Biosciences： Biotechnology（4） | $\begin{gathered} 3 \text { or } \\ 4 \\ \\ 3 \text { or } \\ 4 \end{gathered}$ | 区 <br> 区 |  | Grade of C <br> Grade of C |  |
| Upper division Major Elective | $\begin{gathered} 3 \text { or } \\ 4 \\ \hline \end{gathered}$ | 区 |  | Grade of C |  |
| Upper division Literacy and Critical Inquiry（L） | 3 | 囚 |  |  |  |
| Upper division Humanities，Fine Arts \＆Design（HU）or Social \＆Behavioral Science（SB） | 3 | 区 |  |  |  |
| TERM EIGHT： 106120 CREDIT HOURS |  |  |  |  |  |
| Upper division Major Elective | $\begin{gathered} 3 \text { or } \\ 4 \\ \hline \end{gathered}$ | 区 |  | Grade of C |  |
| Upper division Major Elective | $\begin{gathered} \hline 3 \text { or } \\ 4 \\ \hline \end{gathered}$ | 区 |  | Grade of C |  |
| Upper division Major Elective（if needed） | 3 | 区 |  | Grade of C |  |
| Upper division elective | 3 | 区 |  |  |  |
| Elective | 4 | $\square$ |  |  |  |

## 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：

－Humanities，Literacy and Critical Inquiry，Social Behavioral Sciences，and Science and Society courses are interchangeable in sequencing

Major Map：Chemistry－Bachelor of Arts（B．A．）
College of Liberal Arts and Sciences，Tempe Campus
Catalog Year：2008－2009

|  |  |  | Completed ATP：$\square$ Yes $\square$ No |  | Completed AGEC：$\square$ Yes $\square$ No |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 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： 015 CREDIT HOURS |  |  |  |  |  |
| CHM 113：General Chemistry I（SQ）or <br> CHM 117：General Chemistry for Majors I（SQ） | 4 | $\square$ |  | Grade of 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> －Maintain 2．0 GPA in all critical courses <br> －Consult an academic advisor for Learning Community，Academic Success Clusters and First Year Seminar options |
| MAT 170：Precalculus（MA）OR MAT 270：Calculus \＆ <br> Analytical Geometry I（MA）（depending on math placement score） | $\begin{gathered} 3 \text { or } \\ 4 \end{gathered}$ | $\square$ |  | 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 |  |
| PHY 111：General Physics \＆PHY 113 General Physics Laboratory | 3／1 | $\square$ |  | Grade of C |  |
| TERM TWO： 1630 CREDIT HOURS |  |  |  |  |  |
| CHM 116：General Chemistry II（SQ）or <br> CHM 118：General Chemistry for Majors（SQ）II | 4 | $\square$ |  | Grade of C | －Maintain 2．0 GPA in all critical courses |
| MAT 271：Calculus with Analytic Geometry II or MAT 270： Calculus \＆Analytical Geometry I | 4 | $\square$ |  | Grade of C |  |
| PHY 112：General Physics \＆PHY 114：General Physics Laboratory | 3／1 | $\square$ |  | 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 |  |
| TERM THREE： 3145 CREDIT HOURS |  |  |  |  |  |
| CHM 233：General Organic Chemistry I or CHM 333：Organic Chemistry for Majors I | 3 | $\square$ |  | Grade of C | －Maintain 2．0 GPA in all critical courses <br> －First year composition requirement completed <br> －MAT 271 is a critical course and must be complete by end of Term 3 |
| MAT 271：Calculus with Analytic Geometry II or if completed， take Elective | 4 | $\square$ |  | $\begin{aligned} & \text { Grade of C in MAT } \\ & 271 \end{aligned}$ |  |
| CHM 237：General Organic Chemistry I Laboratory or CHM 337：Organic Chemistry for Majors I Laboratory | 1 | $\square$ |  | Grade of C |  |
| CHM 325：Analytical Chemistry \＆CHM 326 Analytical Chemistry Lab | 3／1 | 区 |  | Grade of C |  |
| Second Language | 4 | $\square$ |  | Grade of C in 202 |  |
| TERM FOUR： 4660 CREDIT HOURS |  |  |  |  |  |
| CHM 234：General Organic Chemistry II or CHM 334：Organic Chemistry for Majors II | 3 | $\square$ |  | Grade of C | －Maintain 2．0 GPA in all critical courses |
| CHM 238：General Organic Chemistry II Laboratory CHM 338：Organic Chemistry for Majors II Laboratory | 1 | $\square$ |  | Grade of C |  |
| Second Language or if completed，take Elective | 4 | $\square$ |  | Grade of C in 202 |  |
| Social \＆Behavioral Science（SB）AND Cultural Awareness in the US（C），Global Awareness（G）OR Historical Awareness（H） | 3 | $\square$ |  |  |  |
| Literacy and Critical Inquiry（L） | 3 | $\square$ |  |  |  |
| Upper division elective | 3 | 区 |  |  |  |
| TERM FIVE： 6175 CREDIT HOURS |  |  |  |  |  |
| CHM 341：Elemental Physical Chemistry | 3 | 区 |  | Grade of C | －Maintain 2．0 GPA in all critical courses |
| CHM 343：Physical Chemistry Laboratory | 1 | 区 |  | Grade of C |  |
| Social \＆Behavioral Science（SB）AND Cultural Awareness in the US（C），Global Awareness（G）OR Historical Awareness（H） | 3 | $\square$ |  |  |  |
| Humanities，Fine Arts \＆Design（HU）AND Cultural Awareness in the US（C），Global Awareness（G）OR Historical Awareness（H） | 3 | $\square$ |  |  |  |
| Second Language or if completed，take Elective | 4 | $\square$ |  |  |  |
| TERM SIX： $76 \mathbf{9 0}$ CREDIT HOURS |  |  |  |  |  |
| Upper division BCH／CHM Elective | 3 | 区 |  | Grade of C |  |
| Computer／Statistics／Quantitative applications（CS） | 3 | $\square$ |  |  |  |
| Humanities，Fine Arts \＆Design（HU） | 3 | $\square$ |  |  |  |
| Second Language or if completed，take Elective | 4 | $\square$ |  |  |  |
| Upper division elective | 3 | 区 |  |  |  |
| TERM SEVEN： 91105 CREDIT HOURS |  |  |  |  |  |
| CHM 453：Inorganic Chemistry | 3 | 区 |  | Grade of C |  |
| Upper division Humanities，Fine Arts \＆Design（HU）or Social Behavioral Science（SB） | 3 | 区 |  |  |  |
| Upper division elective | 3 | 区 |  |  |  |
| Upper division elective | 3 | 区 |  |  |  |
| Elective | 3 | 区 |  |  |  |


| 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 EIGHT： 106120 CREDIT HOURS |  |  |  |  |  |
| Upper division Literacy and Critical Inquiry（L） | 3 | 区 |  |  |  |
| Upper division elective | 3 | 区 |  |  |  |
| Upper division elective | 3 | 区 |  |  |  |
| Upper division elective | 3 | 区 |  |  |  |
| Elective | 1－2 | 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：

Major Map：Chemistry－Bachelor of Science（B．S．）
College of Liberal Arts and Sciences，Tempe Campus
Catalog Year：2008－2009

|  |  |  | Completed ATP：$\square$ Yes $\square$ No |  | Completed AGEC：$\square$ Yes $\square$ No |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 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： 015 CREDIT HOURS |  |  |  |  |  |
| CHM 117：General Chemistry for Majors I（SQ）or CHM 113：General Chemistry I（SQ） | 4 | $\square$ |  | Grade of C | －An SAT，ACT，Accuplacer，or TOEFL score determines placement into first－year composition |
| MAT 270：Calculus with Analytic Geometry I（MA） | 4 | $\square$ |  | Grade of C | courses |
| 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 | ASU Math Placement Exam score determines placement in Mathematics course <br> －Maintain 2．0 GPA in all critical courses <br> －Consult an academic advisor for Learning |
| Social \＆Behavioral Science（SB）AND Cultural Awareness in the US （C），Global Awareness（G）OR Historical Awareness（H） | 3 | $\square$ |  |  | Community，Academic Success Clusters and First Year Seminar options |
| TERM TWO： 1630 CREDIT HOURS |  |  |  |  |  |
| CHM 118：General Chemistry for Majors II（SQ）or CHM 116：General Chemistry II（SQ） | 4 | $\square$ |  | Grade of C | －Maintain 2．0 GPA in all critical courses |
| MAT 271：Calculus with Analytic Geometry II | 4 | $\square$ |  | Grade of C |  |
| PHY 121：University Physics I \＆PHY 122：University Physics I Lab | 3／1 | $\square$ |  | 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 |  |
| TERM THREE： 3145 CREDIT HOURS |  |  |  |  |  |
| CHM 333：Organic Chemistry for Majors I or CHM 233：General Organic Chemistry I | 3 | $\square$ |  | Grade of C | －First year composition requirement completed <br> －Maintain 2.0 GPA in all critical courses |
| CHM 337：Organic Chemistry for Majors I Laboratory or CHM 237：General Organic Chemistry I Laboratory | 1 | $\square$ |  | Grade of C |  |
| PHY 131：University Physics II \＆PHY 132：University Physics II Lab | 3／1 | $\square$ |  | Grade of C |  |
| MAT 272：Calculus with Analytical Geometry III | 4 | $\square$ |  | Grade of C |  |
| Humanities，Fine Arts \＆Design（HU）AND Cultural Awareness in the US（C），Global Awareness（G）OR Historical Awareness（H） | 3 | $\square$ |  |  |  |
| TERM FOUR： $46 \mathbf{6 0}$ CREDIT HOURS |  |  |  |  |  |
| CHM 334：Organic Chemistry for Majors II or CHM 234：General Organic Chemistry II | 3 | $\square$ |  | Grade of C | －Maintain 2．0 GPA in all critical courses |
| CHM 338：Organic Chemistry for Majors II Laboratory or CHM 238：General Organic Chemistry II Laboratory | 1 | $\square$ |  | Grade of C |  |
| CHM 240：Intro to Physical Chemistry（CS） | 3 | $\square$ |  | Grade of C |  |
| Social \＆Behavioral Science（SB）AND Cultural Awareness in the US （C），Global Awareness（G）OR Historical Awareness（H） | 3 | $\square$ |  |  |  |
| Literacy and Critical Inquiry（L） | 3 | $\square$ |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| TERM FIVE： 6175 CREDIT HOURS |  |  |  |  |  |
| CHM 325：Analytical Chemistry \＆CHM 326 Analytical Chem Lab | 3／1 | 区 |  | Grade of C |  |
| CHM 345：Physical Chemistry I | 3 | 区 |  | Grade of C |  |
| CHM 348：Physical Chemistry I Laboratory（must also complete CHM 349 \＆CHM 452 to secure L） | 1 | 区 |  | Grade of C |  |
| Humanities，Fine Arts \＆Design（HU） | 3 | $\square$ |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| TERM SIX： 7690 CREDIT HOURS |  |  |  |  |  |
| CHM 327 Instrumental Analysis | 3 | 区 |  | Grade of C |  |
| CHM 328：Instrumental Analysis Laboratory | 2 | 区 |  | Grade of C |  |
| CHM 346：Physical Chemistry II | 3 | 区 |  | Grade of C |  |
| CHM 349：Physical Chemistry II Laboratory（must also complete CHM 348 \＆CHM 452 to secure L） | 1 | 区 |  | Grade of C |  |
| Upper division Humanities，Fine Arts \＆Design（HU）or Social Behavioral Science（SB） | 3 | 区 |  |  |  |
| Upper division elective | 3 | 区 |  |  |  |
| TERM SEVEN： 91105 CREDIT HOURS |  |  |  |  |  |
| CHM 453：Inorganic Chemistry | 3 | 区 |  | Grade of C |  |
| Upper division CLAS Science \＆Society | 3 | 区 |  | Grade of C |  |
| Upper division elective | 3 | 区 |  |  |  |
| Upper division elective | 3 | 区 |  |  |  |
| Elective | 3 | $\square$ |  |  |  |


| Course Subject and Title （courses in bold／shading are critical） | Hrs． | $\begin{aligned} & \hline \text { Upper } \\ & \text { Division } \end{aligned}$ | Transfer Course／Grade | Minimum Grade if Required | Additional Critical Requirement Notes |
| :---: | :---: | :---: | :---: | :---: | :---: |
| TERM EIGHT： $106 \mathbf{1 2 0}$ CREDIT HOURS |  |  |  |  |  |
| CHM 460：Biological Chemistry | 3 | 区 |  | Grade of C |  |
| CHM 452：Inorganic Chemistry Laboratory（must also complete CHM 348 \＆CHM 349 to secure L） | 1 | $\boxtimes$ |  | Grade of C |  |
| CHM elective | 3 | 区 |  | Grade of C |  |
| Upper division CLAS Science \＆Society | 3 | 区 |  | Grade of C |  |
| Upper division elective | 3 | 区 |  |  |  |
| Elective | 3 | $\square$ |  |  |  |

## 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：

Major Map：Chemistry（Environmental Chemistry）－<br>Bachelor of Science（B．S．）<br>College of Liberal Arts and Sciences，Tempe Campus<br>Catalog Year：2008－2009

|  |  |  | Completed ATP：$\square$ Yes $\square$ No |  | Completed AGEC：$\square$ Yes $\square$ No |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 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： 015 CREDIT HOURS |  |  |  |  |  |
| CHM 113：General Chemistry I（SQ）or CHM 117：General Chemistry for Majors I（SQ） | 4 | $\square$ |  | Grade of C | －An SAT，ACT，Accuplacer，or TOEFL score determines placement into first－year composition |
| MAT 270：Calculus with Analytic Geometry I（MA） | 4 | $\square$ |  | Grade of C | courses |
| 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 | placement in Mathematics course <br> －Maintain 2.0 GPA in all critical courses and upper division BCH and CHM courses |
| Social \＆Behavioral Science（SB）AND Cultural Awareness in the US （C），Global Awareness（G）OR Historical Awareness（H） | 3 | $\square$ |  |  | －Consult an academic advisor for Learning Community，Academic Success Clusters and First Year Seminar options |
| TERM TWO： 1630 CREDIT HOURS |  |  |  |  |  |
| CHM 116：General Chemistry II（SQ）or <br> CHM 118：General Chemistry for Majors II（SQ） | 4 | $\square$ |  | Grade of C | －Maintain 2．0 GPA in all critical courses and upper division BCH and CHM courses |
| MAT 271：Calculus with Analytic Geometry II | 4 | $\square$ |  | Grade of C |  |
| PHY 121：University Physics I \＆PHY 122：University Physics I Lab | 3／1 | $\square$ |  | 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 |  |
| TERM THREE： 3145 CREDIT HOURS |  |  |  |  |  |
| CHM 333：Organic Chemistry for Majors I or CHM 233：General Organic Chemistry I | 3 | $\square$ |  | Grade of C | －Maintain 2．0 GPA in all critical courses and upper division BCH and CHM courses |
| CHM 337：Organic Chemistry for Majors I Laboratory or CHM 237：General Organic Chemistry I Laboratory | 1 | $\square$ |  | Grade of C | －First Year Composition should be completed by the end of semester 3 |
| MAT 272：Calculus with Analytic Geometry III | 4 | $\square$ |  | Grade of C |  |
| PHY 131：University Physics II \＆PHY 132：University Physics II Lab | 3／1 | $\square$ |  | Grade of C |  |
| Humanities，Fine Arts \＆Design（HU）AND Cultural Awareness in the US（C），Global Awareness（G）OR Historical Awareness（H） | 3 | $\square$ |  |  |  |
| TERM FOUR： $46 \mathbf{6 0}$ CREDIT HOURS |  |  |  |  |  |
| CHM 334：Organic Chemistry for Majors II or <br> CHM 234：General Organic Chemistry II | 3 | 区 |  | Grade of C | －Maintain 2．0 GPA in all critical courses and upper division BCH and CHM courses |
| CHM 338：Organic Chemistry for Majors II Laboratory or CHM 238：General Organic Chemistry II Laboratory | 1 | 区 |  | Grade of C |  |
| CHM 240：Introduction to Physical Chemistry（CS） | 3 | $\square$ |  | Grade of C |  |
| CHM 302：Environmental Chemistry | 3 | 区 |  | Grade of C |  |
| CHM 303：Environmental Chemistry Laboratory（must also complete CHM 348 to secure L） | 2 | 区 |  | Grade of C |  |
| Social \＆Behavioral Science（SB）AND Cultural Awareness in the US （C），Global Awareness（G）OR Historical Awareness（H） | 3 | $\square$ |  |  |  |
| TERM FIVE： 6175 CREDIT HOURS |  |  |  |  |  |
| CHM 345：Physical Chemistry I | 3 | 区 |  | Grade of C | A in all upper division BCH and |
| CHM 348：Physical Chemistry Laboratory I（must also complete CHM 303 to secure L） | 1 | 区 |  | Grade of C | CHM courses |
| Humanities，Fine Arts \＆Design（HU） | 3 | $\square$ |  |  |  |
| CHM 325 Analytical Chemistry and CHM 326 Analytical Chemistry Lab | 3／1 | 区 |  | Grade of C |  |
| CHM 341 | 3 | 区 |  | Grade of C |  |
| Elective | 3 | $\square$ |  |  |  |
| TERM SIX： $76 \mathbf{9 0}$ CREDIT HOURS |  |  |  |  |  |
| CHM 327：Instrumental Analysis \＆CHM 328：Instr Analysis Lab | 3／2 | 区 |  | Grade of C | Maintain 2．0 GPA in all upper division BCH and |
| CHM 481：Geochemistry | 3 | 区 |  | Grade of C |  |
| Literacy and Critical Inquiry（L） | 3 | 区 |  |  |  |
| CHM 346 Physical Chemistry II | 3 | 区 |  | Grade of C |  |
| TERM SEVEN： 91105 CREDIT HOURS |  |  |  |  |  |
| Complete one course from： <br> BIO 320 Fundamentals of Ecology， <br> BIO 426 Limnology， <br> GLG 461 Geomicrobiology | $\begin{gathered} 3 \text { or } \\ 4 \\ \hline \end{gathered}$ | 区 |  | Grade of C | －Maintain 2．0 GPA in all upper division BCH and CHM courses |
| Upper division CLAS Science and Society | 3 | 区 |  | Grade of C |  |
| Upper division elective | 3 | 区 |  |  |  |
| Upper division Humanities，Fine Arts \＆Design（HU）or Social \＆Behavioral Science（SB） | 3 | 区 |  |  |  |
| CHM 453 Inorganic Chemistry | 3 | 区 |  | Grade of C |  |

# Major Map: Chemistry (Environmental Chemistry) - 

Bachelor of Science (B.S.)
College of Liberal Arts and Sciences, Tempe Campus
Catalog Year: 2008-2009

| 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 EIGHT: $106 \mathbf{1 2 0}$ CREDIT HOURS |  |  |  |  |  |
| CHM 460: Biological Chemistry | 3 | 区 |  | Grade of C | - Maintain 2.0 GPA in all upper division BCH and CHM courses |
| GLG 321: Mineralogy | 3 | 区 |  | Grade of C |  |
| Upper division CLAS Science and Society | 3 | $\boxtimes$ |  | Grade of C |  |
| Elective | 3 | $\square$ |  |  |  |
| Elective | 3 | $\square$ |  |  |  |

## 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 (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:

Major Map: Communication - Bachelor of Science (B.S.)
College of Liberal Arts and Sciences, Tempe Campus
Catalog Year: 2008-2009


## 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:

## ANN ARIZONA STATE UNIVERSITY

Major Map：Computational Mathematical Sciences<br>－Bachelor of Science（B．S．）<br>College of Liberal Arts and Sciences，Tempe Campus<br>Catalog Year：2008－2009

|  |  |  | Completed ATP：$\square$ Yes $\square$ No |  | Completed AGEC：$\square$ Yes $\square$ No |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 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： 015 CREDIT HOURS |  |  |  |  |  |
| MAT 270：Calculus with Analytic Geometry I（MA） | 4 | $\square$ |  | Grade of 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> －Complete all critical courses by the end of semester 5 <br> －Minimum cumulative 2.60 GPA in all critical courses <br> －Minimum grade of C required in all MAT and STP classes；grade of B or better strongly correlated with timely graduation <br> －Consult an academic advisor for Learning Community，Academic Success Clusters and First Year Seminar options |
| ENG 101 or 102：First－Year Composition or ENG 105：Advanced First－Year Composition ENG 107 or 108：English for Foreign Students | 3 | $\square$ |  | Grade of C |  |
| Complete 1 course from： <br> Humanities，Fine Arts \＆Design（HU）OR <br> Social \＆Behavioral Science | 3 | $\square$ |  |  |  |
| Complete one from： <br> Cultural Diversity in the US（C）OR <br> Historical Awareness（H） | 3 | $\square$ |  |  |  |
| First Year Seminar（course w／ 191 number） | 1 | $\square$ |  |  |  |
| TERM TWO： 1630 CREDIT HOURS |  |  |  |  |  |
| CSE 100：Principles of Programming with C＋＋OR CSE 110：Principles of Programming with Java | 3 | $\square$ |  | Grade of C | －Complete all critical courses by the end of semester 5 <br> －Minimum cumulative 2.60 GPA in all critical courses <br> －Minimum grade of C required in all MAT and STP classes；grade of B or better strongly correlated with timely graduation |
| MAT 271：Calculus with Analytic Geometry II | 4 | $\square$ |  | Grade of C |  |
| ENG 101 or 102：First－Year Composition or ENG 105：Advanced First－Year Composition ENG 107 or 108：English for Foreign Students | 3 | $\square$ |  | Grade of C |  |
| Complete remaining course from： <br> Humanities，Fine Arts \＆Design（HU）OR <br> Social \＆Behavioral Science |  |  |  |  |  |
| Complete remaining course from： Cultural Diversity in the US（C）OR Historical Awareness（H） | 3 | $\square$ |  |  |  |
| TERM THREE： 3145 CREDIT HOURS |  |  |  |  |  |
| CSE 205：Concepts of Computer Science and Data Structures | 3 | $\square$ |  | Grade of C | －First year composition completed <br> －Complete all critical courses by the end of semester 5 <br> －Minimum cumulative 2.60 GPA in all critical courses <br> －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 | 4 | $\square$ |  | Grade of C |  |
| Humanities，Fine Arts \＆Design（HU）OR Social \＆Behavioral Science | 3 | $\square$ |  |  |  |
| Global Awareness（G） | 3 | $\square$ |  |  |  |
| Literacy and Critical Inquiry（L） | 3 | $\square$ |  |  |  |
| TERM FOUR： 4660 CREDIT HOURS |  |  |  |  |  |
| CSE 240：Introduction to Programming Languages OR <br> CSE 310：Data Structures and Algorithms | 3 | $\square$ |  | Grade of C | －Complete all critical courses by the end of semester 5 <br> －Minimum cumulative 2.60 GPA in all critical courses <br> －Minimum grade of C required in all MAT and STP classes；grade of B or better strongly correlated with timely graduation <br> －PHY 121／122（SQ）advised for Natural Sciences I semester 4，also fulfills Science |
| MAT 275：Modern Differential Equations | 3 | $\square$ |  | Grade of C |  |
| MAT 342：Linear Algebra OR MAT 343：Applied Linear Algebra | 3 | 区 |  | Grade of C |  |
| Natural Science Quantitative（SQ） | 4 | $\square$ |  |  |  |
| Upper division CLAS Science and Society | 3 | 区 |  | Grade of C |  |
| TERM FIVE： 6175 CREDIT HOURS |  |  |  |  |  |
| MAT 420：Scientific Computing | 3 | 区 |  | Grade of C | －Minimum cumulative 2.60 GPA in all critical courses <br> －Minimum grade of C required in all MAT and STP classes；grade of B or better strongly correlated with timely graduation |
| MAT 243：Discrete Math Structures OR MAT 300：Mathematical Structures（L） | 3 | $\square$ |  | Grade of C |  |
| Upper division CLAS Science and Society | 3 | 区 |  |  |  |
| Upper division Literacy and Critical Inquiry（L）OR if MAT 300 completed take Upper division general elective | 3 | 囚 |  |  |  |
| Upper division general elective | 3 | 区 |  |  |  |
| TERM SIX： $76 \mathbf{9 0}$ CREDIT HOURS |  |  |  |  |  |
| MAT 421：Applied Computational Methods | 3 | 区 |  | Grade of C | －Minimum grade of C required in all MAT and STP classes；grade of B or better strongly correlated with timely graduation <br> －See the department advisor for a list of advanced science courses． |
| MAT 370：Intermediate Calculus OR MAT 371：Advanced Calculus I OR MAT 460：Vector Calculus | 3 | 区 |  | Grade of C |  |
| Science course | 4 | $\square$ |  |  |  |
| Natural Science Quantitative（SQ）or General（SG） | 4 | $\square$ |  |  |  |
| Upper division Humanities，Fine Arts \＆Design（HU）OR Social \＆Behavioral Science | 3 | 区 |  |  |  |

Major Map：Computational Mathematical Sciences －Bachelor of Science（B．S．）
College of Liberal Arts and Sciences，Tempe Campus
Catalog Year：2008－2009

| 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： 91105 CREDIT HOURS |  |  |  |  |  |
| Upper division MAT or STP（advanced）course | 3 | 区 |  | Grade of C | －Minimum grade of C required in all MAT and STP classes；grade of B or better strongly correlated with timely graduation <br> －See the department advisor for a list of advanced science courses． |
| Upper division（Advanced）Science course | 3 | 区 |  |  |  |
| Science course | 4 | $\square$ |  |  |  |
| Upper division general elective | 4 | $\boxtimes$ |  |  |  |
| TERM EIGHT： $106 \mathbf{1 2 0}$ CREDIT HOURS |  |  |  |  |  |
| Internship／research／advanced course | 3 | 区 |  |  | －Minimum grade of C required in all MAT and STP classes；grade of B or better strongly correlated with timely graduation <br> －See the department advisor for a list of advanced science courses． |
| Upper division MAT or STP（advanced）course | 3 | 区 |  | Grade of C |  |
| UD Science | 3 | 区 |  |  |  |
| Upper division general elective | 3 | 囚 |  |  |  |

## 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

| $\circ$ | Cultural Diversity in the US（C） |
| :--- | :--- |
| $\circ$ | Global Awareness（G） |
| 0 | Historical Awareness（H） |

－First Year Composition
Additional Notes：

Major Map：Earth and Space Exploration－
Bachelor of Science（B．S．）
College of Liberal Arts and Sciences，Tempe Campus
Catalog Year：2008－2009

|  |  |  | Completed ATP：$\square$ Yes $\quad \square$ No |  | Completed AGEC：$\square$ Yes $\square$ No |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Course Subject and Title （courses in bold／shading are critical） | Hrs． | Upper <br> Division | Transfer Course／Grade | Minimum Grade if Required | Additional Critical Requirement Notes |
| TERM ONE： 015 CREDIT HOURS |  |  |  |  |  |
| SES 100：Introduction to Exploration | 3 | $\square$ |  | Grade of 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> －Consult academic advisor for Learning Community，Academic Success Clusters and First Year Seminar options |
| SES 101：Earth，Solar System，and Universe I | 3 | $\square$ |  | Grade of C |  |
| SES 103：Earth，Solar System，and Universe Laboratory I | 1 | $\square$ |  | 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 |  |
| MAT 170 if needed or elective | 3 | $\square$ |  | Grade of C |  |
| Social\＆Behavioral Science（SB） | 3 | $\square$ |  |  |  |
| TERM TWO： 1630 CREDIT HOURS |  |  |  |  |  |
| CHM 113：General Chemistry I（SQ） | 4 | $\square$ |  | Grade of C |  |
| MAT 265：Calculus for Engineers I（MA） | 3 | $\square$ |  | Grade of C |  |
| SES 102：Earth，Solar System，and Universe II | 3 | $\square$ |  | Grade of C |  |
| SES 104：Earth，Solar System，and Universe Laboratory II | 1 | $\square$ |  | 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 |  |
| TERM THREE： 3145 CREDIT HOURS |  |  |  |  |  |
| CHM 116：General Chemistry II（SQ） | 4 | $\square$ |  | Grade of C | －First Year Composition must be completed by the end of semester 3 |
| MAT 266：Calculus for Engineers II | 3 | $\square$ |  | Grade of C |  |
| SES 210：Engineering Systems and Experimental Design | 3 | $\square$ |  | Grade of C |  |
| Humanities，Fine Arts \＆Design（HU）and Cultural Diversity in the US（C），Global Awareness（G）or Historical Awareness（H）： | 3 | $\square$ |  |  |  |
| General Elective | 3 | $\square$ |  |  |  |
| TERM FOUR： 4660 CREDIT HOURS |  |  |  |  |  |
| GLG 321：Mineralogy | 3 | 区 |  | Grade of C |  |
| PHY 121：University Physics I：Mechanics | 3 | $\square$ |  | Grade of C |  |
| PHY 122：University Physics Laboratory I | 1 | $\square$ |  | Grade of C |  |
| MAT 267：Calculus for Engineers III | 3 | $\square$ |  | Grade of C |  |
| CLAS Science and Society | 3 | $\square$ |  | Grade of C |  |
| Literacy and Critical Inquiry（L） | 3 | $\square$ |  |  |  |
| Social \＆Behavioral Science（SB）and Cultural Diversity in the US （C），Global Awareness（G）or Historical Awareness（H）： | 3 | $\square$ |  |  |  |
| TERM FIVE： 6175 CREDIT HOURS |  |  |  |  |  |
| GLG 424：Petrology | 3 | 区 |  | Grade of C |  |
| PHY 131：University Physics II：Electricity and Magnetism | 3 | $\square$ |  | Grade of C |  |
| PHY 132：University Physics Laboratory II | 1 | $\square$ |  | Grade of C |  |
| SES 394：Special Topics：Concepts of Electrical \＆Mechanical Engineering Design | 3 | ® |  | Grade of C |  |
| Upper Division CLAS Science and Society | 3 | 区 |  | Grade of C |  |
| TERM SIX： $76 \mathbf{9 0}$ CREDIT HOURS |  |  |  |  |  |
| MAT 275：Modern Differential Equations | 3 | $\square$ |  |  |  |
| SES 311：Essentials of Astrobiology：Exploration for Life in the Universe | 3 | ® |  | Grade of C |  |
| Branch course | 3 | 囚 |  |  |  |
| ESE Elective | 3 | 区 |  |  |  |
| Upper division Literacy and Critical Inquiry（L） | 3 | 区 |  |  |  |
| TERM SEVEN： 91105 CREDIT HOURS |  |  |  |  |  |
| SES 410：Senior Exploration Project I | 3 | 区 |  | Grade of C |  |
| Computer／Statistics／Quantitative applications（CS） | 3 | $\square$ |  |  |  |
| General Elective | 3 | 区 |  |  |  |
| General Elective | 2 | $\square$ |  |  |  |
| Humanities，Fine Arts \＆Design（HU）and Cultural Diversity in the US（C），Global Awareness（G）or Historical Awareness（H）： | 3 | $\square$ |  |  |  |
| TERM EIGHT： 106120 CREDIT HOURS |  |  |  |  |  |
| SES 411：Senior Exploration Project II | 3 | 区 |  | Grade of C |  |
| Upper division General Elective | 3 | 区 |  |  |  |
| Upper division General Elective | 3 | 区 |  |  |  |
| Upper division General Elective | 3 | 区 |  |  |  |
| Upper division Humanities，Fine Arts \＆Design（HU）or Social Behavioral Science（SB） | 3 | 区 |  |  |  |

Major Map: Earth and Space Exploration Bachelor of Science (B.S.)
College of Liberal Arts and Sciences, Tempe Campus
Catalog Year: 2008-2009

## Graduation Requirements Summary:

| Total Hours (120 <br> minimum) | Total Hrs at ASU (30 <br> minimum) | Hrs Resident Credit for Academic <br> 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:

There is room in this roadmap to add a concurrent degree, minor, or certificate

Major Map: Economics - Bachelor of Science (B.S.)
College of Liberal Arts and Sciences, Tempe campus
Catalog Year: 2008-2009


| 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 EIGHT： $106 \mathbf{1 2 0}$ CREDIT HOURS |  |  |  |  |  |
| ECN 475：Capstone in Economics（L）OR <br> ECN 493：Honors Thesis（L） | 3 | 区 |  | Grade of C |  |
| UD General Elective | 3 | 区 |  |  |  |
| UD General Elective | 3 | 囚 |  |  |  |
| UD General Elective | 3 | 区 |  |  |  |
| UD General Elective | 3 | 囚 |  |  |  |

## 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 upper division <br> Hrs（45 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 (120 <br> minimum) | Total Hrs at ASU (30 <br> minimum) | Hrs Resident Credit for Academic <br> 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

Major Map ：English（Linguistics）－
Bachelor of Arts（B．A．）
College of Liberal Arts and Sciences，Tempe Campus
Catalog Year：2008－2009

|  |  | Upper <br> Division | Completed ATP：$\square$ Yes $\quad \square$ No |  | Completed AGEC：$\square$ Yes $\square$ No |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Course Subject and Title （courses in bold／shading are critical，concentration courses are underlined） | Hrs． |  | Transfer Course／Grade | Minimum Grade if Required | Additional Critical Requirement Notes |
| TERM ONE： 015 CREDIT HOURS |  |  |  |  |  |
| WAC 101：Introduction to Academic Writing or 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 | －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 freshmen are required to pass an academic success class and therefore must enroll in an Academic Success Cluster and／or a First Year Seminar |
| Modern Second Language | 4 | $\square$ |  |  |  |
| Social／Behavioral Science（SB） | 3 | $\square$ |  |  |  |
| MAT 142：College Mathematics／or higher（MA） | 3 | $\square$ |  | Grade of C |  |
| Elective | 3 | $\square$ |  |  |  |
| Academic Success Class OR <br> First Year Seminar | 1 | $\square$ |  |  |  |
| TERM TWO： 1630 CREDIT HOURS |  |  |  |  |  |
| WAC 101：Introduction to Academic Writing or 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 | 3.0 in English courses beyond first－year composition courses required． |
| Modern Second Language | 4 | $\square$ |  |  |  |
| Social \＆Behavioral Science（SB） | 3 | $\square$ |  |  |  |
| Natural Science Quantitative（SQ） | 4 | $\square$ |  |  |  |
| Computer／Statistics／Quantitative applications（CS） | 3 | $\square$ |  |  |  |
| TERM THREE： 3145 CREDIT HOURS |  |  |  |  |  |
| ENG 200：Critical Reading and Writing About Literature（L） | 3 | $\square$ |  |  | 3.0 in English courses beyond first－year composition courses required． |
| ENG 213 Introduction to the Study of Language OR one of the following： <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 | $\square$ |  |  |  |
| Modern Second Language（G） | 4 | $\square$ |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| Natural Science Quantitative（SQ）or General（SG） | 4 | $\square$ |  |  |  |
| TERM FOUR： 4660 CREDIT HOURS |  |  |  |  |  |
| ENG 213 Introduction to the Study of Language OR one of the following： <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 | $\square$ |  |  | 3.0 in English courses beyond first－year composition courses required． |
| ENG 312 English in Its Social Setting（SB）OR ENG 314 Modern Grammar | 3 | 区 |  |  |  |
| Modern Second Language（4 ${ }^{\text {th }}$ semester CLAS Proficiency） | 4 | $\square$ |  | Grade of C |  |
| Elective | 3 | $\square$ |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| TERM FIVE： 6175 CREDIT HOURS |  |  |  |  |  |
| ENG 312 English in Its Social Setting（L）OR <br> ENG 314 Modern Grammar | 3 | 区 |  |  | 3.0 in English courses beyond first－year composition courses required． |
| Upper－division ENG／ENH Elective（HU \＆C） | 3 | 区 |  |  |  |
| Modern Language 300 level | 3 | 区 |  |  |  |
| ENG 413 History of English Language（HU） | 3 | 区 |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| TERM SIX： $76 \mathbf{9 0}$ CREDIT HOURS |  |  |  |  |  |
| ENG 313 Phonology and Morphology | 3 | 区 |  |  | 3.0 in English courses beyond first－year composition courses required． |
| ENG 414 Studies in Linguistics | 3 | 区 |  |  |  |
| Upper－division ENG／ENH Elective（recommended：ENG 385 Career Development for English Majors） | 3 | 区 |  |  |  |
| Modern Language 300 level | 3 | 区 |  |  |  |
| Elective（2 units－or two 1－unit Electives） | 2 | $\square$ |  |  |  |
| TERM SEVEN： 91105 CREDIT HOURS |  |  |  |  |  |
| ENG 414 Studies in Linguistics | 3 | 区 |  |  | 3.0 in English courses beyond first－year composition courses required． |
| Modern Language 400 Level | 3 | 区 |  |  |  |
| Upper－division Elective OR <br> ENG 484 Internship OR <br> ENG 492 Honors Directed Study | 3 | 区 |  |  |  |
| Elective | 3 | $\square$ |  |  |  |

Major Map : English (Linguistics) -
Bachelor of Arts (B.A.)
College of Liberal Arts and Sciences, Tempe Campus Catalog Year: 2008-2009

| Course Subject and Title <br> (courses in bold/shading are critical, concentration courses are underlined) | Hrs. | Upper <br> Division | Transfer <br> Course/Grade | Minimum Grade if <br> Required | Additional Critical Requirement 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 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) |
| $\circ$ | Natural Science-General (SG) |

- General Studies Awareness Requi
- Cultural Diversity in the US (C)
- Global Awareness (G)
- Historical Awareness (H)
- First-Year Composition


## Additional Notes:

BA in English with Concentration in Linguistics (42 hours), 2009-10 Catalog

## Required Courses

ENG 200 Critical Reading and Writing about Literature ( $L / H U$ )
ENG 213 Introduction to the Study of Language (or ASB 480 Principles of Linguistics [SB])
ENG 221 Survey of English Literature to 1798 (HU) or ENG 222 Survey of English Literature since 1798 (HU, H) or ENG 241 Literatures of the United States to $1860(H U)$ or ENG 242 Literatures of the United States, 1860 to Present ( HU )
ENG 312 English in Its Social Setting (L/HU/SB)
ENG 313 Phonology and Morphology (Spring semester only)
ENG 314 Modern Grammar
ENG 413 History of the English Language (HU)
ENG 414 Studies in Linguistics (to be repeated for a total of 9 credit hours)
ENG 414
ENG 414
Twelve additional hours are electives chosen in consultation with the student's advisor. These courses must be at the 200 level and above, and up to 2 non-ENG courses closely related to English may be used with prior advisor approval. At least one must be a 3-credit course in a modern language other than English at the 400 level or above. Internships (ENG 484) and/or ENG 385 Career Development for English Majors are highly encouraged.

## ENG/ENH <br> ENG/ENH _ <br> ENG/ENH

$\qquad$ (400-level modern language course)

Among the total of 42 hours in the major:

- At least 18 hours must be upper division ( 300 or 400 level), with at least 12 of these hours taken at ASU (any campus).
- One 300- or 400-level course must carry the General Studies "L."
- All courses in the major must earn a grade of $C(2.00)$ or higher.

Major Map : English (Literature) -
Bachelor of Arts (B.A.)
College of Liberal Arts and Sciences, Tempe Campus
Catalog Year: 2008-2009


## 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) |
| $\circ$ | 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:

## REQUIRED

ENG 200 Critical Reading and Writing About Literature ( $L / H U$ )

## AREAS AND PERIODS

At least two courses must be at the 400 level. Students may, once only, use a course to satisfy two requirements. See advisor (or English major Blackboard) for each semester's list of Areas/Periods courses.

ENG/ENH $\qquad$ Literature and Culture before 1800
ENG/ENH $\qquad$ Literature and Culture after 1800
ENG/ENH $\qquad$ Literary Theory and Interdisciplinary Studies
ENG/ENH $\qquad$ Transnational, Postcolonial, and Global Literatures

## eLectives

The 10 to 11 additional courses needed to complete the 45 hours are electives chosen from English offerings at the 200 level or above. Up to 2 non-ENG courses closely related to English may be used with prior advisor approval. Internships (ENG 484) and/or ENG 385 Career Development for English Majors are highly encouraged.

## NOTES:

- At least 18 hours must be upper division ( 300 or 400 level), with at least 12 of these hours taken at ASU (any campus).
- One 300- or 400 -level course must carry the General Studies "L."
- Up to 4 Writing Certificate courses can be used in both the major and the certificate.
- PREPARING FOR GRADUATE SCHOOL: Take as many 400 -level ENG courses as possible.
- All courses in the major must earn a grade of $\mathrm{C}(2.00)$ or higher.

Major Map ：Family \＆Human Development<br>－Bachelor of Science（B．S．）<br>College of Liberal Arts and Sciences，Tempe Campus<br>Catalog Year：2008－2009

|  |  |  | Completed ATP：$\square$ Yes $\quad \square$ No |  | Completed AGEC：$\square$ Yes $\square$ No |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Course Subject and Title （courses in bold／shading are critical） | Hrs． | Upper Division | Transfer Course／Grade | $\begin{aligned} & \text { Minimum Grade if } \\ & \text { Required } \end{aligned}$ | Additional Critical Tracking Notes |
| TERM ONE： 015 CREDIT HOURS |  |  |  |  |  |
| ENG 101 and 102：First－Year Composition OR ENG 107 and 108：English for Foreign Students OR ENG 105：Advanced First－Year Composition | 3 | $\square$ |  | Grade of 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> －Complete all critical courses by the end of semester 4 <br> －Consult an academic advisor for Learning Community，Academic Success Cluster and First Year Seminar options |
| MAT 142：College Mathematics or higher（MA） | 3 | $\square$ |  | Grade of C |  |
| PGS 101：Introduction to Psychology（SB）OR SOC 101：Introductory Sociology（SB） | 3 | $\square$ |  |  |  |
| Natural Science－Quantitative or General（SQ／SG） | 4 | $\square$ |  |  |  |
| Elective（recommend LIA 294：Special Topics）OR Learning Community，Campus Match，First Year Seminar options | 1 | $\square$ |  |  |  |
| TERM TWO： 1630 CREDIT HOURS |  |  |  |  |  |
| ENG 101 and 102：First－Year Composition OR ENG 107 and 108：English for Foreign Students OR ENG 105：Advanced First－Year Composition | 3 | $\square$ |  | Grade of C | －Consult an academic advisor for Learning Community，Campus Match and First Year Seminar options |
| CDE 232：Human Development（SB） | 3 | $\square$ |  | Grade of C |  |
| Natural Science－Quantitative（SQ） | 4 | $\square$ |  |  |  |
| Humanities／Fine Arts（HU） | 3 | $\square$ |  |  |  |
| Elective or Learning Community | 3 | $\square$ |  |  |  |
| TERM THREE： 3145 CREDIT HOURS |  |  |  |  |  |
| FAS 331：Marriage and Family Relationships（SB） | 3 | 区 |  | Grade of C | －Complete First Year Composition requirement： ENG 101 \＆ 102 OR ENG 107 \＆ 108 or 105 |
| FAS／CDE Restricted Upper Division Elective | 3 | 区 |  | Grade of C |  |
| Computer／Statistics／Quantitative（CS）： | 3 | $\square$ |  |  |  |
| CDE 338：Child Development Practicum | 3 | 区 |  | Grade of C |  |
| Elective | 3 | $\square$ |  |  |  |
| TERM FOUR： $46 \mathbf{6 0}$ CREDIT HOURS |  |  |  |  |  |
| FAS 370：Family Ethnic \＆Cultural Diversity（SB，C） | 3 | 区 |  | Grade of C | －Complete Mathematical Studies（MA） |
| FAS 361：Research Methods（L or SB） | 3 | 区 |  | Grade of C |  |
| Humanities／Fine Arts（HU）with G awareness （recommend REL 100：Religions of the World） | 3 | $\square$ |  |  |  |
| Historical Awareness Area（H） | 3 | $\square$ |  |  |  |
| FAS／CDE Related Field | 3 | $\square$ |  |  |  |
| TERM FIVE： 6175 CREDIT HOURS |  |  |  |  |  |
| CDE 430：Infant／Toddler Development in the Family（SB） | 3 | 区 |  | Grade of C |  |
| FAS 431：Parent－Adolescent Relationships（SB） | 3 | 区 |  | Grade of C |  |
| Science and Society | 3 | $\square$ |  | Grade of C |  |
| PGS or SOC Course | 3 | $\square$ |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| TERM SIX： $76 \mathbf{9 0}$ CREDIT HOURS |  |  |  |  |  |
| FAS／CDE Restricted Upper Division Elective | 3 | 区 |  | Grade of C |  |
| FAS／CDE Restricted Upper Division Elective | 3 | 区 |  | Grade of C |  |
| Elective（LIA 394：Career Management－CLAS Majors） | 3 | 区 |  |  |  |
| Science and Society | 3 | 区 |  | Grade of C |  |
| Elective | 3 | $\square$ |  |  |  |
| TERM SEVEN： 91105 CREDIT HOURS |  |  |  |  |  |
| FAS 435：Advanced Marriage and Family Relationships（L or SB） | 3 | 区 |  | Grade of C |  |
| FAS／CDE 498：Pro－Seminar | 3 | 区 |  | Grade of C |  |
| FAS／CDE Related Field | 3 | $\square$ |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| TERM EIGHT： $106 \mathbf{1 2 0}$ CREDIT HOURS |  |  |  |  |  |
| FAS 390：Supervised Research Experience OR FAS 484：Internship | 3 | 区 |  | Grade of C |  |
| FAS／CDE Restricted Elective | 3 | 区 |  | Grade of C |  |
| Elective | 3 | $\square$ |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| Elective | 2 | $\square$ |  |  |  |

# Major Map : Family \& Human Development 

 - Bachelor of Science (B.S.)College of Liberal Arts and Sciences, Tempe Campus
Catalog Year: 2008-2009

## Graduation Requirements Summary:

| Total Hours (120 <br> minimum) | Total Hrs at ASU (30 <br> minimum) | Hrs Resident Credit for Academic <br> Recognition ( 56 minimum) | Major GPA <br> $(2.00$ Min. $)$ | Total UD Hrs <br> $(45$ 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:

There is room in this roadmap to add a concurrent degree, a minor or a certificate.

Major Map: Film (Film \& Media Studies) -
Bachelor of Arts (B.A.)
College of Liberal Arts \& Sciences, Tempe Campus
Catalog Year: 2008-2009


Major Map: Film (Film \& Media Studies) -
Bachelor of Arts (B.A.)
College of Liberal Arts \& Sciences, Tempe Campus
Catalog Year: 2008-2009

## Graduation Requirements Summary:

| Total Hours <br> $(120$ minimum $)$ | Total Hrs at ASU <br> $(30$ minimum $)$ | Hrs Resident Credit for Academic <br> Recognition ( 56 minimum $)$ | Major GPA <br> $(2.00$ Min. $)$ | Total UD Hrs <br> (45 minimum) | Total Comm. College <br> Hrs. (64 maximum) |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |

## 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) |
| $\circ$ | 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:

There is room in this roadmap to add a concurrent degree, a minor or a certificate.

Major Map：French－Bachelor of Arts（B．A．）
College of Liberal Arts and Sciences，Tempe Campus
Catalog Year：2008－2009

|  |  |  | Completed ATP：$\square$ Yes $\square$ No |  | Completed AGEC：$\square$ Yes $\square$ No |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Course Subject and Title （courses in bold／shading are critical） | Hrs． | Upper Division | Transfer Course／Grade | $\begin{aligned} & \text { Minimum Grade if } \\ & \text { Required } \end{aligned}$ | Additional Critical Requirement Notes |
| TERM ONE： 015 CREDIT HOURS |  |  |  |  |  |
| FRE 111：Fundamentals of French（or higher level FRE course depending on placement） | 4 |  |  | Grade of C | －FRE 111：Fundamentals of French is equivalent to FRE 101：Elementary French and FRE 102： Elementary French <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> －Minimum 2．34 GPA required in all critical courses． <br> －Consult academic advisor for Learning Community，Academic Success Clusters and First Year Seminar options． |
| ENG 101 and 102：First－Year Composition OR ENG 107 and 108：English for Foreign Students OR ENG 105：Advanced First－Year Composition | 3 | $\square$ |  | Grade of C |  |
| MAT 142：College Mathematics or higher（MA） | 3 | $\square$ |  | Grade of C |  |
| Social and Behavioral Sciences（SB） | 3 | $\square$ |  |  |  |
| Elective－${ }^{\text {st }}$ Year Seminar | 1 | $\square$ |  |  |  |
| TERM TWO： 16 30 CREDIT HOURS |  |  |  |  |  |
| FRE 201：Intermediate French I（or higher）（G） | 4 | $\square$ |  | Grade of C | －Minimum 2．34 GPA required in all critical courses． |
| ENG 101 and 102：First－Year Composition OR ENG 107 and 108：English for Foreign Students OR ENG 105：Advanced First－Year Composition | 3 | $\square$ |  | Grade of C |  |
| Computer／Statistics／Quantitative applications（CS） | 3 | $\square$ |  |  |  |
| Social and Behavioral Sciences（SB） | 3 | $\square$ |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| TERM THREE： 3145 CREDIT HOURS |  |  |  |  | －Minimum 2．34 GPA required in all critical courses． <br> －Complete First Year Composition requirement： ENG 101 \＆ 102 OR ENG 107 \＆ 108 or 105 <br> －Completed Mathematical Studies（MA）． |
| FRE 202：Intermediate French II（or higher） | 4 | $\square$ |  | Grade of C |  |
| Complete one course from： <br> SLC 201：Introduction to Linguistics OR <br> SLC 202：Introduction to Literacy and Cultural Theory（G） | 3 | $\square$ |  | Grade of C |  |
| Natural Science－Quantitative（SQ） | 4 | $\square$ |  |  |  |
| Awareness Area－Cultural（C） | 3 | $\square$ |  |  |  |
| TERM FOUR： 4660 CREDIT HOURS |  |  |  |  | －Minimum 2．34 GPA required in all critical courses． |
| FRE 205：Readings in French Literature（G） | 3 | $\square$ |  | Grade of C |  |
| FRE 311：French Conversation | 3 | 区 |  | Grade of C |  |
| FRE 312：French Composition | 3 | 区 |  | Grade of C |  |
| Complete remaining course from： <br> SLC 201：Introduction to Linguistics OR <br> SLC 202：Introduction to Literacy and Cultural Theory（G） | 3 | $\square$ |  | Grade of C |  |
| Natural Science－Quantitative or General（SQ／SG） | 4 | $\square$ |  |  |  |
| TERM FIVE： 6175 CREDIT HOURS |  |  |  |  |  |
| FRE 321：French Literature（L or HU，H） | 3 | 区 |  | Grade of C | Minimum grade of＂C＂in all FRE，SLC and |
| FRE 3＊＊or 4＊＊ | 3 | 区 |  | Grade of C | French Related Fields courses． |
| FRE Related Field Course | 3 | $\square$ |  | Grade of C | Enroll in＂IPO＂Study Abroad Program credits |
| Elective | 3 | $\square$ |  |  | or listed courses |
| Elective | 3 | $\square$ |  |  |  |
| TERM SIX： 7690 CREDIT HOURS |  |  |  |  |  |
| FRE 322：French Literature（L or HU，H） | 3 | 区 |  | Grade of C | －Minimum grade of＂C＂in all FRE，SLC and |
| FRE 3＊＊or 4＊＊ | 3 | 区 |  | Grade of C | French Related Fields courses． |
| FRE Related Field | 3 | $\square$ |  | Grade of C | Enroll in＂IPO＂Study Abroad Program credits |
| Elective | 3 | $\square$ |  |  | or listed courses |
| Elective | 3 | $\square$ |  |  |  |
| TERM SEVEN： 91105 CREDIT HOURS |  |  |  |  |  |
| FRE 4＊＊（Select a course that also fulfills the Humanities／Fine Arts／Design（HU）requirement ） | 3 | 区 |  | Grade of C | －Minimum grade of＂C＂in all FRE，SLC and French Related Fields courses． |
| FRE 4＊＊ | 3 | 区 |  | Grade of C | －Enroll in＂IPO＂Study Abroad Program credits |
| Upper Division Elective | 3 | 区 |  |  | or listed courses |
| Upper Division Elective | 3 | 区 |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| TERM EIGHT： 106120 CREDIT HOURS |  |  |  |  |  |
| FRE 4＊＊（Select a course that also fulfills the Humanities／Fine Arts／Design（HU）requirement） | 3 | 区 |  | Grade of C | －Minimum grade of＂C＂in all FRE，SLC and French Related Fields courses． |
| FRE 4＊＊ | 3 | 区 |  | Grade of C | Enroll in＂IPO＂Study Abroad Program credits |
| SLC 498：Pro－Seminar | 3 | 区 |  | Grade of C |  |
| Upper Division Elective | 3 | 区 |  |  |  |
| Upper Division Elective | 3 | 区 |  |  |  |

## Graduation Requirements Summary:

| Total Hours (120 <br> minimum) | Total Hrs at ASU (30 <br> minimum) | Hrs Resident Credit for Academic <br> Recognition ( 56 minimum) | Major GPA <br> $(2.00 \mathrm{Min})$. | Total UD Hrs <br> $(45$ minimum $)$ | Total Comm. College <br> Hrs. ( 64 maximum) |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |

## 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) |
| $\circ$ | 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:

Minimum grade of "C" in all FRE, SLC and French Related Fields courses

| Course Subject and Title <br> (courses in bold/shading are critical) | Hrs. | Upper <br> Division | Transfer <br> Course/Grade | Minimum Grade if <br> Required | Additional Critical Tracking Notes |
| :--- | :---: | :---: | :---: | :--- | :--- | :--- |

## Graduation Requirements Summary:

| Total Hours (120 <br> minimum) | Total Hrs at ASU (30 <br> minimum) | Hrs Resident Credit for Academic <br> Recognition ( 56 minimum) | Major GPA <br> $(2.00 \mathrm{Min})$. | Total UD Hrs <br> $(45$ 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:

There is room in this roadmap to add a concurrent degree, a minor or a certificate.

Major Map: Geography - Bachelor of Science (B.S.)
College of Liberal Arts and Sciences, Tempe Campus
Catalog Year: 2008-2009


## Graduation Requirements Summary:

| Total Hours (120 <br> minimum) | Total Hrs at ASU (30 <br> minimum) | Hrs Resident Credit for Academic <br> Recognition ( 56 minimum) | Major GPA <br> $(2.00 \mathrm{Min})$. | Total UD Hrs <br> $(45$ minimum $)$ | Total Comm. College <br> Hrs. ( 64 maximum) |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |

## 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) |
| $\circ$ | 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:

There is room in this roadmap to add a concurrent degree, a minor or a certificate.

Major Map: Geography (Meteorology-Climatology) Bachelor of Science (B.S.)
College of Liberal Arts and Sciences, Tempe Campus
Catalog Year: 2008-2009


Major Map: Geography (Meteorology-Climatology) -
Bachelor of Science (B.S.)
College of Liberal Arts and Sciences, Tempe Campus
Catalog Year: 2008-2009

## Graduation Requirements Summary:

| Total Hours (120 <br> minimum) | Total Hrs at ASU (30 <br> minimum) | Hrs Resident Credit for Academic <br> Recognition ( 56 minimum) | Major GPA <br> $(2.00$ Min. $)$ | Total UD Hrs <br> $(45$ 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:
There is room in this roadmap to add a concurrent degree, a minor or a certificate.

Major Map: Geography (Urban Studies) -
Bachelor of Science (B.S.)
College of Liberal Arts and Sciences, Tempe Campus
Catalog Year: 2008-2009


Major Map：Geography（Urban Studies）－
Bachelor of Science（B．S．）
College of Liberal Arts and Sciences，Tempe Campus Catalog Year：2008－2009

| $\begin{aligned} & \text { Course Subject and Title } \\ & \text { (courses in bold/shading are critical) } \end{aligned}$ | Hrs． | Upper Division | Transfer Course／Grade | Minimum Grade if Required | Additional Critical Tracking Notes |
| :---: | :---: | :---: | :---: | :---: | :---: |
| TERM EIGHT： $106 \mathbf{1 2 0}$ CREDIT HOURS |  |  |  |  |  |
| GCU 496：Geographic Research Methods（L） | 3 | 区 |  | Grade of C |  |
| GCU／GPH 484 or Related Area | 3 | 区 |  | Grade of C or Y |  |
| Upper Division Science and Society | 3 | 区 |  | Grade of C |  |
| GCU 359：Cities of the World I（SB，G，H） <br> GCU 360：Cities of the World II（SB，G） <br> GCU 444：Geographic Studies in Urban Transportation（SB） <br> GCU 494：Special Topics | 3 | 区 |  | Grade of C |  |
| Related Elective | 3 | $\square$ |  | Grade of C |  |

## Graduation Requirements Summary：

| Total Hours（120 <br> minimum） | Total Hrs at ASU（30 <br> minimum） | Hrs Resident Credit for Academic <br> Recognition（56 minimum） | Major GPA <br> $(2.00$ Min．） | Total upper division <br> Hrs <br> $(45$ 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：

There is room in this roadmap to add a concurrent degree，a minor or a certificate．

Major Map：Geological Sciences－<br>Bachelor of Science（B．S．）<br>College of Liberal Arts and Sciences，Tempe Campus<br>Catalog Year：2008－2009

|  |  |  | Completed ATP：$\square$ Yes $\quad \square$ No |  | Completed AGEC：$\square$ Yes $\square$ No |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Course Subject and Title （courses in bold／shading are critical） | Hrs． | Upper <br> Division | Transfer Course／Grade | Minimum Grade if Required | Additional Critical Requirement Notes |
| TERM ONE： 015 CREDIT HOURS |  |  |  |  |  |
| CHM 113：General Chemistry I（SQ） | 4 | $\square$ |  | Grade of 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> －Consult academic advisor for Learning Community， Academic Success Cluster and First Year Seminar options |
| GLG 101／103：Introduction to Geology I／Laboratory（G） | 3／1 | $\square$ |  | 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 |  |
| MAT 170 or Social \＆Behavioral Science（SB） | 3 | $\square$ |  |  |  |
| TERM TWO： 1630 CREDIT HOURS |  |  |  |  |  |
| CHM 116：General Chemistry II（SQ） | 4 | $\square$ |  | Grade of C |  |
| MAT 270：Calculus with Analytic Geometry I（MA） | 4 | $\square$ |  | Grade of C |  |
| GLG 102／104：Introduction to Geology II／Laboratory（SG，H） | 3／1 | $\square$ |  | 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 |  |
| TERM THREE： 3145 CREDIT HOURS |  |  |  |  |  |
| GLG 310：Structural Geology | 3 | 区 |  | Grade of C | －First Year Composition should be completed by the end of semester 3 |
| MAT 271：Calculus with Analytic Geometry II | 4 | $\square$ |  | Grade of C |  |
| CLS Science and Society | 3 | $\square$ |  | Grade of C |  |
| Humanities，Fine Arts \＆Design（HU）and Cultural Diversity in the US（C） | 3 | $\square$ |  |  |  |
| Social \＆Behavioral Sciences（SB）or general elective if SB completed | 3 | $\square$ |  |  |  |
| TERM FOUR： $46 \mathbf{6 0}$ CREDIT HOURS |  |  |  |  |  |
| PHY 121／122：University Physics I／Laboratory | 3／1 | $\square$ |  | Grade of C |  |
| GLG 321：Mineralogy | 3 | 区 |  | Grade of C |  |
| MAT 272：Calculus with Analytic Geometry III | 4 | $\square$ |  |  |  |
| General Elective | 3 | $\square$ |  |  |  |
| TERM FIVE： 6175 CREDIT HOURS |  |  |  |  |  |
| GLG 400：Colloquium | 1 | 区 |  | Grade of C |  |
| GLG 424：Petrology | 3 | 区 |  | Grade of C |  |
| PHY 131／132：University Physics II／Laboratory | 3／1 | $\square$ |  |  |  |
| Upper division CLAS Science and Society | 3 | 区 |  | Grade of C |  |
| General Elective | 2 | $\square$ |  |  |  |
| TERM SIX： 7690 CREDIT HOURS |  |  |  |  |  |
| GLG 435：Sedimentology | 3 | 区 |  | Grade of C |  |
| GLG 451：Field Geology I（L） | 3 | 区 |  | Grade of C |  |
| Humanities，Fine Arts \＆Design（HU） | 3 | $\square$ |  |  |  |
| Social \＆Behavioral Science（SB） | 3 | $\square$ |  |  |  |
| General Elective | 3 | $\square$ |  |  |  |
| SUMMER 3 CREDIT HOURS |  |  |  |  |  |
| GLG 452：Field Geology II（L） | 3 | 区 |  | Grade of C |  |
| TERM SEVEN： 91105 CREDIT HOURS |  |  |  |  |  |
| GLG Branch Course | 3 | 区 |  | Grade of C |  |
| Upper division GLG Elective | 3 | 区 |  | Grade of C |  |
| Computer／Statistics／Quantitative applications（CS） | 3 | $\square$ |  |  |  |
| Upper division Humanities，Fine Arts \＆Design（HU）or Social Behavioral Science（SB） | 3 | 区 |  |  |  |
| Upper division General Elective | 3 | 区 |  |  |  |
| TERM EIGHT： $106 \mathbf{1 2 0}$ CREDIT HOURS |  |  |  |  |  |
| GLG Branch Course | 3 | 区 |  | Grade of C |  |
| Upper division GLG Elective | 3 | 区 |  | Grade of C |  |
| Upper division General Elective | 3 | 区 |  |  |  |
| Upper division General Elective | 3 | 区 |  |  |  |
| Upper division General Elective | 3 | 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:

There is room in this roadmap to add a concurrent degree, minor, or certificate

Major Map：German－Bachelor of Arts（B．A．）
College of Liberal Arts and Sciences，Tempe Campus
Catalog Year：2008－2009

|  |  |  | Completed ATP：$\square$ Yes $\square$ No |  | Completed AGEC：$\square$ Yes $\square$ No |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 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： 015 CREDIT HOURS |  |  |  |  |  |
| GER 111：Fundamentals of German（or higher level GER course depending on placement） | 4 |  |  | Grade of C | －Minimum 2．34 GPA required in all critical courses． <br> －Consult academic advisor for Learning Community，Academic Success Clusters and First Year Seminar options． <br> －GER 111：Fundamentals of German is equivalent to GER 101：Elementary German and GER 102：Elementary German |
| ENG 101 and 102：First－Year Composition OR ENG 107 and 108：English for Foreign Students OR ENG 105：Advanced First－Year Composition | 3 | $\square$ |  | Grade of C |  |
| MAT 142：College Mathematics or higher（MA） | 3 | $\square$ |  | Grade of C |  |
| Social and Behavioral Sciences（SB） | 3 | $\square$ |  |  |  |
| Elective－${ }^{\text {st }}$ Year Seminar | 1 | $\square$ |  |  |  |
| TERM TWO： 1630 CREDIT HOURS |  |  |  |  |  |
| GER 201：Intermediate German（or higher） | 4 |  |  | Grade of C | －Minimum 2．34 GPA required in all critical courses． |
| ENG 101 and 102：First－Year Composition OR ENG 107 and 108：English for Foreign Students OR ENG 105：Advanced First－Year Composition | 3 |  |  | Grade of C |  |
| Computer／Statistics／Quantitative applications（CS） | 3 | $\square$ |  |  |  |
| Social and Behavioral Sciences（SB） | 3 | $\square$ |  |  |  |
| Awareness Area－Historical（H） | 3 | $\square$ |  |  |  |
| TERM THREE： 3145 CREDIT HOURS |  |  |  |  |  |
| GER 202：Intermediate German（or higher）（G） | 4 | $\square$ |  | Grade of C | －Minimum 2．34 GPA required in all critical courses． <br> －Complete First Year Composition requirement： ENG 101 \＆ 102 OR ENG 107 \＆ 108 or 105 <br> －Complete Mathematical Studies（MA） |
| Complete one course from： <br> SLC 201：Introduction to Linguistics OR <br> SLC 202：Introduction to Literacy and Cultural Theory（G） | 3 | $\square$ |  | Grade of C |  |
| Natural Science－Quantitative（SQ | 4 | $\square$ |  |  |  |
| Awareness Area－Cultural（C） | 3 | $\square$ |  |  |  |
| TERM FOUR： $46 \mathbf{6 0}$ CREDIT HOURS |  |  |  |  |  |
| GER 311：German Conversation OR <br> GER 312：German Conversation（G） | 3 | 区 |  | Grade of C | －Minimum 2．34 GPA required in all critical courses． |
| GER 313：German Composition（G） | 3 | 区 |  | Grade of C |  |
| Complete remaining course from： <br> SLC 201：Introduction to Linguistics OR <br> SLC 202：Introduction to Literacy and Cultural Theory（G） | 3 | $\square$ |  | Grade of C |  |
| Natural Science－Quantitative（SQ）or General（SG） | 4 | $\square$ |  |  |  |
| Literacy and Critical Inquiry（L） | 3 | $\square$ |  |  |  |
| TERM FIVE： 6175 CREDIT HOURS |  |  |  |  |  |
| GER 411：Advanced Grammar and Conversation（G） | 3 | 区 |  | Grade of C | －Minimum grade of＂C＂in all GER，SLC and German Related Fields courses． <br> －Enroll in＂IPO＂Study Abroad Program credits or listed courses |
| GER 422：German Literature（L or HU） | 3 | 区 |  | Grade of C |  |
| Elective | 3 | $\square$ |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| TERM SIX： $76 \mathbf{9 0}$ CREDIT HOURS |  |  |  |  |  |
| GER 412：Advanced Grammar and Conversation（G） | 3 | 区 |  | Grade of C | －Minimum grade of＂C＂in all GER，SLC and German Related Fields courses． <br> －Enroll in＂IPO＂Study Abroad Program credits or listed courses |
| GER 421：German Literature（HU） | 3 | 区 |  | Grade of C |  |
| GER Related Field | 3 | $\square$ |  | Grade of C |  |
| Humanities，Fine Arts，and Design（HU） | 3 | $\square$ |  |  |  |
| Upper Division Elective | 3 | 区 |  |  |  |
| TERM SEVEN： 91105 CREDIT HOURS |  |  |  |  |  |
| GER 4＊＊ | 3 | 囚 |  | Grade of C | －Minimum grade of＂C＂in all GER，SLC and German Related Fields courses． <br> －Enroll in＂IPO＂Study Abroad Program credits or listed courses |
| GER Related Field | 3 | $\square$ |  | Grade of C |  |
| Upper Division Elective | 3 | 区 |  |  |  |
| Upper Division Elective | 3 | 区 |  |  |  |
| Humanities，Fine Arts，and Design（HU）or Social and Behavioral Sciences（SB） | 3 | $\square$ |  |  |  |
| TERM EIGHT： 106120 CREDIT HOURS |  |  |  |  |  |
| GER 4＊＊ | 3 | 区 |  | Grade of C | －Minimum grade of＂C＂in all GER，SLC and German Related Fields courses． <br> －Enroll in＂IPO＂Study Abroad Program credits or listed courses |
| SLC 498：Pro－Seminar | 3 | 区 |  | Grade of C |  |
| Upper Division Elective | 3 | 区 |  |  |  |
| Upper Division Elective | 3 | 区 |  |  |  |
| Upper Division Elective | 3 | 区 |  |  |  |

## Graduation Requirements Summary:

| Total Hours (120 <br> minimum) | Total Hrs at ASU (30 <br> minimum) | Hrs Resident Credit for Academic <br> Recognition ( 56 minimum) | Major GPA <br> $(2.00$ Min. $)$ | Total UD Hrs <br> $(45$ minimum $)$ | Total Comm. College <br> Hrs. (64 maximum) |
| :--- | :--- | :--- | :--- | :--- | :--- |
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## 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:

Minimum grade of "C" in all GER, SLC and German Related Fields courses

## 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:

Major Map：Global Studies－Bachelor of Arts（B．A．）
College of Liberal Arts \＆Sciences，Tempe Campus
Catalog Year：2008－2009

|  |  |  | Completed ATP：$\square$ Yes $\quad \square$ No |  | Completed AGEC：$\square$ Yes $\square$ No |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Course Subject and Title （courses in bold／shading are critical） | Hrs． | Upper Division | Transfer Course／Grade | $\begin{aligned} & \text { Minimum Grade if } \\ & \text { Required } \end{aligned}$ | Additional Critical Requirement Notes |
| TERM ONE： 015 CREDIT HOURS |  |  |  |  |  |
| ENG 101 and 102：First－Year Composition OR ENG 107 and 108：English for Foreign Students OR ENG 105：Advanced First－Year Composition | 3 | $\square$ |  | Grade of C | －Recommended 2.5 cumulative ASU GPA <br> －Consult academic advisor for Learning Community，Academic Success Clusters and First |
| MAT 142：College Mathematics（MA） | 3 | $\square$ |  | Grade of C | Year Seminar options． |
| Second Language | 4 | $\square$ |  |  |  |
| Natural Science－Quantitative（SQ）or General（SG） | 4 | $\square$ |  |  |  |
| Elective | 1 | $\square$ |  |  |  |
| TERM TWO： 1630 CREDIT HOURS |  |  |  |  |  |
| ENG 101 and 102：First－Year Composition OR ENG 107 and 108：English for Foreign Students OR ENG 105：Advanced First－Year Composition | 3 | $\square$ |  | Grade of C | －Recommended 2.5 cumulative GPA |
| Complete one course from： <br> SGS 101：Thinking Globally：The Individual \＆Authority（SB）or <br> SGS 103：Contemporary Global Trends（SB，G） | 3 | $\square$ |  | Grade of C |  |
| Second Language | 4 | $\square$ |  |  |  |
| Humanities，Fine Arts，and Design（HU） | 3 | $\square$ |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| TERM THREE： 3145 CREDIT HOURS |  |  |  |  |  |
| Complete remaining course from： <br> SGS 101：Thinking Globally：The Individual \＆Authority（SB）or <br> SGS 103：Contemporary Global Trends（SB，G） | 3 | $\square$ |  | Grade of C | －Completed First Year Composition <br> －Math completed <br> －Recommended 2.5 cumulative GPA |
| SGS 394：Special Topics：Track Introduction 1 | 3 | 区 |  | Grade of C |  |
| Second Language | 4 | $\square$ |  |  |  |
| Natural Science－Quantitative（SQ） | 4 | $\square$ |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| TERM FOUR： 4660 CREDIT HOURS |  |  |  |  |  |
| SGS 394：Special Topics：Track Introduction 2 | 3 | 区 |  | Grade of C | －Declare track（meet with an advisor） |
| SGS 394：Special Topics：Professional Global Career Development | 3 | 区 |  | Grade of C |  |
| Second Language | 4 | $\square$ |  |  |  |
| Literacy \＆Critical Inquiry | 3 | $\square$ |  |  |  |
| Humanities，Fine Arts，and Design（HU） | 3 | $\square$ |  |  |  |
| TERM FIVE： 6175 CREDIT HOURS |  |  |  |  |  |
| SGS 305：Research Methods（L） | 3 | 区 |  | Grade of C | －Recommended 2.5 cumulative GPA |
| SGS 394：Special Topics：Track Introduction 3 | 3 | 囚 |  | Grade of C |  |
| Upper Division track elective | 3 | 区 |  | Grade of C |  |
| Upper Division Humanities，Fine Arts \＆Design（HU）or Social \＆Behavioral Science（SB） | 3 | 区 |  |  |  |
| Historical Awareness（H）if needed，or Elective | 3 | $\square$ |  |  |  |
| TERM SIX： $76 \mathbf{9 0}$ CREDIT HOURS |  |  |  |  |  |
| Complete one course from： <br> SOC 390：Social Statistics I（CS）OR <br> POS 401：Political Statistics（CS） | 3 | 区 |  | Grade of C | －Recommended 2.5 cumulative GPA |
| Upper Division track elective | 3 | 区 |  | Grade of C |  |
| Upper Division track elective | 3 | 囚 |  | Grade of C |  |
| Awareness Area－Cultural（C）（if needed）or Elective | 3 | $\square$ |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| TERM SEVEN： 91105 CREDIT HOURS |  |  |  |  |  |
| SGS 494：Capstone | 3 | 区 |  | Grade of C | －Recommended 2.5 cumulative GPA |
| Upper Division track course | 3 | 区 |  | Grade of C |  |
| Upper division elective | 3 | 区 |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| Elective | 2 | $\square$ |  |  |  |
| TERM EIGHT： 106120 CREDIT HOURS |  |  |  |  |  |
| SGS 484：Internship | 6 | 区 |  | Grade of C | －Recommended 2.5 cumulative GPA |
| Upper Division Elective | 3 | 区 |  |  |  |
| Elective | 3 | $\square$ |  |  |  |

## Graduation Requirements Summary:

| Total Hours <br> $(120$ minimum $)$ | Total Hrs at ASU <br> $(30$ minimum $)$ | Hrs Resident Credit for Academic <br> Recognition $(56$ minimum $)$ | Major GPA <br> $(2.00$ Min. $)$ | Total UD Hrs <br> $(45$ 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)
- 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:

Major Map: History - Bachelor of Arts (B.A.)
College of Liberal Arts \& Sciences, Tempe Campus
Catalog Year: 2008-2009


## Graduation Requirements Summary:

| Total Hours <br> $(120$ minimum $)$ | Total Hrs at ASU <br> $(30$ minimum $)$ | Hrs Resident Credit for Academic <br> Recognition $(56$ minimum $)$ | Major GPA <br> $(2.00$ Min. $)$ | Total UD Hrs <br> $(45$ minimum $)$ | Total Comm. College <br> Hrs. ( 64 maximum $)$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
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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) |  |  |  |  |
| 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.
$\qquad$

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 Arts (B.A.)
College of Liberal Arts and Sciences, Tempe Campus
Catalog Year: 2008-2009
$\left.\begin{array}{l|l|l|l|l}\begin{array}{l}\text { III. Integrated Studies Courses } \\ \text { (min. } \mathbf{4 5} \text { hours hours) } \\ \text { Courses used for the major may not also be used to fill the universitit } \\ \text { general studies or college requirements }\end{array} & & & & \\ \hline & & \\ \text { Total } \\ \text { Hours }\end{array}\right)$

## 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) |  |  |  |  |
| 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)

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 <br> hrs max.) | Minimum GPA <br> required (2.00 <br> min.) | ASU Resident Hours for <br> Academic Recognition (60 <br> hrs min) |
| :--- | :--- | :--- | :--- | :--- | :--- |
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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, Tempe Campus
Catalog Year: 2008-2009

| III. Integrated Studies Courses (min. 45 hours hours) ${ }^{1}$ <br> Courses used for the major may not also be used to fill the university general studies or college requirements | Total Hours | $\left\lvert\, \begin{array}{\|c\|} \hline \text { UD } \\ \text { Hours } \end{array}\right.$ | Res <br> Hours | Grade |
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## IV. Electives

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## Bachelor of Interdisciplinary Studies

Catalog: 2008-2009

| III. BIS Core (12 hours) | Total <br> Hours | UD <br> Hours | Res <br> Hours | Grade |
| :--- | :---: | :---: | :---: | :--- |
| BIS 301: Foundations of Interdis. Studies (L) | 3 | 3 | 3 |  |
| BIS 302: Interdisciplinary Inquiry | 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) ${ }^{1}$

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V. Concentration II (18-30 hours) ${ }^{1}$

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## VI. Electives (6-40 or more hours) ${ }^{2}$

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## TEMPE CAMPUS

College of Design

- Architectural Studies
- Design Studies
- Interior Design History
- Landscape Studies
- Urban Planning
W. P. Carey School of Business
- Business
- International Business Studies*

Mary Lou Fulton College of Education

- Education

Ira A. Fulton School of Engineering

- Computer Gaming*
- Informatics*

Katherine K. Herberger College of the Arts

- Art History
- Dance
- Music
- Theatre
- Film and Media Production

College of Liberal Arts and Sciences

- African \& African American Studies*
- American Indian Studies*
- Anthropology
- Arabic Studies*
- Asian Pacific American Studies*
- Asian Studies*
- Astronomy
- Biochemistry
- Biological Sciences
- Chemistry
- Chinese
- Classical Studies-Greek*
- Classical Studies-Latin*
- Communication
- Computational Mathematical Sciences
- East Asian Studies*
- Economics
- English: Creative Writing
- English: Linguistics
- English: Literature
- English: Writing Certificate*
- Ethics*
- Family and Human Development
- Film \& Media Studies
- French
- Geography
- Geography: Geographic Information

Sciences*

- Geography: Geography for Business
- Geography: Environmental Geography
- Geography: Inter'I Geography
- Geological Sciences
- German
- Global Studies
- History
- Islamic Studies*
- Italian
- Japanese
- Jewish Studies*
- Justice Studies
- Kinesiology
- Latin American Studies*
- Mathematics
- Medieval \& Renaissance Studies*
- Philosophy
- Philosophy: History \& Philosophy of Science*
- Philosophy: Symbolic Systems*
- Physics
- Political Science
- Political Science: Civic Education
- Political Science: Inter'I Studies*
- Psychology
- Religious Studies
- Romanian
- Russian
- Russian and East European Studies*
- Sociology
- Southeast Asian Studies*
- Spanish
- Speech \& Hearing Science
- Statistics
- Transborder Chicana/o and Latina/o Studies
- Translation (Spanish/English)*
- Women \& Gender Studies*


## DOWNTOWN CAMPUS

College of Nursing \& Healthcare Innovation

- Healthcare Innovation

College of Public Programs

- Creative City
- Leadership \& Ethics*
- Lesbian, Gay, Bisexual \& Transgender Studies*
- Nonprofit Administration*
- Parks \& Protected Area Management
- Public Administration \& Public Management ${ }^{*}$
- Recreation Management
- Social Welfare
- Tourism Development \& Management
- Urban \& Metropolitan Studies


## POLYTECHNIC CAMPUS

## College of Technology and Innovation

- Hazardous Materials \& Waste Management*


## Morrison School of Management \&

## Agribusiness

- Small Business


## School of Applied Arts and Sciences

- Applied Biological Sciences
- Applied Psychology
- Food \& Nutrition Management
- History and Culture
- Human Nutrition
- Literature, Writing and Film
- Multi-Media Writing \& Technical Communication*
- Spa Management*
- Wellness Foundations


## WEST CAMPUS

## College of Human Services

- Aging and Lifespan Development (previously named Gerontology)
- Communication Studies
- Public Relations and Strategic Communications
- Recreation Management
- Special Events Management
- Tourism Management
- Youth Services Leadership

New College of Interdisciplinary Arts \&

## Sciences

- American Studies
- English
- Ethnic Studies
- Film \& Video Studies: Film Studies*
- Film \& Video Studies: Media \& Video

Studies*

- History
- Interdisciplinary Arts \& Performance
- Life Sciences
- Mathematics
- Philosophy
- Political Science
- Psychology
- Religious Studies
- Social \& Behavioral Sciences
- Sociocultural Anthropology
- Sociology
- Spanish
- Women's Studies

Those marked with an asterisk $\left(^{*}\right)$ are also offered as certificates. Some combinations are not permissible; see an advisor for additional information.

```
WRITING CERTIFICATE
College of Liberal Arts \& Sciences
2008-2009
Language and Literature, Room 549C, Ph: 480.965.3535
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I. Core - 9 hours

- ENG 301 Writing for the Professions L (3)
- ENG 372 Document Production L (3)
- ENG 472 Rhetorical Studies L (3)
II. Internship/ Portfolio - 4 hours
- ENG 484 Internship: Writing Certificate (3)
- ENG 498 Pro-Seminar: Writing Certificate Portfolio (1)
III. Writing - 3 hours (choose one)
- ENG 216 Persuasive Writing on Public Issues L (3) or
- ENG 412 Creative Nonfiction (3)
IV. Writing/Design-3 hours
- ART 456 Fine Printing and Bookmaking I
- ART 457 Fine Printing and Bookmaking II
- ART 458 Papermaking
- BUS 301-M - Fundamental Mgt/Comm
- GIT 135-Graphic Communications
- ENG 212 - English Prose Style
- ENG 215 - Strategies of Academic Writing
- ENG 217 - Writing Reflective Essays
- ENG 218-Writing about Literature
- ENG 374-Technical Editing
- ENG 494 - Magazine Writing
- ENG 494 - Review Writing
- ENG 494 - Writing for Non-Profit Organizations


## What you'll see on your DARS:

NOTE: Student must apply for admission to program.
See English advisor for details.
NOTE: Minimum cumulative GPA of 3.0 (B) in Writing courses required.

NOTE: Grade of C (2.00) or better required in all courses. Minimum 12 upper division hours required.
--> NEEDS: 19.00 HOURS 5 SUB-GROUPS 3.00 GPA

- 1) CORE - 9 hours

NEEDS: 9.00 HOURS
COURSE LIST: ENG 301 ENG 372 ENG 472

- 2) INTERNSHIP/PORTFOLIO-4 hours

See English advisor for course information
NEEDS: 4.00 HOURS
COURSE LIST: ENG-CEMPHX ENG-CEMPH2

- 3) WRITING - 3 hours

NEEDS: 3.00 HOURS
COURSE LIST: ENG 216 ENG 412
4) WRITING/DESIGN - 3 hours

NEEDS: 3.00 HOURS
COURSE LIST: ART 456 ART 457 ART 458 BUS 301 BUS 431 BUS 451 GIT 135 GIT 351 GIT 352 GIT 438 COM 263 COM 316 COM 319 COM 320 COM 321 COM 371 COM 421 COM 422 COM 426 COM 472 EDT 405 EDT 406 ENG 310 ENG 411 ENG 494 [*WRIT* BEING*] GIT 233 GRA 345 JMC 414 JMC 415 JMC 440 JUS 404 MCO 418 MCO 430 MCO 450 MCO 456 PHI 350 TWC 200 TWC 400 WAC 294 [*PEER* TUTOR*] ENG 216 ENG 412 ENG 212 ENG 215 ENG 217 ENG 218 ENG 374 OR ENG 394 [*TECH* EDIT*] ENG 385 ENG 394 [*WRIT* CYBER*] ENG 394 [*WORK* WRIT*] ENG 494 [*WRIT* NON*]

- 5) ADMISSION CHECK Student must apply for admission to program
NEEDS: 1 COURSE
COURSE LIST: ENG-CEMPH5


# BIS Concentration Check Sheet 

WOMENS STUDIES<br>New College of Interdisciplinary Arts \& Sciences<br>2007-2008<br>West Campus<br>Ph: (602) 543-4444

The Women's Studies concentration consists of 18 semester hours. Required courses consist of WST 100 or WST 300, WST 350, WST 457, WST 498, and one course each in two of the following three areas: global, representation, culture studies.

- Please contact (602) 543-4444 for more information

WOMEN AND GENDER STUDIES<br>College of Liberal Arts and Sciences<br>2008-2009<br>West Hall 205, Ph: 480.965.2358

## Description:

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 concentration consists of 18 semester hours, 12 of which must be in the upper division.
All courses must have grade of " C " or higher. At least 12 of the 18 credit hours must be upper division courses ( 300 or higher). No more than 3 courses can come from any one prefix (excluding WST/WSH).
The following courses are required:
WST 100 Women and Society SB, C (3)
or WST 300 Women in Contemporary Society SB, C (3)
WST 377 History of American Feminist Thought C (3)
or WST 378 Global Feminist Theory L, C (3)
or WST 380 - Gender, Race and Class L or SB, C (3)
Total 6
Twelve additional hours of approved women and gender studies courses must be taken after consultation with the Women and Gender Studies advisor.
I. Core - 6 Hours

WST 100 - Women and Society
OR
WST 300 - Women in Contemporary Society
WST 377 - History of American Feminist Thought
OR
WST 378-Global Feminist Theory
OR
WST 380 - Gender, Race and Class
II. Electives - 12 Hours

WSH 2 - Any WSH 200-level course
WSH 3 - Any WSH 300-level course
WSH 4 - Any WSH 400-level course
WST 2 - Any WST 200-level course
WST 3 - Any WST 300-level course
WST 4 - Any WST 400-level course
ARS 485 - Women in the Visual Arts

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ASB 211 - Women in Other Cultures
COM 316 - Gender and Communication
CSS 432 - Issues in Chicana and Chicano Gender
ENG 461 - Studies in Women and Literature
ENG 364 - Women and Literature
OR
ENG 462 - Africana Literature
HST 327 - Women in U.S. History, 1600-1880
HST 328 - Women in U.S. History, 1880-1980
HST 365 - Women in Europe
HST 377 - Women in Colonial Latin America
HST 378 - Latin American Women: The National Period
HST 415 - Unequal Sisters: Women and Political and Cultural Change
JUS 329 - Domestic Violence
JUS 415 - Gender and International Development
JUS 420 - Women, Work, and Justice
JUS 422 - Women, Law, and Social Control
JUS 460 - Feminism and Justice
POS 435 - Women and Politics
REL 373 - Women in Judaism
REL 390 - Women and Religion
SOC 315 - Courtship and Marriage
SOC 417 - Family Violence
SOC 424 - Women and Health
SOC 464 - Sociology of Women
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What you'll see on your DARS:

NOTE: Grade of C (2.00) or better required.
Minimum 12 upper division hours required.
--> NEEDS: 18.00 HOURS

- 1) CORE - 6 hours

NEEDS: 6.00 HOURS
COURSE LIST: WST 100 OR WST 300 WST 377 OR WST 378 OR WST 380

- 2) ELECTIVES - 12 hours

NOTE: A maximum of three courses may be taken under any one prefix - excluding WST/WSH prefixes.
NEEDS: 12.00 HOURS
COURSE LIST: WSH 2 WSH 3 WSH 4 WST 2 WST 3 WST 4 ARS 485 ASB 211 COM 316 CSS 432 ENG 461 ENG 364 OR ENG 462 HST 327 HST 328 HST 365 HST 377 HST 378 HST 415 JUS 329 JUS 415 JUS 420 JUS 422
JUS 460 POS 435 REL 373 REL 390 SOC 315 SOC 417
SOC 424 SOC 464

URBAN PLANNING
College of Design
2008-2009
CDS, Ph: 480.965 .7167

## Description:

The BIS degree can prepare students for careers in urban planning. Students can select courses that include comprehensive planning, socioeconomic and environmental analysis, computer and analytical methods, planning law, site planning, urban design, and public-policy formulation and administration. 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.

A minimum of 18 semester hours are required for the minor, 12 semester hours must be from 300- or 400- level courses.
I. Introduction - Needs 3 Hours

PUP 301 - Introduction to Urban Planning
II. Electives - Needs 15 Hours

PUP 100 - Introduction to Environmental Design
PUP 190 - Sustainable Cities
PUP 200 - The Planned Environment
PUP 363 - History of Planning
PUP 420 - Theory of Urban Design
PUP 425 - Urban Housing Analysis
PUP 430 - Transportation Planning and the Environment
PUP 432 - Planning and Development Control Law
PUP 433 - Zoning Ordinances, Subdivision Regulations, and Building Codes

- PUP 434 - Urban Land Economics
- PUP 442 - Environmental Planning
- PUP 444 - Preservation Planning
- PUP 445 - Women and Environments
- PUP 452 - Ethics and Theory in Planning
- PUP 475 - Environmental Impact Assessment
- PUP 485 - International Field Studies in Planning


## Minimum 2.50 GPA required.

What you'll see on your DARS:
Minimum 2.50 GPA required.
Grade of "C" (2.00) or better required.
Minimum 12 hours upper division required.
--> NEEDS: 18.00 HOURS 2 SUB-GROUPS 2.50 GPA

- 1) INTRODUCTION - 3 hours

NEEDS: 3.00 HOURS
COURSE LIST: PUP 301

- 2) PUP ELECTIVES - 15 hours NEEDS: 15.00 HOURS
COURSE LIST: PUP 100 PUP 190 PUP 200 PUP 363
PUP 420 PUP 425 PUP 430 PUP 432 PUP 433 PUP 434 PUP 442 PUP 444 PUP 445 PUP 452 PUP 475 PUP 485


## URBAN AND METROPOLITAN STUDIES

## College of Public Programs

2007-2008
University Center, Room 400, Ph: 602.496.0468

## Description:

The concentration in Urban \& 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.

## Requirements:

Eighteen (18) hours of coursework with a "C" or better in each course. Students take 12 hours of core courses and 6 hours of elective courses. The 6 hours of elective courses may be selected from a list of related topic courses, or taken upon the recommendation of the Concentration Advisor.

## I. Require Courses:

- URB 100 - Introduction to Urban \& Metropolitan Studies
-or-
- URB 300-Urban \& Metropolitan Studies
- URB 105-Introduction to Urban Governance
-or-
- URB 305-Urban Governance
II. Core Courses:
- URB 220 - Introduction to Urban America
- URB 240 - Urban Policy
- URB 301 - Urban Research
- URB 302 - Urban Theory
- URB 410-Urban Leadership and Collaborative Skills
III. Electives:
-6 Hours picked with an advisor

What you'll see on your DARS:
NOTE: Grade of C (2.00) or better required.
Minimum 12 upper division hours required.
--> NEEDS: 18.0 HOURS 3 SUB-GROUPS

- 1) INTRODUCTORY CORE - 6 hours NEEDS: 6.0 HOURS
COURSE LIST: URB 100 OR URB 300 URB 105 OR URB 305
- 2) CORE - 6 hours NEEDS: 6.0 HOURS
COURSE LIST: URB 220 URB 240 URB 301 URB 302 URB 410
- 3) ELECTIVES - 6 hours

See Urban and Metropolitan Studies advisor for additional course choices.
NEEDS: 6.0 HOURS
COURSE LIST: AFS 366 GCU 361 HIS 444 HST 319 HST 320 HUD 201 HUD 402 PAF 300 PAF 340 PAF 420 PAS 460 PLA 101 PLA 410 PLA 420 POL 453 POS 110 POS 220 POS 310 POS 316 POS 320 POS 325 POS 426 PUP 100 PUP 190 PUP 200 PUP 301 PUP 425 PUP 430 PUP 436 PUP 442 PUP 445 PUP 475 SBS 460 SBS 461 SOC 332 SOC 333 SOC 332 TWC 200 WST 300

TRANSLATION (SPANISH/ENGLISH)
College of Liberal Arts and Sciences
2008-2009
LL 440, Ph: 480.965.0135

NOTE: Grade of C (2.00) or better required.
Minimum 12 upper division hours required.

Please note:

- A minimum of 6 upper-division hours in the certificate or BIS emphasis area must be taken in residence at ASU Tempe Campus.
- A grade of C or better must be achieved in all courses for the certificate and BIS emphasis area.
- Pass/Fail courses cannot be used for the certificate or BIS emphasis area.
- You may not receive the certificate or BIS emphasis area in a catalog year for which you are not eligible. If you are unsure of your catalog year, check with your academic advisor.
- The Spanish/English Translation Certificate may be pursued only at the undergraduate level, by degree or non-degree seeking students.
- Admission to the certificate program is required to register for certificate courses.
- SPA 412 and/or ENG 301 can be waived if the student can present proof of having taken an equivalent course at another institution of having had substantial formal education in Spanish and/or English.


## I. Core - 9 Hours

SPA 400 - Introduction to Spanish Linguistics
OR
SLC 400 - Linguistics
OR
SLC 201 - Introduction to Linguistics
SPA 412 - Advanced Conversation and Composition
SLC 401 - Translation Theory
II. Translation - 9 Hours

SLC 481-Technical and Scientific Translation
SLC 482 - Business and Financial Translation
SLC 483-Medical and Legal Translation
SLC 485 -
III. 3. Internship - 2 Hours

SLC 484 - Internship

What you'll see on your DARS:
--> NEEDS: 20.00 HOURS

- 1) CORE - 9 hours NEEDS: 9.00 HOURS
COURSE LIST: SPA 400 OR SLC 400 OR SLC 201 SPA 412
SLC 401
- 2) TRANSLATION-9 hours NEEDS: 9.00 HOURS
COURSE LIST: SLC 481 SLC 482 SLC 483 SLC 485
- 3) INTERNSHIP - 2 hours NEEDS: 2.00 HOURS COURSE LIST: SLC 484

CHICANA/O \& LATINA/O STUDIES
College of Liberal Arts and Sciences
2008-2009
Coor 6633, Ph: 480.965.5091

## I. Core - $\mathbf{6}$ hours

TCL 201 - Transborder Society and Culture I: Interdisciplinary Approaches
OR
TCL 202 - Transborder Society and Culture II: Contemporary Issues
TCL 332 - Mexican American History since 1900 (3)
II. Electives - 12 Hours (upper division)

TCL 303-Transborder Theory
TCL 304 - Transborder Method (3)
TCL 498 - Pro Seminar Capstone of Integration (3)
TCL 3 - any 300 -level class
TCL 4 - any 400 -level class

## What you'll see on your DARS:

NOTE: Grade of "C" (2.00) or better required.
Minimum 12 upper division hours required.
--> NEEDS: 18.00 HOURS

- 1) BIS CONCENTRATION CORE - 6 hours

NEEDS: 6.00 HOURS
COURSE LIST: TCL 201 OR TCL 202 TCL 332(R)

- 2) ELECTIVES - 12 upper division hours

NEEDS: 12.00 HOURS
COURSE LIST: TCL 3 TCL 4

TOURISM MANAGEMENT
College of Human Services
2008-2009
West, Ph: 602.543.6620

## Description:

The minor consist of 18 semester hours of which 15 semester hours must be at the upper division level. To earn the minor, students must complete all courses with a minimum grade of C (2.00). Recreation and Tourism Management majors are not eligible to earn the Minor in Tourism Management.
I. Core - Needs $\mathbf{6}$ Hours of the Following:

- RTM 373 - Leisure Travel and Tourism OR
- TDM 205 - Introduction to Travel and Tourism
- RTM 458 - International Tourism OR
- TDM 458-International Tourism
- RTM 475 - Entrepreneurial Recreation and Tourism OR
PRM 475 - Entrepreneurial Recreation and Tourism
II. Electives - 12 Hours
- RTM 303 - Programming Recreation and Tourism Services OR
- PRM 303 - Program Planning
- RTM 304 - Recreation and Tourism Areas and Facilities Management

OR

- PRM 304 - Recreation Planning and Facility Development
- RTM 360 - Policy, Planning, Development of Recreation and Tourism Resources
- RTM 401 - Administration of Recreation and Tourism Services

OR
PRM 401 - Management of Parks and Recreation Services
OR

- TDM 401 - Tourism Management
- RTM 404 - Marketing Recreation and Tourism
- RTM 458 - International Tourism OR
- TDM 458- International Tourism
- RTM 475 - Entrepreneurial Recreation and Tourism OR
- PRM 475 - Entrepreneurial Recreation and Tourism
- RTM 486 - Special Events Management OR
- PRM 486-Special Events Management

What you'll see on your DARS:

TOURISM MANAGEMENT Concentration
College of Human Services 18 HOURS, MINIMUM 15 UPPER DIVISION MINIMUM "C" (2.00) GRADE
***Not available to Recreation and Tourism Management majors***
--> NEEDS: 2 SUB-GROUPS

- 1) Core - 6 Hours NEEDS: 2 COURSES
COURSE LIST: RTM 373 OR REC 305 OR TDM 205 RTM 458 OR REC 458 OR TDM 458 RTM 475 OR PRM 475 OR REC 494 [*COM*A*REC*A*TO*]
- 2) Recreation Electives - 12 Hours SELECT IN CONSULTATION WITH FACULTY ADVISOR MAY NOT USE COURSES TAKEN IN CORE AREA NEEDS: 12.00 HOURS
COURSE LIST: RTM 303 OR REC 303 OR REC 330 OR PRM 303
RTM 304 OR REC 304 OR REC 440 OR PRM 304 RTM 360
OR REC 360 RTM 401 OR REC 401 OR REC 462 OR
PRM 401 OR TDM 401 RTM 404 OR REC 404 OR REC 350
RTM 458 OR REC 458 OR TDM 458 RTM 473 OR REC 473
RTM 475 OR PRM 475 OR REC 494 [*COM*A*REC*A*TO*]
RTM 486 OR PRM 486 OR REC 494 [*SPEC*EVE*MAN*] OR
CMN 494 [*SPEC*EVE*MAN*]

TOURISM DEVELOPMENT AND MANAGEMENT
College of Public Programs
2008-2009
University Center, Room 550, Ph: 602.496.0167

## Description

The concentration in Tourism Development \& Management program provides students with the planning and development skills needed to enter the largest industry in the world. Exposure to the businesses of nature-based 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 (WTO) and the World Travel Tourism Council (WTTC), 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 concentration 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 program.

## I. Core - Needs 9 Hours

- TDM 205 - Introduction to Travel and Tourism
- TDM 325 - Tourism Accommodations
- TDM 415 - Tourism Transportation Systems


## II. Electives - Needs 9 Hours

PRM 120 - Leisure and the Quality of Life
TDM 345 - Meeting and Convention Planning
TDM 350 - Tourism Marketing
TDM 386 - Convention Sales and Management
TDM 448 - Heritage and Cultural Tourism

- TDM 458-International Tourism
- TDM 480 - Nature-Based Tourism
- PRM 475 - Entrepreneurial Recreation and tourism
- PRM 380-Wilderness and Parks in America
- PRM 486-Special Events Management

What you'll see on your DARS:
NOTE: Grade of C (2.00) or better required.
Minimum 12 upper division hours required.
--> NEEDS: 18.00 HOURS 2 SUB-GROUPS

- 1) CORE - 9 hours NEEDS: 9.00 HOURS
COURSE LIST: TDM 205 TDM 325 TDM 415
- 2) ELECTIVES - 9 hours NEEDS: 9.00 HOURS COURSE LIST: PRM 120 TDM 345 TDM 350 TDM 386 TDM 448 TDM 458 TDM 480 PRM 475 PRM 380 PRM 486

THEATRE
Herberger College of the Arts, School of Theatre and Film
2008-2009
Dixie Gammage Room 232, Ph: 480.965.5337

## Description

As a student pursuing this concentration, you will study the literatures, histories and basic production practices of theatre while having opportunities to concentrate in an area such as theatre and performance studies, directing and performance, design and production, new work development, theatre for youth, and film and media production.

## Program Requirements

The school offers a BIS concentration in Theatre consisting of 22 semester hours of course work.

The following courses are required (13 credits):
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)

## Concentration area (9 credits):

Three upper-division three-hour courses within the same curricular area. Contact the Herberger College of the Arts for options and course requirements.

Total 22

Courses ordinarily limited to majors only are available on a second-priority basis; that is, BIS students may not register for these courses early, but are allowed to register after all majors' needs have been met. All prerequisites for the concentration courses must be met (see course listings). Transfer students may transfer up to nine semester hours toward their concentration. A grade of $C$ (2.00) or higher is required for all courses in the concentration.

Contact the Herberger College of the Arts advising office for information: http://theatre.asu.edu/students/current/undergrad-minors.php.

## SYMBOLIC SYSTEMS

College of Liberal Arts \& Sciences
2008-2009
Coor Hall, Room 3305, Ph: 480.965.2933

NOTE: Grade of C (2.00) or better required.
Minimum 12 upper division hours required.

## Requirements:

- Students must satisfy the prerequisites for the listed courses.
- With written approval from the Director of Undergraduate Studies in the Department of Philosophy, one substitution of a course from outside this list may be made.
- All courses must be passed with a minimum grade of " $C$ ".


## I. Computer Science - 9 Hours

CSE 200 - Concepts of Computer Science
CSE 210 - Object-Oriented Design and Data Structures
CSE 240 - Introduction to Programming Languages
II. Psychology - 10 Hours

PSY230 - Introduction to Statistics
PSY290 - Research Methods
PSY323 - Sensation and Perception
OR
PSY324-Memory and Cognition
OR
PSY437 - Human Factors
III. Philosophy - 9 Hours

PHI319-Philosophy of Computing
OR
PHI333 - Introduction to Symbolic Logic
PHI315 - Philosophy of Language
OR
PHI317-Philosophy of Mind
PHI312-Theory of Knowledge
OR
PHI314 - Philosophy of Science

What you'll see on your DARS:
--> NEEDS: 28.00 HOURS
2 SUB-GROUPS

- 1) COMPUTER SCIENCE - 9 hours

NEEDS: 9.00 HOURS
COURSE LIST: CSE 200 CSE 210 CSE 240

- 2) PSYCHOLOGY - 10 hours NEEDS: 10.00 HOURS
COURSE LIST: PSY 230 PSY 290 PSY 323 OR PSY 324 OR PSY 437
- 3) PHILOSOPHY - 9 hours NEEDS: 9.00 HOURS
COURSE LIST: PHI 319 OR PHI 333 PHI 315 OR PHI 317
PHI 312 OR PHI 314

BIS Concentration Check Sheet

STATISTICS
College of Liberal Arts and Sciences
2008-2009
PSA 216, Ph: 480.965.3951

## Description:

- The concentration in Statistics consists of a minimum of 18 semester hours, 12 of which must be upper division (300-level or higher).


## Required courses are the following:

- 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 L(3)
- STP 420 Introductory Applied Statistics CS (3)
- STP 421 Probability (3)
- STP 427 Mathematical Statistics (3)
or
- STP 429 Experimental Statistics CS (3)

Total 18-20

SPEECH AND HEARING SCIENCE
College of Liberal Arts and Sciences
2008-2009
Coor 221 1, Ph: 480.965.2374

## I. Core - 12 Hours

SHS 105 - Intro to Human Communication Disorders
SHS 250 - Introduction to Phonetics
SHS 310 - Anatomical and Physiological Bases of Speech
SHS 311 - Physical and Physiological Bases of Hearing
II. Core - 3 Hours

SHS 367 - Language Science
SHS 375 - Speech Science
SHS 376 - Psychoacoustics
III. Electives - 9 Hours

SHS 401 - Introduction to Audiology
SHS 402 - Modifying Communicative Behavior
SHS 465 - Speech and Language Acquisition
SHS 470 - Developmental Language Disorders
SHS 485 - Acquired Speech and Language Disorders
SHS 496 - Aural Rehabilitation

## What you'll see on your DARS:

NOTE: Grade of C (2.00) or better required.
Minimum 12 upper division hours required.
NOTE: Minimum 6 upper division hours at Tempe campus.
--> NEEDS: 24.00 HOURS

1) CORE - 12 hours

NEEDS: 12.00 HOURS
COURSE LIST: SHS 105 SHS 250 SHS 310 SHS 311

- 2) CORE - 3 hours

NEEDS: 3.00 HOURS
COURSE LIST: SHS 367 SHS 375 SHS 376

- 3) ELECTIVES - 9 hours

NEEDS: 9.00 HOURS
COURSE LIST: SHS 401 SHS 402 SHS 465 SHS 470 SHS 485 SHS 496

## SPECIAL EVENTS MANAGEMENT

College of Human Services
2008-2009
602.543.6600

Requirements:

- The concentration requires 18 credit hours - at least 12 of these hours must be taken at the West campus.
- All courses must be at the 300 level or higher.
- Students must complete the 2 core courses and 4 electives.
- Students must receive a grade of at least a "C" in order for the course to count toward the concentration.


## I. Core - 6 Hours

- RTM 486-Special Event Management OR
- PRM 486-Special Events Management

OR

- CMN 494-Topic: (Special Events Management)

OR

- RTM 487-Special Events Advanced
- Electives - $\mathbf{1 2}$ Hours
- RTM 301 - Leadership in Rec. \& Tourism
- RTM 303-Programming for Rec. \& Tourism OR
- PRM 303 - Program Planning
- RTM 304-Rec. \& Tour. Areas and Facility Mgmt.

OR

- PRM 304-Recreation Planning and Facility Development
- RTM 320-Talent and Entertainment Concepts
- RTM 328 - Budgeting and Accounting for Special Events
- RTM 345-Meeting \& Convention Planning
- RTM 373 - Leisure, Travel and Tourism OR
- TDM 205 - Introduction to Travel and Tourism
- RTM 394-Special Topics
- RTM 403-Professional Development Seminar
- RTM 404-Marketing for Rec. and Tourism
- RTM 451-Grant Writing for Human Service Professionals
- RTM 453 - Volunteer Mgmt. in Human Service Orgs. OR
- NLM 310-Volunteer Management
- RTM 458-International Tourism OR
- TDM 458-International Tourism
- RTM 484-Senior Internship

OR

- PRM 463 - Senior Internship OR
- NLM 463 - Senior Internship OR
- TDM 463 - Senior Internship
- RTM 494 - Special Topics

What you'll see on your DARS:
MINIMUM 12 HOURS UPPER DIVISION MUST BE COMPLETED AT ASU MINIMUM "C" (2.00) GRADE
***Not available to Recreation and Tourism
Management majors***
--> NEEDS: 18 HOURS
2 SUB-GROUPS

- 1) Core - 6 Hours

NEEDS: 6.00 HOURS 2 COURSES
COURSE LIST: RTM 486 OR PRM 486 OR
CMN 494 [*SPEC*EVE*MAN*] RTM 487 OR CMN 494 [*SPEC*EVE*MAN*ADV*]

- 2) Elective Courses - 12 Hours

SELECT IN CONSULTATION WITH FACULTY ADVISOR NEEDS: 12.00 HOURS
COURSE LIST: REC 300 RTM 301 RTM 303 OR REC 303 OR REC 330 OR PRM 303 RTM 304 OR REC 304 OR REC 440 OR PRM 304 RTM 320 TO RTM 328 RTM 345 RTM 373 OR REC 305 OR TDM 205 RTM 394 [*CONV*\&*MEET*PLA*] RTM 403 RTM 404 OR REC 404 OR REC 350 RTM 451 RTM 453 OR NLM 310 RTM 458 OR REC 458 OR TDM 458 RTM 475 OR PRM 475 OR REC 494 [*COM*A*REC*A*TO*] RTM 484 OR REC 463 OR PRM 463 OR NLM 463 OR TDM 463 RTM 494 [*NON*PROF*MANG*]

SPANISH
New College of Interdisciplinary Arts \& Sciences
2008-2009
West Campus
FAB, Room N204, Ph: 602.543.6090

20 HOURS, MINIMUM 12 UPPER DIVISION
***MINIMUM C (2.00) GRADE***

## Description:

The concentration in Spanish consists of 20 hours of Spanish coursework, of which 12 hours must be upper division. All Spanish coursework must be completed with a minimum grade of " C ".

## I. Core - 8 Hours

SPA 201 - Intermediate Spanish
AND
SPA 202 - Intermediate Spanish
OR
SPA 207 - Spanish for International Professions II
II. Upper Division - $\mathbf{1 2}$ Hours

See an advisor:
SPA 3 - any 300 -level SPA course
SPA 4 - any 400 -level SPA course

## What you'll see on your DARS:

--> NEEDS: 20.00 HOURS 2 SUB-GROUPS

- 1) Core-8 Hours

NEEDS: 8.00 HOURS
COURSE LIST: SPA 201 \& SPA 202 (OR) SPA 207

- 2) Upper Division Spanish - 12 Hours
***CHOOSE IN CONSULTATION WITH PROGRAM ADVISOR***
NEEDS: 12.00 HOURS
-> NOT FROM: SPA 311 SPA 312 SPA 394 SPA 494
COURSE LIST: SPA 3 SPA 4


## ASI ARTOM Statt UNIVERSITY

SPANISH
College of Liberal Arts and Sciences
2008-2009
Durham Language \& Literature Building 440

## NOTES FOR MINOR and BIS EMPHASIS AREA:

- SPA 313 \& 314 (OR SPA 315 \& SPA 316 , which are designed for bilinguals) are prerequisites for SPA 412. Students testing out of SPA $313 \&$ SPA 314 may register directly in SPA 412.
- As part of their electives, students might select two 3-credit courses from any POR 400 level culture or literature course.
- Students may substitute SPA 413 , Advanced Spanish Grammar, for SPA 412 , Advanced Conversation and Composition.
- A minimum of 6 upper-division hours in the minor or BIS emphasis area must be taken in residence at ASU Tempe Campus.
- A grade of $C$ or better must be achieved in all courses for the minor \& BIS emphasis area; Pass/Fail courses cannot be used for the minor or BIS emphasis area.
- SPA 311 \& SPA 312 do not count towards the minor or BIS emphasis area in any catalog year.


## REQUIRED COURSES:

## I. Course General Studies Credits

- SPA 325 Introduction to Hispanic Literature HU (3)
- SPA 412 Advanced Conversation/Composition G (3)
II. Six semester hours from the following courses: (6)
- SPA 425 Spanish Literature I (to 1700), OR HU
- SPA 426 Spanish Literature II (from 1700), OR HU
- SPA 427 Spanish-American Literature I (to 1880), OR L
- SPA 428 Spanish-American Literature II (from 1880), OR L, G
- SPA 464 Mexican-American Literature HU, C
III. Three (and only three) semester hours from the following courses: (3)

SPA 471 Civilization of the Spanish Southwest, OR L or HU, C
SPA 472 Spanish-American Civilization, OR HU, H, G
SPA 473 Spanish Civilization HU or SB, G
IV. Three semester hours from SPA 394 or SPA 400-level courses: (3)

SPA 394 Special Topics (Titles Vary)
SPA 413 Advanced Spanish Grammar G
SPA 429 Mexican Literature
SPA 434 Drama of the Golden Age
SPA 435 Cervantes-Don Quijote
SPA $45419{ }^{\text {th }}$ Century Spanish American Narrative
SPA $45620^{\text {th }}$ Century Spanish American Fiction
SPA 474 Mexican Culture
SPA 485 Mexican American Short Story L
SPA 486 Mexican American Novel
SPA 487 Mexican American Drama
SPA 494 Special Topics (Titles Vary)

## What you will see on your DARS:

NOTE: Grade of C (2.00) or better required.
Minimum 18 upper division hours required.
--> NEEDS: 18.00 HOURS

- 1) REQUIRED COURSES - 6 hours

NEEDS: 6.00 HOURS
COURSE LIST: SPA 325 SPA 412

- 2) 400-LEVEL LITERATURE - 6 hours

NEEDS: 6.00 HOURS
COURSE LIST: SPA 425 SPA 426 SPA 427 SPA 428
SPA 464

- 3) CIVILIZATION - 3 hours

NEEDS: 3.00 HOURS
COURSE LIST: SPA 471 SPA 472 SPA 473

- 4) 400-LEVEL ELECTIVES - 3 hours

NEEDS: 3.00 HOURS
COURSE LIST: SPA 394 SPA 4

SPA MANAGEMENT
School of Applied Arts and Sciences, Polytechnic Campus
2008-2009
480.727.1932

## Description:

The certification includes four courses (12 semester hours) focused on major business administration topics identified by a recent ISPA survey of spa directors and by members of the Spa Management Advisory Committee as crucial to success as a spa director. The faculty selected to instruct these courses are experts in their respective area of business.

- BUA 381 - Small Business Accounting and Finance
- BUA 382 - Small Business Sales and Market Development
- BUA 383 - Small Business Working Relationships
- BUA 330 - Organizational Leadership

Healthy nutrition is an important component of high-level health, and should be an important consideration in any spa.

- NTR 345 - Development of Healthy Cuisines

The Exercise and Wellness Department brings considerable experience and expertise in all areas of wellness to the program. The following courses have been designed to address key wellness and fitness issues for future spa directors, as well as specific spa operations and management issues, and provide students with hands-on spa experience.

- EXW 325 - Fitness for Life
- EXW 400 - Stress Management for Wellness
- EXW 484 - Exercise and Wellness Internship
- EXW 498 - Professional Seminar in Spa Management I
- EXW 498 - Professional Seminar in Spa Management II

Complementary and alternative health care has long been embraced by the spa industry. The rapid growth of medical spas is testimony to the expansion of this component of the spa experience. We have selected two courses to provide a broad overview of complementary and alternative health care.

- WED 165 - Overview of Massage Therapy
- HHS 300 - Overview of Complementary Health Systems

What you'll see on your DARS:
NOTE: Grade of C (2.00) or better required.
Minimum 32 upper division hours required.
--> NEEDS: 34.0 HOURS 3 SUB-GROUPS

1) UPPER DIVISION EXW CORE - 14 hours

NEEDS: 14.0 HOURS
COURSE LIST: EXW 325 EXW 400 EXW 484 EXW 498

- 2) ELECTIVES - 20 hours

At least 18 upper division hours required NEEDS: 20.0 HOURS
COURSE LIST: BUA 381 BUA 382 BUA 383 NTR 345 HHS 300 WED 165 OMT 494
3) SPA MANAGEMENT ADMISSIONS CHECK

Formal admission to this program is required.
See EXW departmental advisor for information.
NEEDS:
1 COURSE
COURSE LIST: CERTEXW EXWEMPH-C3

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SOUTHEAST ASIAN STUDIES
College of Liberal Arts \& Sciences
2008-2009
Coor Hall, Room 6608, Ph: 480.965.7184
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## I. Introduction - 3 Hours

REL 240 - Introduction to Southeast Asia OR
HST 240 - Introduction to Southeast Asia
OR
ASB 240 - Introduction to Southeast Asia
OR
GCU 240 - Introduction to Southeast Asia
OR
POS 240 - Introduction to Southeast Asia
ASB 325 Peoples of Southeast Asia,
II. History - 3 Hours

HST 391 - Modern Southeast Asia
III. Electives - 9 Hours (Upper Division)

ASB 494 - Special Topics
ARS 394 - Special Topics
FLA 394 - Special Topics
ARS 394 - Special Topics
HUM 394-Special Topics
HST 456 - The Vietnam War
ISB 394 - Special Topics
ISB 494 - Special Topics
IDN 394 - Special Topics
IDN 499
FLA 420 - Foreign Literature in Translation
THA 394 - Special Topics
VTN 394 - Special Topics
VTN 499
GLB 302 - Culture and Diversity Management
PUP 494 - Special Topics
POS 358 - Southeast Asia
REL 405 - Problems in Religious Studies

What you'll see on your DARS:
NOTE: Grade of C (2.00) or better required. Minimum 12 upper division hours required.
--> NEEDS: 18.00 HOURS 4 SUB-GROUPS

- 1) INTRODUCTION - 3 hours NEEDS: 3.00 HOURS
COURSE LIST: REL 240 OR HST 240 OR ASB 240 OR GCU 240 OR POS 240 ASB 325
- 2) HISTORY - 3 hours NEEDS: 3.00 HOURS
COURSE LIST: HST 391
- 3) ELECTIVES - 9 hours upper division Additional course options available - see department NEEDS: 9.00 HOURS
COURSE LIST: ASB 494 [*SOUTHEAST* AS*] ARS 394 [*VIETNAM*] FLA 394 [*VIETNAM*]
ARS 394 [*SOUTHEAST* AS*] OR HUM 394 [*SOUTHEAST* AS*] OR FLA 394 [*SOUTHEAST* AS*] HST 456 IBS 394 [*ASIAN*] OR IBS 494 [*ASIAN*] IDN 394 [*AD* IND*] IDN 499
FLA 420 [*SOUTHEAST* AS*] THA 394 [*AD* THAI*] VTN 394 [*AD* VIET*] VTN 499 GLB 302 PUP 494 [*GLOB*] POS 358 REL 405 [*LIT* SOUTH*]
- 4) CAPSTONE - 3 hours

NEEDS: 3.00 HOURS
COURSE LIST: SASEMPH4 SASEMPHX

## SOCIOLOGY

New College of Interdisciplinary Arts \& Sciences
2008-2009
West Campus
FAB, Rooms N203 \& N207, Ph: 602.543.6058

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21 HOURS, MINIMUM "C" (2.00) GRADE
MINIMUM 9 HOURS UPPER DIVISION AT ASU
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NOTE: FAS 331 is cross-listed with SOC 315 , students cannot receive for both courses.

## Description:

- The minor in Sociology requires 21 hours in sociology, nine of which must be upper division.
- All coursework within the minor must be completed with a minimum grade of "C" (2.00)
- At least nine upper-division hours must be completed from the New College of Interdisciplinary Arts and Sciences
I. Core - 9 Hours

SBS 303 - Quantitative Methods
SBS 304 - Social Statistics I
OR
SOC 486 - Contemporary Theory
SOC 301 - Principles of Sociology
OR
SOC 101 - Introductory Sociology
II. Electives - 12 Hours

See an advisor for approved list

## What you'll see on your DARS:

--> NEEDS: 21.00 HOURS 2 SUB-GROUPS

1) Core - 9 Hours NEEDS: 3 COURSES COURSE LIST: SBS 303 SBS 304 OR SOC 486 SOC 301 OR SOC 101

- 2) Sociology Electives - 12 Hours Select in consultation with Sociology Advisor

NEEDS: 12.00 HOURS

## SOCIOLOGY

College of Liberal Arts and Sciences
2008-2009
Social Sciences 144, Ph: 480.965.6978

NOTE: Grade of C (2.00) or better required.
Minimum 12 upper division hours required.
NOTE: Minimum 6 upper division hours at Tempe campus.
NOTE: FAS 331 is cross-listed with SOC 315 , students cannot receive for both courses.

## Description:

The concentration in sociology requires 18 credit hours, of which 12 hours must be upper division courses, with at least six upper-division hours completed at the Tempe campus.

## I. Needs 6 hours

SOC 101-Fundamentals of sociology
SOC 391 - Research Methods
OR
SOC 483 - History of Social Thought
OR
SOC 486 - Contemporary Theory
II. Needs 12 Hours, at least 9 upper division

ANY SOC 100 level class
ANY SOC 200 level class
ANY SOC 300 level class
ANY SOC 400 level class

## What you'll see on your DARS:

--> NEEDS: 18.00 HOURS

- 1) CORE - 6 hours NEEDS: 6.00 HOURS
COURSE LIST: SOC 101, SOC 391 OR SOC 483 OR SOC 486
- 2) ELECTIVES - 12 hours

At least 6 upper division hours required to meet the Sociology 12 upper division hour requirement. NEEDS: 12.00 HOURS
COURSE LIST: SOC 1 SOC 2 SOC 3 SOC 4

Needs 18.00 Total Hours completed

SOCIOCULTURAL ANTHROPOLOGY<br>New College of Interdisciplinary Arts and Sciences<br>2008-2009<br>West Campus<br>FAB, Rooms N203 \& N207, Ph: 602.543.6058

18 HOURS, MINIMUM 12 UPPER DIVISION MINIMUM "C" (2.00) GRADE

## Description:

The concentration 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.

## I. Core - $\mathbf{6}$ Hours

ASB 311 - Principles of Social Anthropology
SBS 302 - Qualitative Methods
II. Electives - $\mathbf{1 2}$ Hours

ASB 3 - any 300 -level ASB course
ASB 4 - any 400 -level ASB course
ASB 1 - any 100 -level ASB course
ASB 2 - any 200 -level ASB course
SBS 205 - Cybercultures
SBS 301 - Cultural Diversity
SBS 410 - Topics in Identity/Difference
SBS 430 - Topics in Power/Knowledge
SBS 440 - Family Studies
SBS 450 - Topics in Local/Global
SBS 460 - Urban Studies

What you'll see on your DARS:
--> NEEDS: 18.00 HOURS 2 SUB-GROUPS

1) Core - 6 Hours

NEEDS: 6.00 HOURS
COURSE LIST: W ASB 311 (R) SBS 302(R)

- 2) Select 12 Hours from the following:

Maximum 3 Hours of Independent Study
NEEDS: 12.00 HOURS
-> NOT FROM: ASB 311 SBS 302
COURSE LIST: W ASB 3 ASB 4 ASB 1 ASB 2 SBS 205
SBS 301 SBS 410 SBS 430 SBS 440 SBS 450 SBS 460

SOCIAL WELFARE<br>College of Public Programs<br>2008-2009

UCENT 800, Ph: 602.496.0800

## Description:

The Concentration in Social Welfare prepares students for social welfare work and other professional careers where a fundamental knowledge of human relations is required.
The Concentration 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 Concentration also contributes to students' understanding of society and social behavior, encourages critical thinking, and helps develop communication skills.

## Students should:

Meet with a Social Welfare Advisor prior to registration
School of Social Work Advising Office Laura.Orr@asu.edu or (602) 496-0800
$\square$ Complete 18 hours of graded coursework (internship or independent study not applicable)
$\square$ Take a minimum of 12 hours of upper division coursework from the approved list
$\square$ Earn a grade of " C " or higher for all classes in the concentration
$\square$ Minimum of 12 hours of residence credit at the ASU Downtown Phoenix Campus
$\square$ Complete SWU 171 as the prerequisite for all upper division SWU courses
$\square$ Maintain cumulative GPA of 2.0 or higher
$\square$ Be sophomore standing to take 300 or 400 level courses

## I. Required:

- SWU 171 - Introduction to Social Work
- SWU 291 - Social Service Delivery Systems
- SWU 374 - Diversity \& Oppression in Social Work
- SWU 332-Social Policy \& Services
II. Choose 6 Hours:
- SWU 302 - Human Biology for Social Workers
- SWU 303 - Micro Human Behavior Social Environ SB
- SWU 321-Statistics for Social Workers CS
- SWU 340 - Macro Human Behavior Social Environ SB
- SWU 498-Pro-Seminar


## What you'll see on your DARS:

NOTE: Grade of C (2.00) or better required.
Minimum 12 upper division hours required.
Minimum 12 resident credit hours taken at Downtown Phoenix Campus
Must be a sophomore standing to take 300 or 400 level courses
--> NEEDS: 18.0 HOURS 2 SUB-GROUPS

1) CORE - 12 hours

NEEDS: 12.0 HOURS
COURSE LIST: SWU 171 SWU 291 SWU 332 SWU 374
2) ELECTIVES - 6 hours NEEDS: 6.0 HOURS
COURSE LIST: SWU 302 SWU 303 SWU 321 SWU 340 SWU 498

SOCIAL \& BEHAVIORAL SCIENCES
New College of Interdisciplinary Arts \& Sciences
2008-2009
West Campus
FAB, Rooms N203 \& N207, Ph: 602.543.6058

18 HOURS, MINIMUM 12 UPPER DIVISION
Minimum "C" (2.00) Grade in all courses

## Description:

- The concentration in Social and Behavioral Sciences consists of 18 credit hours, at least 12 hours of which must be in upper division courses.
- All coursework within the concentration must be completed with a minimum grade of "C" (2.00)
- At least nine upper-division hours must be completed from the New College of Interdisciplinary Arts and Sciences
I. Core - 6 Hours

SBS 300 - Interdisciplinary Approaches to Social and Behavioral Sciences
SBS 302 - Qualitative Methods
OR
SBS 303 - Quantitative Methods
OR
POS 301 - Empirical Political Inquiry
II. SBS Core - $\mathbf{1 2}$ Hours

The remaining courses must be drawn from at least two of the fields of social and behavioral sciences (including the SBS interdisciplinary prefix). Internships or individualized instruction/research may not be applied to the concentration. All courses must be passed with a minimum grade of "C." Students wishing to pursue a concentration must meet with an SBS faculty advisor to construct a concentration that reflects a particular area of specialty and interest.

## What you'll see on your DARS:

--> NEEDS: 18.00 HOURS 2 SUB-GROUPS

- 1) Core-2 Courses

NEEDS: 6 Hours 2 COURSES
COURSE LIST: SBS 300(R) SBS 302 OR SBS 303 OR M POS 301
2) SBS Courses - 12 Hours

Courses must be taken from at least 2 different fields
of Social \& Behavioral Sciences. Internships or
Individualized Instruction/Research may NOT be used.
***STUDENTS MUST MEET WITH AN SBS DEPARTMENT ADVISOR TO CONSTRUCT A CONCENTRATION THAT REFLECTS A PARTICULAR AREA OF SPECIALTY AND INTEREST***
NEEDS: 12.00 HOURS 2 COURSES

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SMALL BUSINESS
Morrison School of Agribusiness and Resource Management
2008-2009
480.727.1585
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## Description

The concentration in small business is available to non-business majors and consists of 18 semester hours, with five required courses and one business-related area course.

## I. Core - Needs 15 hours of the following:

- BUA 381-Small Business Accounting and Finance
- BUA 382-Small Business Sales and Market Development
- BUA 383 - Small Business Working Relationships
- BUA 384-Small Business Operations and Planning


## II. Electives - Needs 3 Hours of the Following:

- AGB 321 - Agribusiness Marketing II
- AGB 333-Agribusiness Finance II
- AGB 364-Agribusiness Technologies I
- AGB 365-Agribusiness Technologies II
- AGB 410 - Agribusiness Management II
- AGB 414 - Agribusiness Analysis
- AGB 422 - Consumer Behavior
- AGB 424 - Agribusiness Sales
- AGB 425 - Agricultural Marketing Channels
- AGB 429 - Marketing Research
- AGB 431 - Intermediate Agribusiness Financial Management
- AGB 433 - Intermediate Agribusiness Financial Markets
- AGB 434 - Agricultural Risk Management and Insurance
- AGB 435 - Agricultural Commodities
- AGB 436 - Entrepreneurship and Financial Management of E-Commerce
- AGB 445 - Food Retailing
- AGB 450 - International Agricultural Development
- AGB 451 - Management Science
- AGB 452 - International Agricultural Policy
- AGB 454 - International Trade
- AGB 455 - Resource Management
- AGB 460 - Agribusiness Management Systems
- AGB 481 - Applied Microeconomics
- AGB 494 [*ADVERTISING*PUBLIC*REL*] - Special Topics
- AGB 494 [*ST:*ADVER*] - Special Topics
- AGB 494 [*NAMA*MARKETING*PLAN*] - Special Topics
- AGB 494 [*ST:*SPORT* EN*] - Special Topics
- AGB 494 [*ST:*TEC* AN*] - Special Topics
- AGB 498 [*PS:*AFM* FOOD*] - Pro-Seminar
- AGB 498 [*PS:*BUS* ETH*] - Pro-Seminar

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AGB 498 [*PS:*EFF* CON*] - Pro-Seminar
AGB 498 [*EVAL* BUY*] - Pro-Seminar
AGB 498 [*PS:*EVAL* SEL*] - Pro-Seminar
AGB498 [*EVAL*BUY*SELLING*BUSINESS*] - Pro-Seminar
AGB498 [*PS:*FOOD* BUS*] - Pro-Seminar
AGB }498\mathrm{ [*PS:*INCOM*] - Pro-Seminar
AGB }498\mathrm{ [*PS:*MARKET*] - Pro-Seminar
AGB }498\mathrm{ [*NEW* BUS*] - Pro-Seminar
AGB 498 [*NEW*BUSINESS*PRCESSES*] - Pro-Seminar
AGB 498 [*PREPARATION*OF*TAXES*] - Pro-Seminar
AGB 498 [*PS:*PREP*] - Pro-Seminar
AGB }498\mathrm{ [*SELL* TO*] - Pro-Seminar
AGB 498 [*PS:*SPORT* RE*] - Pro-Seminar
AGB }498\mathrm{ [*SUPERVIS*] - Pro-Seminar
AGB 498 [*SUPERVISORY*MANAGE*] - Pro-Seminar
MGT }394\mathrm{ [*ST:*LEADER*] - Special Topics
BUA 394 [*PERSPEC*GLOBAL*BUS*] - Special Topics
BUA 380(THROUGH FA07) - Small Business Leadership
BUA 381(THROUGH FA06) - Small Business Accounting and Finance
BUA 382(THROUGH FA06) - Small Business Sales and Market Development
BUA 383(THROUGH FA07) - Small Business Working Relationships
BUA 394 [*ST:*LEG* ISS*] - Special Topics
BUA 394 [*ST:*MANAGE*] - Special Topics
BUA 440 - Strategic Management
BUA 441 - Entrepreneurship and Feasibility
BUA 494 *FIN*REP*ANALY* -Special Topics
BUA 498 [*PS:*PER* INCO*] - Pro-Seminar
BUA 498 [*COMM*INFRASTRUCT*] - Pro-Seminar
BUA }498\mathrm{ [*FOOD*MANUFACT*] - Pro-Seminar
BUA 498 [*INDUSTRIAL*MANUFACT*] - Pro-Seminar
ENG 394 [*ST:*GIANT* BU*] - Special Topics
ENH 311-Giants of Business
ENH 394 [*MGMT*NONP*SECTOR*ART*] - Special Topics
ETM 301 - Environmental Management
ETM 360 - Introduction to Emergency Management
ETM 428 - International Environmental Management
ETM 494 [*ST:*ENVIR* RE*] - Special Topics
ETM 494 [*INTER*ENVIR*LAW*] - Special Topics
EXW 400 - Stress Management for Wellness
FIN 380 - Personal Financial Management
HST 394 [*ST:*GIANT* BU*] - Special Topics
MCN 394 [*PUB*RELAT*BUS*NONPROFIT*] - Special Topics
TMC 331-Quality Assurance
TMC 470 - Project Management
OMT 343-Occupational Safety and Ergonomics
OMT 344 - Industrial Organization
OMT 402 - Legal Issues for Technologists
OMT 453 - Safety Management
OMT 456 - Introduction to Organized Labor
OMT 480-Organizational Effectiveness
OMT 494 [*ST:*IND* TRA*] - Special Topics
OMT 494 [*ST:*MID* EAST*] - Special Topics
OMT }494\mathrm{ [*ST:*TEAM*] - Special Topics
OMT }494\mathrm{ [*TEAM*] - Special Topics
OMT 494 [*ST:*TEC* DEV*] - Special Topics
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o LES 411 - Real Estate Law
- MGT 484-Internship
- MGT 494 [*ST:*TECH* ORG*] - Special Topics
- MGT 494 [*HUMAN*RES*MANAGE*] - Special Topics
- OMT 494 [*INDUSTRIAL*LEADER*] -
- PGM 394 [*SPORT*PSYCH*] -
- PGS 304-Effective Thinking
- PGS 350-Social Psychology
- PHI 306 - Applied Ethics
- PHI 394 [*ST:*ETH* ISS*] - special topics
- POS 325 - Pub Policy Develop
- PSY 437-Human Factors
o PSY 438- Human-Computer Interaction
- PSY 439 - Training and Skill Acquisition
- PSY 440- Industrial/Organizational Psychology
- PSY 448-Human Factors in Transportation
- PSY 449-Human Factors in Sport
- PSY 494 [*ST:*CHAN* MAN*] - Human Factors in Sport
- PSY 494 [*ST:*ERGO*] - Human Factors in Sport
o PSY 494 [*ST:*SAFE* BEH*] - Human Factors in Sport
- REA 394-Special Topics
- REA 300-Real Estate Analysis
o REA 331 - Real Estate Finance
o REA 380-Real Estate Fundamentals
- REA 394 [*ST:*REA* E* E*] - Special Topics
- REA 401 - Real Estate Appraisal
O REA 441 - Real Estate Land Development
- REA 456 - Real Estate Investments
- REA 494 [*ST:*REA* E* F*] - Special Topics
- REA 494-Special Topics
- AGB 498 [PRO-S* BUY*] - Pro-Seminar
- OMT 494 [*ST:*INT* LEAD*] - Special Topics
- OMT 494 [*ST:*LEA* CHAL*] - Special Topics
- OMT 494 [*ST:*LEA* WORK*] - Special Topics
- MGT 394(THROUGH S206) [*ST:*MANA*] - Special Topics
- MGT 394(THROUGH S206) [*ST:*LEAD*] - Special Topics
- MGT 494(THROUGH S206) *ST:*CAP* BUS* - Special Topics
- MGT 494(THROUGH S206) *ST:*SM* BU* E* - Special Topics
- MGT 494(THROUGH S206) *ST:*STRA* MAN* - Special Topics
o PSY 494 [*ST:*PSY* OF*] - Human Factors in Sport
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What you'll see on your DARS:
NOTE: Grade of C (2.00) or better required.
--> NEEDS: 18.00 HOURS 2 SUB-GROUPS

- 1) SMALL BUSINESS CORE - 15 hours NEEDS: 15.00 HOURS

COURSE LIST: BUA 380 BUA 381 BUA 382 BUA 383
BUA 384
2) SMALL BUSINESS RELATED AREA - 3 hours

See online Related Area course list:
www.poly.asu.edu/ecollege/businessadmin/curriculum.html
NEEDS: 3.00 HOURS
-> NOT FROM: BUA 380 BUA 381 BUA 382 BUA 383
BUA 384
COURSE LIST: SMBEMPH2 AGB 311 AGB 321 AGB 333
AGB 364 AGB 365 AGB 380 AGB 410 AGB 414 AGB 420
AGB 422 AGB 424 AGB 425 AGB 429 AGB 431 AGB 433
AGB 434 AGB 435 AGB 436 AGB 445 AGB 450 AGB 451
AGB 452 AGB 454 AGB 455 AGB 460 AGB 481 OR
AGB 380org AGB 494 [*ADVERTISING*PUBLIC*REL*]
AGB 494 [*ST:*ADVER*]
AGB 494 [*NAMA*MARKETING*PLAN*]
AGB 494 [*ST:*SPORT* EN*] AGB 494 [*ST:*TEC* AN*]
AGB 498 [*PS:*AFM* FOOD*] AGB 498 [*PS:*BUS* ETH*]
AGB 498 [*PS:*EFF* CON*] AGB 498 [*EVAL* BUY*]
AGB 498 [*PS:*EVAL* SEL*]
AGB 498 [*EVAL*BUY*SELLING*BUSINESS*]
AGB 498 [*PS:*FOOD* BUS*] AGB 498 [*PS:*INCOM*]
AGB 498 [*PS:*MARKET*] AGB 498 [*NEW* BUS*]
AGB 498 [*NEW*BUSINESS*PRCESSES*]
AGB 498 [*PREPARATION*OF*TAXES*]
AGB 498 [*PS:*PREP*] AGB 498 [*SELL* TO*]
AGB 498 [*PS:*SPORT* RE*] AGB 498 [*SUPERVIS*]
AGB 498 [*SUPERVISORY*MANAGE*] BUA 330 OR
MGT 394 [*ST:*LEADER*]
BUA 394 [*PERSPEC*GLOBAL*BUS*]
BUA 380(THROUGH FA07) BUA 381 (THROUGH FA06)
BUA 382(THROUGH FA06) BUA 383(THROUGH FA07)
BUA 384(THROUGH FA06) BUA 394 [*ST:*LEG* ISS*]
BUA 394 [*ST:*MANAGE*] BUA 440 BUA 441
BUA 494 *FIN*REP*ANALY* BUA 498 [*PS:*PER* INCO*]
BUA 498 [*COMM*INFRASTRUCT*]
BUA 498 [*FOOD*MANUFACT*]
BUA 498 [*INDUSTRIAL*MANUFACT*]
ENG 394 [*ST:*GIANT* BU*] ENH 311
ENH 394 [*MGMT*NONP*SECTOR*ART*] ETM 301 ETM 360
ETM 428 ETM 494 [*ST:*ENVIR* RE*]
ETM 494 [*INTER*ENVIR*LAW*] EXW 400 FIN 380
HST 394 [*ST:*GIANT* BU*] IBS 400(THROUGH S207)
MCN 394 [*PUB*RELAT*BUS*NONPROFIT*] TMC 331
TMC 470 OMT 343 OMT 344 OMT 402 OMT 453 OMT 456
OMT 480 OMT 494 [*ST:*IND* TRA*]
OMT 494 [*ST:*MID* EAST*] OMT 494 [*ST:*TEAM*]
OMT 494 [*TEAM*] OMT 494 [*ST:*TEC* DEV*] LES 411
MGT 484 MGT 494 [*ST:*TECH* ORG*]
MGT 494 [*HUMAN*RES*MANAGE*]
OMT 494 [*INDUSTRIAL*LEADER*]
PGM 394 [*SPORT*PSYCH*] PGS 304 PGS 350 PGS 458

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PHI 306 PHI 394 [*ST:*ETH* ISS*] POS 325 PSY 437
PSY 438 PSY 439 PSY 440 PSY 448 PSY 449
PSY 494 [*ST:*CHAN* MAN*] PSY 494 [*ST:*ERGO*]
PSY 494 [*ST:*SAFE* BEH*] REA 394 REA 300 REA 331
REA 380 REA 394 [*ST:*REA* E* E*] REA 401 REA 441
REA }456\mathrm{ REA 494 [*ST:*REA* E* F*] REA }49
AGB }498\mathrm{ [PRO-S* BUY*] OMT 494 [*ST:*INT* LEAD*]
OMT 494 [*ST:*LEA* CHAL*] OMT 494 [*ST:*LEA* WORK*]
MGT 394(THROUGH S206) [*ST:*MANA*]
MGT 394(THROUGH S206) [*ST:*LEAD*]
MGT 494(THROUGH S206) *ST:*CAP* BUS*
MGT 494(THROUGH S206) *ST:*SM* BU* E*
MGT 494(THROUGH S206) *ST:*STRA* MAN*
PSY 494 [*ST:*PSY* OF*]
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RUSSIAN AND EAST EUROPEAN STUDIES
College of Liberal Arts and Sciences
2008-2009
COOR Hall 4450, Ph: 480.965.4188

NOTE: Grade of C (2.00) or better required.
Minimum 12 upper division hours required.

## I. Core - 6 Hours (one HST/ one SLV/RUS)

HST 370 - Eastern Europe in Transition
OR
HST 435 - The Russian Empire
OR
HST 436 - The Soviet Experiment
SLV 440 - History of Slavic Languages
OR
RUS 440 -
OR
RUS 441 - Survey of Russian Culture
OR
RUS 321 - Foundations of Russian Literature
RUS 322 - Great Russian Writers of the 19th Century
II. Capstone - 3 Hours

See an advisor
III. Electives - 9 Hours

APH 446/447-20 ${ }^{\text {th }}$ Century Architecture I/II
ARS 410 - Early Christian and Byzantine Art
ECN 306 - Survey of International Economics
OR
ECN 331 - Comparative Economic Systems
OR
ECN 365 - Economics of Russia and Eastern Europe
FLA 323 - Survey of Literature of the Soviet Era in Translation OR
RUS 323 - Survey of Literature of the Soviet Era in Translation
OR
FLA 394 - Modern East European Drama
OR
FLA 420 - Survey of Literature in Translation -Russian
OR
FLA 461 - Feminist Political Writing in Contemporary Europe
OR
FLA 472 - Literature and Politics in Pre- and Post-Communist Europe
OR

FLA 476 - Literature and Film in 20th-Century Eastern Europe
OR
FLA 494-Special Topics
OR
RUS 321 - Survey of Russian Literature
OR
RUS 322 - Survey of Russian Literature
OR
RUS 420 - Russian Poetry
OR
RUS 421 - Pushkin
OR
RUS 423 - Dostoevsky
OR
RUS 424 - Tolstoy
OR
RUS 425 - Chekhov
OR
RUS 426 - Literature of the Nationalities of the Former Soviet Union
OR
RUS 430-Russian Short Story
OR
RUS 440 - History of the Russian Language
OR
RUS 441 - Survey of Russian Culture
OR
SLV 304 - Computational Linguistics of Slavic Languages
OR
SLV 440 - History of Slavic Languages
GCU 426-Geography of Russia and Surroundings
HST 105 - Introduction to Slavic Civilization
OR
HST 370 - Eastern Europe in Transition
OR
HST 431 - Eastern Europe and the Balkans before 1914
OR
HST 432 - Eastern Europe and the Balkans since 1914
OR
HST 435 - The Russian Empire
OR
HST 436 - The Soviet Experiment
MGT 302-
MHL 363 - Survey of Russian Music
OR
MHL 439 - Music of the $19^{\text {th }}$ Century
OR
MHL 447 - Music since 1900
OR
MHL 456 - History of Opera
POS 355-Russia and Successor States
OR
POS 494 - Democratization
REL 270 - Introduction to Christianity
OR
REL 305 - Ritual, Symbol and Myth

OR
REL 310 - Western Religious Traditions
OR
REL 365 - Islamic Civilization
OR
REL 366 - Islam in the Modern World
OR
REL 372 - Formation of the Christian Tradition
OR
REL 377 - Religion in Russia
OR
REL 379 - Religion, Nationalism, Ethnic Conflict
SOC 332 - Urban Sociology
WST 360 - Women as Healers
AND
WST 457 - Gender, Culture, and Development

## What you'll see on your DARS:

--> NEEDS: 18.00 HOURS 3 SUB-GROUPS

- 1) CORE - 6 hours

Select one HST course and one SLV/RUS course NEEDS: 6.00 HOURS
COURSE LIST: HST LIST: HST 370 OR HST 435 OR HST 436
SLV/RUS LIST: SLV 440 OR RUS 440 OR RUS 441 OR RUS 321 OR RUS 322

- 2) CAPSTONE - 3 hours

Consult a Russian \& East European Studies advisor for a current list of acceptable courses.
NEEDS: 3.00 HOURS
COURSE LIST: REEEMPHX REEEMPH2

- 3) ELECTIVES - 9 hours

Select one course or course group from three separate disciplines.
NEEDS: 9.00 HOURS 3 SETS
COURSE LIST: APH 446 \& APH 447 ARS 410 ECN 306 OR
ECN 331 OR ECN 365 FLA 323 OR RUS 323 OR FLA 394
OR FLA 420 OR FLA 461 OR FLA 472 OR FLA 476 OR
FLA 494 OR RUS 321 OR RUS 322 OR RUS 420 OR
RUS 421 OR RUS 423 OR RUS 424 OR RUS 425 OR
RUS 426 OR RUS 430 OR RUS 440 OR RUS 441 OR
SLV 304 OR SLV 440 GCU 426 HST 105 OR HST 370 OR
HST 431 OR HST 432 OR HST 435 OR HST 436 MGT 302
MHL 363 OR MHL 439 OR MHL 447 OR MHL 456 POS 355
OR POS 494 REL 270 OR REL 305 OR REL 310 OR
REL 365 OR REL 366 OR REL 372 OR REL 377 OR
REL 379 SOC 332 WST 360 \& WST 457

RUSSIAN
College of Liberal Arts \& Sciences
2008-2009
Language and Literature, Room 440, Ph: 480.965.6281

NOTES FOR BIS EMPHASIS AREA:

- A grade of C or better must be achieved in all courses to be counted toward the minor or BIS emphasis area.
- A minimum of 6 upper-division hours in the minor or BIS emphasis area must be taken in residence at ASU Tempe Campus.
- Pass/Fail courses cannot be used for the minor or BIS emphasis area.
- RUS 201 and 202 are not applicable to the minor or BIS emphasis area.
- Course substitutions are permitted for Heritage speakers and other advanced speakers of Russian.
- Please contact Professor Lee Croft in the School of International Letters \& Cultures for more information.
- Alternative courses may be chosen from the following: RUS 321, RUS 322, RUS 323, RUS 411 , RUS 412 , RUS 417 , RUS 420, RUS 421 , RUS 423, RUS 424, RUS 425, RUS/SLV 426, RUS 430, RUS/SLV 440, RUS 441, RUS 494, or RUS 495.
I. Core - 6 Hours

RUS 311 - Russian Composition and Conversation
RUS 312-Russian Composition and Conversation
II. Electives - 12 Hours

RUS 211 - Basic Russian Conversation
RUS 212 - Basic Russian Conversation
RUS 3 - any 300-level Russian class
RUS 4 - any 400- level Russian class
SLV 3 - any 300-level SLV course
SLV 4 - any 400-level SLV course

## What you'll see on your DARS:

NOTE: Grade of C (2.00) or better required.
Minimum 12 upper division hours required.
--> NEEDS: 18.00 HOURS

1) CORE - 6 hours

NEEDS: 6.00 HOURS
COURSE LIST: RUS 311 RUS 312

- 2) ELECTIVES - 12 hours

NEEDS: 12.00 HOURS
COURSE LIST: RUS 211 RUS 212 RUS 3 RUS 4 SLV 3

SLV 4

ROMANIAN
School of International Letters and Cultures
2008-2009
Ph: 480.965.6281

## Description:

Romanian is a Romance language derived mainly from the Latin language spoken in the ancient Roman province of Dacia, which coincides roughly with modern Romania. Romanian has four principal dialects. Daco-Romanian, or Romanian proper, is spoken by about 18 million people in Romania, in parts of the Federal Republic of Yugoslavia, Croatia, Slovenia, Bosnia and Herzegovina, the Former Yugoslav Republic of Macedonia, Bulgaria, Hungary, and Moldova, where it is officially called Moldovan (although widely considered identical to Romanian). Macedo-Romanian, or Aromanian, has several hundred thousand speakers in various Balkan countries. Only a few thousand people still speak Megleno-Romanian, or Meglenitic, in Greece northwest of Thessaloníki, and Istro-Romanian, in Istria. These dialects are classified by some linguists as independent languages.

The Romanian literary language is based on the Daco-Romanian of the historic region of Walachia, in southern Romania. Romanian preserves some Latin traits lost in other Romance languages, notably the inflection of nouns. Romanian also has some characteristics common to the languages spoken in the Balkan Peninsula (most of which are not Romance languages), such as the placement of the definite article after the noun. Romanian has absorbed an unusually large number of words from the Slavic languages, the Greek language, the Turkish language, the Hungarian language, and the Albanian language.

## Required Courses:

- ROM 313-Intermediate Composition and Conversation I
- ROM 314 - Intermediate Composition and Conversation II
- ROM 411 - Advanced Spoken and Written Romanian I
- ROM 412 - Advanced Spoken and Written Romanian II
- ANY 2 courses (6 credits)
- 300 ROM courses
- 400 ROM courses

The Romanian concentration consists of 18-semester hours of ROM - courses above ROM-201. This concentration is so structured that it required all ROM semester hours of it be at the upper-division (300-and above) levels.

## Notes for BIS emphasis area:

- A grade of C or better must be achieved in all courses to be counted toward the minor.
- A minimum of 6 upper-division hours in the concentration must be taken in residence at ASU Tempe campus
- Pass/Fail courses cannot be used for credit towards the concentration
- ROM 101 through 201 are not applicable for the concentration


## RELIGIOUS STUDIES

College of Liberal Arts \& Sciences
2008-2009
Engineering Center A-Wing, Room 365, Ph: 480.965.0642

## Description:

The BIS emphasis in Religious Studies requires 18 semester hours, including a minimum of 12 upper division hours.
Notes for BIS emphasis area:

- You will need to achieve a grade of "C" or better in your Religious Studies coursework.
- REL 400 and 405 are for Religious Studies majors only and registration in those courses would be by instructor permission only.
I. Core 3 Hours
- REL 305-Ritual, Symbol, and Myth
II. Electives 15 Hours
- Any REL 100, 200, 300 or 400 level classes


## What you'll see on your DARS:

NOTE: Grade of C (2.00) or better required.
Minimum 12 upper division hours required.
--> NEEDS: 18.00 HOURS 2 SUB-GROUPS

- 1) CORE - 3 hours

NEEDS: 3.00 HOURS
COURSE LIST: REL 305

- 2) ELECTIVES - 15 hours

Must include at least 9 upper division hours to meet the 12 hour upper division requirement in Religious Studies.
NEEDS: 15.00 HOURS
COURSE LIST: REL 1 REL 2 REL 3 REL 4

RELIGIOUS STUDIES<br>New College of Interdisciplinary Arts \& Sciences<br>2008-2009<br>West Campus<br>FAB, Room N276, Ph: 602.543.7003

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21 HOURS, MINIMUM 18 UPPER DIVISION
15 HOURS REQUIRED AT ASU
***MINIMUM "C" (2.00) GRADE***
Note: Select courses in consultation with Religious Studies Faculty Advisor
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## Description:

The minor in Religious Studies consists of 21 semester hours of religious studies course work, of which 18 must be upper-division hours. Fifteen semester hours of campus resident credit is required. 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 the religious studies advisor to create a coherent and complete program of study for the minor.

## I. One Course - 3 Hours

AMS 417 - Religious Traditions of the American Southwest
REL 320 - Religion in America
REL 321 - Religion in America
REL 420 - Religion in American Life and Thought

## II. Two Courses - 6 Hours

IAS 430 - ST: Science and Religion
REL 305 - Ritual, Symbol, and Myth
REL 390 - Women and World Religions
OR
WST 390 - Women and World Religions
ENG 424 - Milton
HIS 363 - Reformation
OR
HST 352 - Europe's Reformations
IAS 494 - ST: Science and Religion
OR
REL 494 - ST: Science and Religion
AMS 494 - ST: Psychology of Religion
OR
REL 494 - ST: Psychology of Religion
III. Special Topics - 3 Hours

At least one special topics course
IV. Electives - 9 Hours

See an advisor for full list:
AMS, CMN, IAS, REL, WST - any from these prefixes

What you'll see on your DARS:
--> NEEDS: 21.00 HOURS 4 SUB-GROUPS

- 1) At least one course from the following:

NEEDS: 3.00 HOURS 1 COURSE
COURSE LIST: AMS 417 W REL 320 W REL 321 REL 420

- 2) At least two courses from the following: NEEDS: 6.00 HOURS 2 COURSES
COURSE LIST: IAS 430 REL 305 REL 390 OR WST 390
W ENG 475 OR ENG 424 HIS 363 OR M HST 352 IAS 494 [*SCI*REL*] OR REL 494 [*SCI*REL*] AMS 494 [*PSY*REL*] OR REL 494 [*PSY*REL*]
- 3) At least one Special Topics Course SEE RELIGIOUS STUDIES FACULTY ADVISOR FOR APPLICABLE TOPICS NEEDS: 3.00 HOURS 1 COURSE COURSE LIST: RELTOPIC
- 4) 9 Hours of Electives SEE RELIGIOUS STUDIES FACULTY ADVISOR FOR APPROVED COURSES NEEDS: 9.00 HOURS

RECREATION MANAGEMENT<br>College of Public Programs<br>2008-2009<br>University Center, Room 550, Ph: 602.496.0167

## Description:

The concentration in Recreation Management will introduce you to community recreation programming and planning for a variety of populations. 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.

## Requirements:

1. PRM 120, PRM 424
2. 18 hours of graded classroom course work (no internship, no independent study)
3. A minimum of 9 hours of course work at the upper division level, from the approved list
4. _C_ minimum grade required for all classes in the concentration
5. No double counting of courses for both a major and the concentration
6. A minimum GPA of 2.00 for those pursuing the concentration
7. Must be a junior to take 400 level courses

## I. Core - 6 Hours

- PRM 120 - Leisure and the Quality of Life
- PRM 424 - Recreation Program Management
II. Electives - $\mathbf{1 2}$ Hours

PRM 150 - Outdoor Pursuits
PRM 302 - Inclusive Community Development
PRM 315 - Community Recreation Systems

- PRM 364 - Foundations of Therapeutic Recreation
- PRM 368 - Sports Management
- PRM 475 - Entrepreneurial Recreation and Tourism
- PRM 486-Special Event Management

What you'll see on your DARS:

NOTE: Grade of C (2.00) or better required. Minimum 12 upper division hours required.
--> NEEDS: 18.00 HOURS 2 SUB-GROUPS

- 1) CORE - 6 hours NEEDS: 6.00 HOURS
COURSE LIST: PRM 120 PRM 424
- 2) ELECTIVES - 12 hours NEEDS: 12.00 HOURS
COURSE LIST: PRM 150 PRM 302 PRM 315 PRM 364
PRM 368 PRM 475 PRM 486


## RECREATION MANAGEMENT

College of Human Services
2008-2009
West, 602.543.6600

## Description:

The concentration consists of 12 semester hours of required courses and 6 semester hours of electives selected in consultation with a faculty advisor. At least 12 semester hours must be completed at West campus in upper division classes. To earn the concentration, students must complete all course work in the concentration with a minimum grade of $C$ (2.00).

## I. Core - 12 Hours

- RTM 120-Leisure and Quality of Life
- RTM 303 - Programming Recreation and Tourism Services
- RTM 304-Recreation and Tourism Areas and Facilities Management
- RTM 401-Administration of Recreation and Tourism Services
II. Electives - 6 Hours
- RTM 210 - Leisure Delivery Systems

OR

- PRM 210 - Community Services and Professions OR
- NLM 210 - Community Services and Professions OR
- TDM 210-Community Services and Professions OR
- RTM 301 - Leadership in Recreation and Tourism
- RTM 302-Recreation and Tourism for Diverse Populations OR
- PRM 302 - Inclusive Community Development OR
- NLM 302 - Inclusive Community Development OR
- TDM 302-Inclusive Community Development OR
- RTM 360 - Policy, Planning, Development of Recreation and Tourism Resources
- RTM 402 - Evaluation and Assessment in Recreation and Tourism OR
- PRM 402-Assessment and Evaluation of Community Services OR
- NLM 402-Assessment and Evaluation of Community Services OR
- TDM 402 - Assessment and Evaluation of Community Services
- RTM 403-Professional Development Seminar
- RTM 404-Marketing Recreation and Tourism
- RTM 450 - Leisure and Aging
- RTM 451-Grant Writing for Human Service Professionals
- RTM 453-Volunteer Management in Human Service Organizations OR
- NLM 310-Volunteer Management
- RTM 454 - Human Services for At-Risk Youth
- RTM 475 - Entrepreneurial Recreation and Tourism OR
- PRM 475-Entrepreneurial Recreation and Tourism
- RTM 484-Internship

OR

- PRM 463-Senior Internship

OR

- NLM 463-Senior Internship OR
- TDM 463-Senior Internship
- RTM 486-Special Events Management OR
- PRM 486-Special Events Management
- RTM 494 [*LEAD*A*PROF*DEV*] - Special Topics


## What you'll see on your DARS:

18 HOURS, MINIMUM 12 UPPER DIVISION
***9 HOURS OF UPPER DIVISON MUST BE COMPLETED AT ASU*** MINIMUM "C" (2.00) GRADE
*** NOT AVAILABLE TO RECREATION \& TOURISM
MANAGEMENT MAJORS ***
--> NEEDS: 2 SUB-GROUPS

- 1) Core-12 Hours NEEDS: 12 HOURS 4 COURSES
COURSE LIST: RTM 120 OR REC 120 RTM 303 RTM 304
RTM 401
- 2) Recreation Management Electives - 6 Hours

SELECT IN CONSULTATION WITH A RECREATION AND TOURISM MANAGEMENT FACULTY ADVISOR Choose two courses from the following: NEEDS: 6.00 HOURS
COURSE LIST: RTM 210 OR REC 210 OR PRM 210 OR NLM 210
OR REC 160 OR TDM 210 OR REC 160 RTM 301 OR
REC 301 RTM 302 OR REC 302 OR PRM 302 OR NLM 302
OR TDM 302 OR REC 494 [*INCL*COMM*DEV*] RTM 345
RTM 360 RTM 402 OR REC 482 OR PRM 402 OR NLM 402
OR TDM 402 RTM 403 OR REC 403 RTM 404 OR REC 404
OR REC 350 RTM 450 RTM 451 RTM 453 OR NLM 310
RTM 454 RTM 475 OR PRM 475 OR
REC 494 [*COM*A*REC*A*TO*] RTM 484 OR REC 463 OR
PRM 463 OR NLM 463 OR TDM 463 RTM 486 OR PRM 486
OR REC 494 [*SPEC*EVE*MAN*]
RTM 494 [*LEAD*A*PROF*DEV*]

## PUBLIC RELATIONS \& STRATEGIC COMMUNICATION

College of Human Services
2008-2009
West; 602.543.6600

## Description

The Department of Communication Studies prepares professionals with highly effective communication skills-speaking, writing, cultural sensitivity, critical thinking, problem solving, and conflict management-through a number of academic program options.

## Program Requirements

The Public Relations and Strategic Communications concentration 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 concentration consists of 18 semester hours upper-division course work, including nine semester hours of required course work and nine semester hours of electives.

## I. Core - Needs 9 hours of the following:

- COM 320-Communication and Consumerism

OR

- CMN 320 - Communication and Consumerism
- COM 329 - Persuasion

OR

- CMN 329-Persuasion
- CMN 353 - Professional Communication
- CMN 454 - Rhetorical and Critical Approaches to Public Relations
II. Electives - 9 Hours

See an advisor for list
--> NEEDS: 18.00 HOURS 2 SUB-GROUPS
18 SEMESTER HOURS UPPER DIVISION COURSEWORK

- 1) At least three courses from the following:

NEEDS: 9.00 HOURS 3 COURSES
COURSE LIST: COM 320 OR CMN 320 COM 329 OR CMN 329
COM 353 OR CMN 353 COM 454 OR CMN 454
2) Electives - 9 hours

Select courses in consultation with an advisor NEEDS: 9.00 HOURS

PUBLIC ADMINISTRATION \& PUBLIC MGT
College of Public Programs
2008-2009
University Center, Room 400, Ph: 602.496.0468

## Description:

The Concentration in Public Administration and Public Management prepares students for citizenship, leadership, and careers in governmental agencies and nonprofit organizations. It is for students interested in public service who want to:

- deliver and manage public programs
- reform welfare
- provide public safety
- preserve natural resources
- improve the quality of life
- build and bridge communities
- strengthen democratic governance
- analyze critical issues
- Lead change in public policy.


## Requirements

The Concentration in Public Administration and Public Management consists of 18 credit hours of coursework. Students take 12 hours of core courses and 6 hours of elective courses. The 6 hours of elective courses may be selected from a list of elective courses, or taken upon the recommendation of the Concentration Advisor.

## I. Core - Needs 12 Hours:

PAF 300 - Public Management and Administration
PAF 340 - Public Management and Policy
PAF 420 - Public Leadership
PAF 460 - Public Service Ethics
II. Electives - Needs 6 Hours:
A. ANTHROPOLOGY:

- ASB 416 - Economic Anthropology
- ASB 417 - Political Anthropology
B. COMMUNICATION:

COM 426 - Political Communication
COM 430 - Leadership in Group Communication
C. GEOGRAPHY:

- GCU 352 - Political Geography
- GCU 357 - Social Geography
- GCU 361 - Urban Geography
- GCU 421 - Geography of Arizona and Southwestern United States
D. HISTORY:
- HST 344 - DNE
E. JUSTICE STUD:
- JUS 303 - Justice Theory
F. MANAGEMENT:
- MGT 380-Management and Strategy for Nonmajors
G. MASS COMM:
- MCO 460 - Race, Gender, and Media
H. PHILOSOPHY:

PHI 306 - Applied Ethics
I. PLAN/LAND ARCH:

- HUD 402 - Comm Revitalization:Prob/Strat
- PUP 420 - Theory of Urban Design
- PUP 424 - Planning Methods
- PUP 442 - Environmental Planning
J. POLITICAL SCI:

POS 310-American National Government

- POS 316- State and Local Government
- POS 346- Problems of Democracy
- POS 410 - Governing American Cities
- POS 426 - Elements of Public Policy
- POS 439 - Minority Group Politics in America
- POS 442 - American Political Thought
- POS 485 - Political Economy
K. PUBLIC AFFAIRS:
- any PAF undergraduate course
L. REC MGT TOUR:
- REC 430 - DNE
M. SOCIOLOGY:
- SOC 456 - Political Sociology
- SOC 486 - Contemporary Theory
N. WOMENS STUD:
- WST 380-Gender, Race, and Class


## What you'll see on your DARS:

NOTE: Grade of "C" (2.00) or better required.
Minimum 12 hours upper division.

- 1) CORE - 12 Hours

NEEDS: 12.0 HOURS
COURSE LIST: PAF 300 PAF 340 PAF 420 PAF 460

- 2) ELECTIVES - 6 Hours

NEEDS: 6.0 HOURS
COURSE LIST: ANTHROPOLOGY: ASB 416 ASB 417
COMMUNICATION: COM 426 COM 430
GEOGRAPHY: GCU 352 GCU 357 GCU 361 GCU 421
HISTORY: HST 344
JUSTICE STUD: JUS 303
MANAGEMENT: MGT 380
MASS COMM: MCO 460
PHILOSOPHY: PHI 306
PLAN/LAND ARCH: HUD 402 PUP 420 PUP 424 PUP 442
POLITICAL SCI: POS 310 POS 316 POS 346 POS 410
POS 426 POS 439 POS 442 POS 485
PUBLIC AFFAIRS: any PAF undergraduate course
REC MGT TOUR: REC 430
SOCIOLOGY: SOC 456 SOC 486
WOMENS STUD: WST 380

PSYCHOLOGY
New College of Interdisciplinary Arts \& Sciences
2008-2009
West Campus
FAB, Rooms N203 \& N207, Ph: 602.543.6058

## Description:

- Maximum of three hours of research (PGS 399 and PGS/PSY 499) may be applied to meet concentration requirements
- Students with appropriate equivalent may exclude PSY 230 and PSY 290 with prior approval from a SBS advisor
- PGS 484 may be taken for elective credit only
- All coursework within the concentration must be passed with a minimum grade of "C" (2.00)
- At least nine upper-division hours must be completed from the New College of Interdisciplinary Arts and Sciences
I. Foundations of Psychological Science - 9 Hours

PGS 101 - Introduction to Psychology
PSY 230 - Introduction to Statistics
PSY 290 - Research Methods
II. Social and Developmental Core - 3 Hours

PGS 315 - Personality Theory and Research
PGS 341 - Developmental Psychology
PGS 350 - Social Psychology
III. Neuroscience Core - 6 Hours (choose two courses)

PSY 323 - Sensation and Perception
PSY 324 - Memory and Cognition
PSY 325 - Physiological Psychology
PSY 330 - Statistical Methods
PSY 369 - Biology of Human Sexuality
PSY 470 - Psychopharmacology
IV. Upper Division - 3 Hours

PGS 3 - any 300-level PGS course
PGS 4 - any 400-level PGS course
PSY 3 - any 300-level PSY course
PSY 4 - any 400-level PSY course

What you'll see on your DARS:
22 HOURS, MINIMUM "C" (2.00) GRADE
--> NEEDS: 22.00 HOURS 4 SUB-GROUPS

- 1) Foundations of Psychological Science - 3 Courses NEEDS: 9 HOURS 3 COURSES COURSE LIST: PGS 101(R) PSY 230(R) PSY 290(R)
- 2) Social \& Developmental Core: NEEDS: 3.00 HOURS 1 COURSE COURSE LIST: PGS 315 PGS 341 PGS 350
- 3) Neuroscience Core (Choose two courses) NEEDS: 6.00 HOURS 2 COURSES
COURSE LIST: PSY 323 PSY 324 PSY 325 PSY 330 PSY 369 PSY 470
- 4) Upper Division Psychology - 3 Hours Maximum 3 Hours of PGS 399, PGS 499 and PSY 499 may be used NEEDS: 3.00 HOURS COURSE LIST: PGS PSY

PSYCHOLOGY<br>College of Liberal Arts \& Sciences<br>2008-2009<br>Psychology Building, Room 236A, Ph 480.965.7258

## Description

Psychology focuses on appreciating and valuing the life of the mind and understanding the human condition from a scientific, psychological point of view. Students completing the concentration 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 fundamental 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 inside and outside of Psychology and engage on a daily basis their increasingly complex, information-rich world.

## Program Requirements

The concentration in Psychology consists of completing the 22 semester hours of course work in the foundations of psychology and the breadth categories described below.
Students must complete the specified psychology courses with grades of C or better.

## Required Courses

I. Foundations of Psychology-All are required (10 hours):

- PGS 101 - Introduction to Psychology
- PSY 230 - Introduction to Statistics
- PSY 290 - Research Methods
II. Breadth-Select one course from four of the five clusters ( 12 hours):


## Personality:

- PGS 315-Personality Theory and Research

OR

- PGS 466-Abnormal Psychology


## Cognitive:

$\circ$ PSY 320 - Learning and Motivation
OR

- PSY 323 - Sensation and Perception

OR

- PSY 324-Memory and Cognition

Developmental:

- PGS 341 - Developmental Psychology

Social:

- PGS 306 - Environmental Psychology


## OR

- PGS 350-Social Psychology OR
- PGS 351 - Honors Social Psychology

Biological:

- PSY 325 - Physiological Psychology


## What you'll see on your DARS:

NOTE: Grade of C (2.00) or better required. Minimum 12 upper division hours required.
--> NEEDS: 22.00 HOURS 2 SUB-GROUPS

- 1) FOUNDATIONS OF PSYCHOLOGY - 10 hours NEEDS: 10.00 HOURS
COURSE LIST: PGS 101(R) PSY 230(R) PSY 290(R)
- 2) BREADTH - 12 upper division hours

Select one course from four of the five clusters
NEEDS: 12.00 HOURS 4 COURSES
COURSE LIST: PERSONALITY: PGS 315 OR PGS 466
COGNITIVE: PSY 320 OR PSY 323 OR PSY 324
DEVELOPMENTAL: PGS 341
SOCIAL: PGS 306 OR PGS 350 OR PGS 351
BIOLOGICAL: PSY 325

POLITICAL SCIENCE
New College of Interdisciplinary Arts \& Sciences
2008-2009
West Campus
FAB, Rooms N203 \& N207, Ph: 602.543.6058

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18 HOURS REQUIRED
Minimum 12 Hours Upper Division
Maximum 3 Hours of POL 484 Internship \&
3 Hours of POL 499 Individualized Instruction
```


## Description:

- The minor in Political Science consists of 18 semester hours in POL courses, 12 hours of which must be in upper division courses.
- All coursework within the minor must be completed with a minimum grade of "C" (2.00)
- At least nine upper-division hours must be completed from the New College of Interdisciplinary Arts and Sciences
I. Political Science Minor - 9 Hours

POL 101 - Political Ideologies
OR
POL 340 - Political Theory
POL 110 - Government and Politics
OR
POL 310 - American National Government: Ideas \& Institutions
POL 160 - Global Politics
OR
POL 360 - World Politics Theory
II. Electives $\mathbf{-} 9$ Hours

POL 101 - Political Ideologies
OR
POL 340 - Political Theory
POL 3 - any POL 300-level course
POL 4 - any POL 400-level course

## What you'll see on your DARS:

--> NEEDS: 18.00 HOURS 2 SUB-GROUPS

- 1) Political Science Minor 3 HOURS MUST BE UPPER DIVISION NEEDS: 9.00 HOURS 3 COURSES
COURSE LIST: POL 101 OR POL 340 POL 110 OR POL 310 POL 160 OR POL 360
- 2) Political Science Electives - 9 Hours NEEDS: 9.00 HOURS 3 COURSES -> NOT FROM: POL 110 OR POL 310 POL 160 OR POL 360 COURSE LIST: POL 101 OR POL 340 POL 3 POL 4

POLITICAL SCIENCE<br>College of Liberal Arts \& Sciences<br>2008-2009<br>Coor Hall, $\mathbf{6}^{\text {th }}$ Floor, Ph: 480.965.655

## Description:

The concentration in Political Science consists of 18 semester hours in political science courses, 12 hours of which must be upper-division courses. Students with a concentration in Political Science must have two courses from among the following, in addition to four POS electives:

- POS 210 Political Ideologies SB 3
- 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

Students must complete all courses for the concentration with grades of "C" (2.00) or higher. No more than three hours of POS 484 Internship and three hours of POS 499 Individualized Instruction may be applied to the concentration. A minimum of six upper division hours in the concentration must be taken in residence at the Tempe campus.
I. Political Science Core-choose 2 of the following ( 6 hours):

- POS 210-Political Ideologies
- POS 110-Government and Politics

OR

- POS 310-American National Government
- POS 150-Comparative Government
- POS 160-Global Politics
II. Political Science Electives ( 12 Hours):
- 9-12 upper division credits required
- POS 311 cannot be used the Political Science concentration

What you will see on your DARS:

NOTE: Grade of C (2.00) or better required.
Minimum 12 upper division hours required.
--> NEEDS: 18.00 HOURS 2 SUB-GROUPS

- 1) CORE - 6 hours

NEEDS: 6.00 HOURS
COURSE LIST: POS $210($ (SP07 or after) POS 110 OR POS 310 POS 150 POS 160

- 2) ELECTIVES - 12 hours

9 to 12 upper division hours required to meet the
12 hour upper division POS requirement.
Maximum of 3 hours of POS 484 (or any internship) may be used.
NEEDS: 12.00 HOURS
-> NOT FROM: POS 311
COURSE LIST: POS 1 POS 2 POS 3 POS 4

PHYSICS
College of Liberal Arts \& Sciences
2008-2009
Physical Science F-Wing, Room 470, Ph: 480.965.3561
I. Core - 8 Hours

PHY 150 - Physics I
OR
PHY 121 - University Physics I: Mechanics
PHY 122 - University Physics Laboratory I
PHY 151 - Physics II (4 cr.)
OR
PHY 131 - University Physics II: Electricity and Magnetism
PHY 132 - University Physics Laboratory II
II. Core - 18 Hours

PHY 201 - Mathematical Methods in Physics I
PHY 252 - Physics III
PHY 302 - Mathematical Methods in Physics II
PHY 310 - Classical Particles, Fields, and Matter I
PHY 311 - Classical Particles, Fields, and Matter II
PHY 314-Quantum Physics I
III. Electives -3 Hours

PHY 3 - any 300 -level class
PHY 4 - any 400 -level class

## What you'll see on your DARS:

NOTE: Grade of C (2.00) or better required.
Minimum 12 upper division hours required.
--> NEEDS: 29.00 HOURS

- 1) CORE - 8 hours

PHY 121 \& 122 and PHY $131 \& 132$ can be taken in lieu of PHY 150 \& 151
NEEDS: 8.00 HOURS
COURSE LIST: PHY 150 PHY 151

- 2) CORE - 18 hours

NEEDS: 18.00 HOURS
COURSE LIST: PHY 201(R) PHY 252(R) PHY 302(R)
PHY 310(R) PHY $311(\mathrm{R})$ PHY 314(R)
3) UPPER DIVISION ELECTIVES - 3 hours NEEDS: 3.00 HOURS
COURSE LIST: PHY 3 PHY 4

PHILOSOPHY
New College of Interdisciplinary Arts \& Sciences
2008-2009
West Campus
FAB, Room N276, Ph: 602.543.7003

## Nature of Program

The concentration is designed to provide students with an understanding of central philosophical issues. The concentration provides students with knowledge of the most important problems and ideas in the philosophical areas studied; a capacity for critical thinking and analytical reasoning; and the ability to present one's positions effectively through oral and written communication.

## Program Requirements:

The concentration in Philosophy consists of 21 semester hours of philosophy course work, of which 15 must be upper-division hours. Fifteen semester hours of campus resident credit is required. Only courses in which the student earns a grade of "C" (2.00) or higher will fulfill requirements for the minor. Courses are to be selected from the following list in consultation with a philosophy advisor to create a coherent and complete program of study.

## I. Core - 21 Hours (choose 7 courses)

- PHI 101-Introduction to Philosophy
- PHI 103-Principles of Sound Reasoning
- PHI 306-Applied Ethics
- PHI 340 - Bioethics

OR

- IAS 340-Bioethics
- PHI 360-Business and Professional Ethics
- PHI 406-Moral Dilemmas
- PHI 407-Environmental Philosophy and Policy

OR

- IAS 407 - Environmental Philosophy and Policy
- PHI 408-Feminist Ethics

OR

- IAS 408-Feminist Ethics
- IAS 411-History and Philosophy of Mathematics OR
- MAT 411 - History and Philosophy of Mathematics
- IAS 484 - Internship
- PHI 494-Special Topics

OR

- IAS 494-Special Topics
- PHI 499-Individualized Instruction OR
- IAS 499-Individualized Instruction


## What you'll see on your DARS:

```
21 HOURS, MINIMUM 15 UPPER DIVISION
15 HOURS REQUIRED AT ASU
*** MINIMUM "C" (2.00) GRADE ***
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NOTE: SELECT COURSES IN CONSULTATION WITH A
PHILOSOPHY FACULTY ADVISOR
*** SIX HOURS MAXIMUM IN INTERNSHIP AND ***
*** INDIVIDUALIZED INSTRUCTION ***
--> NEEDS: 21.00 HOURS 1 SUB-GROUP

- 1) SELECT 21 HOURS FROM THE FOLLOWING COURSES: NEEDS: 21.00 HOURS
COURSE LIST: PHI 101 PHI 103 PHI 306 PHI 340 OR IAS 340 PHI 360 PHI 406 OR IAS 406 PHI 407 OR IAS 407 PHI 408 OR IAS 408 IAS 411 OR MAT 411 IAS 484 PHI 494 OR IAS 494 PHI 499 OR IAS 499

BIS Concentration Check Sheet

PHILOSOPHY
College of Liberal Arts \& Sciences
2008-2009
Coor Hall, Room 3305, Ph: 480.965.2933

## Description:

A concentration in Philosophy consists of 18 semester hours, of which at least 12 must be upper division. All courses must be passed with a minimum grade of "C". No more
than two courses may be taken in any one philosophical sub-discipline, which include:

- Metaphysics
- Epistemology
- Logic
- History of Philosophy
- Ethics / Political Philosophy
I. Upper Division - 12 Hours

PHI 3 - any 300-level PHI course
PHI 4 - any 400 -level PHI course
II. Electives - 6 Hours

PHI 1 - any 100-level PHI course
PHI 2 - any 200-level PHI course
PHI 3 - any 300 -level PHI course
PHI 4 - any 400 -level PHI course

## What you'll see on your DARS:

```
--> NEEDS: 18.00 HOURS 2 SUB-GROUPS
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NOTE: Grade of C (2.00) or better required.
Minimum 12 upper division hours required.

- 1) UPPER DIVISION - 12 hours NEEDS: 12.00 HOURS
COURSE LIST: PHI 3 PHI 4

2) ELECTIVES - 6 hours

NEEDS: 6.00 HOURS
COURSE LIST: PHI 1 PHI 2 PHI 3 PHI 4

```
PARKS AND PROTECTED AREA MANAGEMENT
College of Public Programs
2008-2009
Downtown, Ph: 602.496.0550
```


## Description:

As the Southwest continues to develop and urbanize, the demands and pressures on our public lands and natural resources will grow. The interplay between society and natural resources is key to understanding modernity and will continue be at the center of policy issues and quality of life debates in the West. The concentration in Parks and Protected Area Management will introduce you to the role of parks and protected areas, with a focus on the unique issues faced by urban-proximate natural area managers.
The concentration 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.

## Completion of a concentration in Parks and Protected Area Management requires the following:

1. 18 hours of graded classroom course work (no internship, no independent study).
2. 15 hours of course work at the upper division level, from the approved list.
3. " C " minimum grade required for all classes in the concentration.
4. A minimum GPA of 2.00 .
5. Must be a junior to take 400 level courses.
6. No double counting of courses for both BIS concentrations.
I. Core - 12 Hours

PRM 120 - Leisure and the Quality of Life
PRM 370 - Natural Resource Recreation Planning/Management
PRM 380 - Wilderness and Parks in America
TDM 480 - Nature Based Tourism
II. Electives - 3 Hours

PRM 301 - Sustainable Communities
PRM 340 - Outdoor Survival
PRM 470 - Environmental Education and Interpretation
TDM 448 - Heritage and Cultural Tourism

What you'll see on your DARS:
NOTE: Grade of C (2.00) or better required.
Minimum 9 upper division hours required.
--> NEEDS: 15.00 HOURS 2 SUB-GROUPS

- 1) CORE - 12 hours NEEDS: 12.00 HOURS COURSE LIST: PRM 120 PRM 370 PRM 380 TDM 480
- 2) ELECTIVES - 3 upper division hours NEEDS: 3.00 HOURS
COURSE LIST: PRM 301 PRM 340 PRM 470 TDM 448

BIS Concentration Check Sheet

HUMAN NUTRITION
ASU Polytechnic: East College
2008-2009
HSC 1386, (480) 727-1728

## Description:

The human nutrition concentration provides a sound foundation in the basic sciences and nutrition, but no food service courses are required. This program would be useful to students seeking further education in allied health or medical fields.

- Courses Include:
- NTR 241 - Human Nutrition* (3)
- NTR 341 - Intro to Planning Therapeutic Diets (3)
- NTR 340-Applications in Human Nutrition (3)
- NTR 440 - Advanced Human Nutrition I (3)
- NTR 441 - Advanced Human Nutrition II (3)
- NTR 444 - Medical Nutrition Therapy (3)
*- Classes offered on both Tempe and Polytechnic Campus
Program Requirements
I. Core courses - $\mathbf{1 8}$ Hours
- NTR 241 - Human Nutrition* (3)
- NTR 341 - Intro to Planning Therapeutic Diets (3)
- NTR 340 - Applications in Human Nutrition (3)
- NTR 440 - Advanced Human Nutrition I (3)
- NTR 441 - Advanced Human Nutrition II (3)
- NTR 444 - Medical Nutrition Therapy (3)

NONPROFIT ADMINISTRATION

College of Public Programs<br>2008-2009<br>University Center, Room 550, Ph: 602.496.0167

For a dynamic career in the nonprofit sector, there is no better undergraduate education and preparation than earning an American Humanics certificate. Arizona State University is one of the leading programs in the nation that offers this preferred national certification in Nonprofit Youth and Human Service Leadership and Management. It can be earned:

- in conjunction with a Bachelor of Interdisciplinary Studies (B.I.S.) Nonprofit Administration available through the School of Letters and Sciences


## Courses:

- NLM 160 - Voluntary Action and Community Leadership
- NLM 220 - Introduction to Nonprofit Organizations

Four classes from list below

- NLM 300 - Fund Raising and Resource Development
- NLM 301 - Sustainable Communities
- NLM 302 - Inclusive Community Development
- NLM 310 - Volunteer Management
- PRM 424 - Recreation Program Management
- NLM 435 - Service Learning for Community Development
- PRM 486 - Special Events Management
- NLM 494 - Special Topics, as approved by CRD advisor

MUSIC
Herberger College of the Arts
2008-2009
Music E185, Ph: 480.965.3371

## Description

The Music concentration 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 BIS concentration in Music consisting of 21 semester hours of course work. A minimum grade of $C(2.00)$ is required in all courses.

## Required Courses (9 credits)

- MHL 201 Mac Literacy for Musicians* (3)
- MUP 100 Concert Attendance (four semesters)** (0)
- MUS 100 Fundamentals of Music Notation (3)
- MUS 340 Survey of Music History (3)
* The online version of this course is required
** Requires 4 semesters to complete this requirement


## Music History (6 credits)

Choose two of the following five courses:

- MUS 347 Jazz in America (3)
- MUS 355 Survey of American Music (3)
- MUS 356 Survey of Musical Theatre (3)
- MUS 410 History of Women in Music (3)


## Electives ( 6 credits)

Choose two of the following five courses:

- 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)

Please contact the School of Music for more information: http://music.asu.edu/students/current/undergrad/minorinfo.php.

The B.I.S. option requires 18 hours to include:

- TWC301 General Principles of Multimedia Writing
- TWC401 Principles of Technical Communication
- One (1) of the other core courses:
- TWC411 Principles of Visual Communication
- TWC421 Principles of Writing with Technology
- TWC431 Principles of Technical Editing
- Three (3) other 400 level TWC courses at least two (2) of which must be genre courses, such as TWC443 Proposal Writing or TWC447 Business Reports.
- In addition, students must take the B.I.S. Capstone course


## I. Core - $\mathbf{6}$ Hours

TWC301 General Principles of Multimedia Writing
TWC401 Principles of Technical Communication
II. Options - 3 Hours

TWC431 Principles of Technical Editing
TWC443 Proposal Writing
TWC447 Business Reports
III. Genre Courses - 6 Hours

TWC 44_
IV. 400-level Elective

TWC 4 - any TWC 400-level course

## What you'll see on your DARS:

NOTE: Grade of C (2.00) or better required.
--> NEEDS: 18.00 HOURS

- 1) CORE - 6 hours

NEEDS: 6.00 HOURS
COURSE LIST: TWC 301(R) TWC 401(R)

- 2) OPTIONS - 3 hours

Select one course from the list
NEEDS: 3.00 HOURS
COURSE LIST: TWC 411 TWC 421 TWC 431

- 3) GENRE COURSES - 6 hours

Select two technical genre courses
NEEDS: 6.00 HOURS
COURSE LIST: TWC 44
4) 400-LEVEL ELECTIVE - 3 hours

Select any 400 -level course not used above NEEDS: 3.00 HOURS
COURSE LIST: TWC 4

MEDIEVAL \& RENAISSANCE STUDIES
College of Liberal Arts \& Sciences
2008-2009
PH: 480.965.5900

NOTE: Grade of C (2.00) or better required.
Minimum 12 upper division hours required.
NOTE: Students may also pursue the certificate in Medieval \& Renaissance Studies. See Medieval \& Renaissance Studies advisor for details.
I. Latin - 6 to $\mathbf{8}$ Hours

LAT 101 - Elementary Latin
LAT 102 - Elementary Latin
LAT 201 - Intermediate Latin I
LAT 202 - Intermediate Latin II
LAT 3 - any 300 -level LAT course
LAT 4 - any 400 -level LAT course
LAT 5 - any 500 -level LAT course
II. Language - $\mathbf{6}$ to $\mathbf{8}$ Hours

LAT 201 - Intermediate Latin I
LAT 202 - Intermediate Latin II
LAT 3 - any 300 -level LAT course
LAT 4 - any 400 -level LAT course
LAT 5 - any 500 -level LAT course
FRE 321 - French Literature
FRE 415 - French Civilization I
ITA 430 - Italian Literature of the Middle Ages
ITA 441 - Dante: Divina Commedia
ITA 443 - Italian Literature of the Renaissance
FRE 3 -
FRE 4 -
ITA 3-
ITA 4 -
SCA 314 -
SCA 315 - Old Norse
ENG 530 - Old English
ENG 531 - Old English Literature
III. Electives - 6 upper division Hours

See an advisor for list
IV. Thesis - 3 Hours

See an advisor to discuss

What you'll see on your DARS:
--> NEEDS: 21.00 HOURS
4 SUB-GROUPS

- 1) LATIN - 6 to 8 hours NEEDS: 6.00 HOURS
COURSE LIST: LAT 101 LAT 102 LAT 201 LAT 202 LAT 3
LAT 4 LAT 5
- 2) LANGUAGE - 6 to 8 hours

See program advisor for additional course selections NEEDS: 6.00 HOURS
COURSE LIST: LAT 201 LAT 202 LAT 3 LAT 4 LAT 5
FRE 321 FRE 415 ITA 430 ITA 441 ITA 443
FRE 3 [*REN*] FRE 4 [*REN*] FRE 3 [*MEDIEVAL*]
FRE 4 [*MEDIEVAL*] ITA 3 [*REN*] ITA 4 [*REN*]
ITA 3 [*MEDIEVAL*] ITA 4 [*MEDIEVAL*] SCA 314
SCA 315 ENG 530 ENG 531

- 3) ELECTIVES - 6 upper division hours

See program advisor for list of acceptable courses
NEEDS: 6.00 HOURS
COURSE LIST: MRSEMPHX MRSEMPH3

- 4) THESIS - 3 hours

Arrange thesis in consultation with program advisor
NEEDS: 3.00 HOURS
COURSE LIST: MRSEMPH4

MATHEMATICS
New College of Interdisciplinary Arts \& Sciences
2008-2009
West Campus
FAB, Room N290C, Ph: 602.543.1650

## 27 HOURS, MINIMUM 9 HOURS IN MATHEMATICAL SCIENCES AND APPLIED COMPUTING DEPARTMENT

## Description:

The concentration in Mathematics explores the study of higher mathematics. It is designed to enable the student to understand the mathematics most commonly used in science, economics, and business. It is expected that students in the concentration will be able to reason, and to find creative solutions to problems that were either presented to them or meaningfully formulated by them. The concentration is recommended for students who plan to also have a concentration in integrative studies, life sciences, and business, as well as those who prepare for further graduate study.

## I. Core - 15 Hours

MAT 270 - Calculus with Analytic Geometry I
MAT 271 - Calculus with Analytic Geometry II
MAT 272 - Calculus with Analytic Geometry III
MAT 300 - Mathematical Structures
MAT 342 - Linear Algebra
II. Electives - 3 Courses

MAT 310 - Introduction to Geometry
MAT 371 - Advanced Calculus I
MAT 411 - History and Philosophy of Mathematics
MAT 443 - Abstract Algebra
MAT 445 - Theory of Numbers
STP 420 - Introductory Applied Statistics

What you'll see on your DARS:
--> NEEDS: 27.00 HOURS 2 SUB-GROUPS

1) Core - 5 Courses

NEEDS: 5 COURSES
COURSE LIST: MAT 270(R) MAT 271 (R) MAT 272(R) MAT 300(R) MAT 342(R)
2) Select 3 Courses NEEDS: 3 COURSES
COURSE LIST: MAT 310 MAT 371 MAT 411 MAT 443 MAT 445 STP 420

## IS Arizona State UNIVERSITY

BIS Concentration Check Sheet

## MATHEMATICS

College of Liberal Arts and Sciences
2008-2009
PSA 211, Ph: 480.727 .6590

## Description:

- The concentration in Mathematics consists of a minimum of 18 semester hours, 12 of which must be upper division ( 300 -level or higher).
- Electives must be upper-division courses in mathematics (MAT) or Statistics and Probability (STP). Students may not apply MAT 485 or a course not offered at the Tempe campus to the minor, unless otherwise approved by a department advisor.


## Required courses are as follows:

- 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) Total 9-11


## Electives:

- 9 hours chosen in consultation with an advisor Total 9

Total credits 18-20

LITERATURE, WRITING, AND FILM
School of Applied Arts and Sciences
2008-2009
Ph: 480-727-1333

NOTE: Grade of C (2.00) or better required.
Minimum 12 upper division hours required.

## Description:

The concentration in Literature, Writing, and Film at Arizona State University offers students the opportunity to develop their skills in professional, academic and imaginative writing, as well as their interpretation of literary and non-literary texts and critical thinking. The focus of the program is on effective writing, critical thinking, and sophisticated reading of literary and non-literary texts. The program stresses cultural and information literacy. It encourages the study of texts in their cultural context, and stresses the role of media and technology in the reading process.

## BIS Concentration (18-21 hours)

- ENG 200 (3 semester hours)
- $\quad 9$ semester hours of focus-area courses in their chosen track
- 6-9 semester hours of electives


## I. Core - 3 Hours

ENG 200 - Critical Reading and Writing about Literature
II. Focus Area - 9 Hours
A. English for Secondary Teachers

- ENG 221 Survey of English Literature
- ENG 222 Survey of English Literature
- ENG 241 Literatures of the United States to 1860
- ENG 242 Literatures of the United States, 1860-Present
- ENG 314 Modern Grammar
- ENG 321 Introduction to Shakespeare
- ENG 333 American Ethnic Literature
B. Imaginative Writing, Literature, and Digital Publishing
- ENG 204 Introduction to Contemporary Literature
- ENG 210 Introduction to Creative Writing
- ENG 310 Intermediate Creative Writing
- ENG 411 Advanced Creative Writing
- ENG 412 Creative Nonfiction
C. Literature and Film
- ENG 221 Survey of English Literature
- ENG 222 Survey of English Literature
- ENG 241 Literatures of the United States to 1860
- ENG 242 Literatures of the United States, 1860-Present
- ENG 321 Introduction to Shakespeare
- ENG 365 History of Film
- ENG 385 Career Development for English Majors
- ENH 430 Studies in International Film
- ENH 440 Director's Cinema
D. Pre-Law
- COM 222 Argumentation
- COM 225 Public Speaking
- ENG 216 Persuasive Writing on Public Issues
- ENG 472 Rhetorical Studies
- HST 321 Constitutional History of the United States to 1865
- HST 322 Constitutional History of the United States Since 1865
- PHI 306 Applied Ethics
E. Writing and Recording Family History
- CMS 360/394 Recording Oral Histories
- ENH 251/294 Introduction to Writing Family History
- ENH 320/394 Writing a Personal History
- ENH 322/394 Editing Family Writing for Public Audiences
- ENH 394 Special Topics in Writing Family History
- ENH 484 Capstone: Publication of a Family History (cross-listed with GIT 484)
- GIT 294 Special Topics: Introduction to Digital Photography
- GIT 303 Digital Publishing
- GIT 394 Web Site Development
- GIT 484 Senior Project (cross-listed with ENH 484)
- HST 325 Immigration and Ethnicity in the United States
- HTY 250/294 Introduction to Researching Family History
- HTY 394 Special Topics: Researching Family History
- TWC 301 General Principles of Multimedia Writing
- TWC 401 General Principles of Writing with Technology
F. Writing for Special Purposes
- ENG 215 Strategies for Academic Writing
- ENG 216 Persuasive Writing on Public Issues
- ENG 212 English Prose Style
- ENG 385 Career Development for English Majors
- ENG 472 Rhetorical Studies
- TWC 301 General Principles of Multimedia Writing
III. Electives - 6 Hours
A. English for Secondary Teachers
- ENG
- ENH
B. Imaginative Writing, Literature and Digital Publishing
- GIT 194 Introduction to Graphic Documents
- GIT 294 Introduction to Digital Photography
- GIT 210 Creative Thinking and Design Visualization
- GIT 237 Web Content Design,
- GIT 233 Digital Publishing
- GIT 333 Printing Technology
C. Literature and Film
- ENG
- ENH
- FMS
D. Pre-Law
- COM 326 Court Room Oratory
- HST 321 Constitutional History of the United States to 1865
- HST 322 Constitutional History of the United States Since 1865
- JUS 100 The Justice System
- JUS 200 Topics in Concepts and Issues of Justice
- LES 350 Legal, Ethical, and Regulatory Issues
- MCO 402 Mass Communication Law
- PGS 101 Introduction to Psychology
- POL 313 The Congress
- POL 417 The Arizona Political System
- REL 100 Religions of the World
- REL 320 Religion in America
- SOC 101 Introductory Sociology
- SOC 301 Principles of Sociology
- SOC 340 The Sociology of Deviance
- SOC 341 Modern Social Problems
- SOC 417 Family Violence
- SOC 424 Social Inequality (ASU West course)
- SOC 429 Sociology of Law
- SOC 446 Sociology of Crime
E. Writing and Recording Family History
- COM 241 Introduction to Oral Interpretation
- COM 316 Gender and Communication
- COM 344 Performance of Oral Traditions
- COM 411 Communication in the Family
- ENG 210 Introduction to Creative Writing
- ENG 217 Writing Reflective Essays
- ENG 333 Ethnic Literature
- GIT 194 Special Topics: Introduction to Graphic Documents
- GIT 230 Digital Illustration in Publishing
- GIT 314 Multimedia Design Planning and Storyboarding
- GIT 334 Image Capture and Manipulation
- GIT 337 Web Content Design
- GIT 352 Technical Presentations
- GIT 413 Professional Portfolio Design and Presentation
- GIT 414 Web Site Design and Internet/Web Technologies
- HST 210 American Social History
- HST 314 American Cultural History Since 1865
- HST 331 Mexican American History to 1900
- HST 332 Mexican American History Since 1900
- HST 333 African American History to 1865
- HST 334 African American History Since 1865
- HST 337 American Indian History to 1900
- HST 338 American Indian History Since 1900
- HST 344 Arizona
- TWC 451 Intellectual Property and Copyright
- TWC 452 Information in the Digital Age
F. Writing for Special Purposes
- ENG 412 Creative Nonfiction
- GIT 194 Introduction to Graphic Documents
- GIT 230 Digital Illustration in Publishing
- GIT 334 Image Capture and Manipulation
- GIT 337 Web Content Design
- GIT 414 Web Site Design and Internet/Web Technologies
- TWC 401 Principles of Technical Communication
- TWC 403 Writing for Professional Publication
- TWC 411 Principles of Visual Communication
- TWC 421 Principles of Writing with Technology


## What you'll see on your DARS:

--> NEEDS: 18.00 HOURS 3 SUB-GROUPS

- 1) CORE-3 hours

NEEDS: 3.00 HOURS
COURSE LIST: ENG 200

- 2) FOCUS AREA COURSES - 9 hours

NEEDS: 9.00 HOURS
COURSE LIST: LWFEMPHX LWFEMPHFA

- 3) RELATED ELECTIVES - 6 HOURS

NEEDS: 6.00 HOURS
COURSE LIST: LWFEMPHX LWFEMPHRE

LIFE SCIENCES
New College of Interdisciplinary Arts \& Sciences
2008-2009
West Campus
Ph: 602.543.6050

## I. Required Courses - 29 Hours

BIO 187 -General Biology I
BIO 188 - General Biology II
CHM 113-General Chemistry
CHM 116 -General Chemistry II
LSC 320 - Fundamentals of Ecology
OR
BIO 320 - Fundamentals of Ecology
LSC 322 - Fundamentals of Ecology Laboratory
LSC 347 - Fundamentals of Genetics
OR
BIO 340 - General Genetics
LSC 348 - Fundamentals of Genetics Laboratory
LSC 353 - Cell Biology
LSC 355 - Cell Biology Laboratory

## What you'll see on your DARS:

--> NEEDS: 29 HOURS 2 SUB-GROUPS

- 1) Required Courses

COURSE LIST: BIO 187 BIO 188 CHM 113(R) CHM 116(R)
LSC 320 OR BIO 320 LSC 322(R) LSC 347 OR BIO 340 LSC 348(R) LSC 353 OR BIO 353 LSC 355(R)

LESBIAN, GAY, BISEXUAL \& TRANSGENDER STUDIES
College of Public Programs
2008-2009
UASB 129, Ph: 480.965.4464
http://uc.asu.edu/LGBT/

## Curriculum

- The certificate requires fifteen credit hours; a minimum of twelve must be upper division.
- Students who are using the certificate as a concentration for the Bachelor of Interdisciplinary Studies degree offered through the School of Interdisciplinary Studies, University College, need to complete eighteen hours of course-work. Students in this degree program should select twelve hours of electives from the approved list.


## Descriptions of Required Courses

- Introduction to Lesbian, Gay, Bisexual, and Transgender Studies. The introductory course is taught at the 100 level and carries no prerequisites. The syllabus has been designed by a faculty committee and is divided into three topics: history, contemporary issues, and identity development. The purpose of the course is to introduce the students to key concepts, terms, and issues related to lesbian, gay, bisexual, and transgender people. Individual instructors create their own assignments and approach topics in unique ways, but regardless of who teaches the course, the foundations and key elements are addressed. Key elements include Stonewall, homophile movement, Hirschfeld, the Holocaust, The Well of Loneliness, Oscar Wilde, health, queer theory and politics, coming out, gender as a cultural construct, race/class/ethnicity, the closet, law and policy, transgender issues, transsexual issues, bisexuality, urban/ rural, religion and spirituality, celebrities in the media, and the Westernization of "gay" and "lesbian" cultures. The curriculum committee will provide instructors with resources for the course, including materials on the capstone experience and career development.
- Introduction to Lesbian, Gay, Bisexual, and Transgender Studies will be taught once each fall and spring semester on a rotation basis. The schedule will be updated each year. The course will be taught under the prefix of the host department (e.g., if the course is taught in Social Work, it will carry the SWU prefix); the course will not be cross-listed; and the SCH (student credit hours) will go to the host department. Capstone Experience. All students will complete a three credit- hour capstone experience after completing a minimum of nine credit hours in the certificate program. The capstone experience will be supervised by any member of the faculty approved by the Lesbian, Gay, Bisexual, and Transgender Studies Committee.
- The capstone experience should be an internship, community service project, or research apprenticeship that integrates curricular activities with each student's unique interests. The capstone experience should be based in principles of useinspired, transformative research or creative activity that bridges the student's curriculum with lived experiences of LGBT communities. Ideally, the capstone
experience integrates theory with experience, scholarship with change, and/or research with outcomes.


## I. Introduction - 3 Hours

SWU 194 - Topic: Introduction to LGBT Studies<br>II. Capstone - 3 Hours<br>SEE LGBT ADVISOR<br>III. Electives - 12 Hours<br>APA 330 - Asian Pacific American Genders and Sexualities<br>APA 494 - Asian Pacific American Genders and Sexualities<br>CCS 294 - Dynamics of Difference in a Transborder Context<br>COM 400 - Asian Pacific American Genders and Sexualities<br>COM 494 - Communicative Sexualities<br>ENG 430 - Studies in Victorian Literature and Culture: Victorian Sexuality<br>ENG 461 - Studies in Women and Literature<br>ENG/FLA 494-Queer Theory<br>ENG/FLA 494 - Queer Filmmaking<br>FLA 494-Gay Identities<br>FAS 330 - Human Sexuality<br>FMS 340 - Contemporary American Film and Popular Culture<br>FMS 460 - Masculinity and Film<br>HUM 331 - Sexuality, Race and Power<br>HUM 340 - Contemporary U.S. Film<br>HUM 494/598 - Gender and Sexuality in the Classical World<br>HUM 494/598 - Masculinity in Film<br>HUM 494 - Sexuality in the Media<br>JUS 329 - Domestic Violence<br>JUS 425 - Race, Gender, and Justice<br>JUS 460 - Feminism and Justice<br>JUS 494 - Justice Issues in Israel/Palestine<br>LAW 691-Sexual Orientation and the Law<br>SOC 361 - Variant Sexuality<br>SOC 363 - Sociology of Men and Masculinity<br>SWU 498 - Gender and Sexuality: Contemporary Issues<br>SWU 498 - Gay/Lesbian Issues

## What you'll see on your DARS:

NOTE: Grade of "C" (2.00) or better required.
Minimum 12 hours upper division.
Minimum 12 hours at ASU.
--> NEEDS: 18.00 HOURS

- 1) INTRODUCTION - 3 hours

NEEDS: 3.00 HOURS
COURSE LIST: *** 194 [*INTRO* LGBT*]

- 2) CAPSTONE - 3 hours

Select in consultation with your LGBT advisor.
NEEDS: 3.00 HOURS

- 3) ELECTIVES - 12 hours See your LGBT advisor for course options.

NEEDS: 12.00 HOURS

2008-09 Academic Catalog 1073

LEADERSHIP \& ETHICS
College of Public Programs
2008-2009
University Center, Room 400, Ph: 602.496.0468

## Description:

The concentration in Leadership and Ethics provides a catalyst for students with identified leadership potential to become ethical leaders of organizational and community change. This concentration is designed:

- to prepare individuals for positions of leadership and responsibility in the university, in their communities, and throughout their careers in business, government, and society;
- 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; and to
- provide students an understanding of change processes as they affect individuals, groups, and organizations throughout society, so that they might better learn to cope with and direct change in positive and beneficial ways.

All courses applied to the concentration must be completed with a grade of C or better.

- PAF 494 Building Leadership Skills (three credits): Introduction to developing leadership skills, including an assessment of the individual student's leadership skills, an examination of models of leadership and the skills and capacities required to lead successfully, and a series of activities in which students will reflect on the leadership lessons generated through their university experience.
- PHI 394 Ethics and Justice (three credits): An exploration of the ethical issues confronting contemporary leaders in the public, private, and nonprofit sectors, with special attention to the relationship between ethics and justice.
- PAF 494 Leadership and Change (three credits): An overview of the leader's role in bringing about significant and creative organizational and societal change, with special attention to establishing a vision, mobilizing and empowering individuals and groups, and assessing outcomes of the change process.
- PAF 494 Leadership Capstone (three credits): This course will engage students in specific service learning projects either on-campus or in the community and provide an opportunity for self-reflection and self-critique designed to enhance students overall leadership skills. Students will work directly with community mentors from the public, private, and nonprofit sectors on specific leadership projects that will test and refine their abilities to lead.
- Electives (six credits): leadership/ethics course within a substantive discipline. BUS/HON 497 Honors Colloquium (Leadership through Service)
COM 430 Leadership in Group Communication
MGT 300 Organizational Management and Leadership
PAF 420 Public Leadership
PAF 460 Public Service Ethics PAF 494 Leadership, Ethics, and Sports

PAF 494 Leadership and Communication
POS 314 The American Presidency
REC 430 Managing Nonprofit Organizations
SPF 498 Educational Leadership and Diversity in Sports

LATIN AMERICAN STUDIES
College of Liberal Arts \& Sciences
2008-2009
Coor Hall, Room 6633, Ph: 480.965.6994

## Description:

The Latin American Studies concentration 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 Schools of Human Evolution and Social Change and International Letters and Cultures (Spanish and Portuguese); and Transborder Chicana/o and Latina/o Studies offer courses that combine to make up the interdisciplinary concentration.

## Program Requirements:

Students must complete 33 semester hours of upper-division courses from the above departments/colleges with a concentration in Latin America-15 semester hours in the major subject and 15 semester hours in other disciplines. The program 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 area of preparation. Spanish and Portuguese courses above 313 in grammar and phonology do not count toward the major requirements.
I. Language - $\mathbf{3}$ Hours

- POR 313-Portuguese Composition and Conversation
- POR 314-Portuguese Composition and Conversation
- SPA 313-Spanish Conversation and Composition
- SPA 314-Spanish Conversation and Composition
- SPA 315-Spanish Conversation and Composition for Bilinguals
- SPA 316-Spanish Conversation and Composition for Bilinguals
- SPA 319-Business Correspondence and Communication
- SPA 412-Advanced Conversation and Composition
- SPA 413 - Advanced Spanish Grammar
- SPA 417-Spanish Phonetics and Phonology
- SPA 420 - Applied Spanish Linguistics
II. Content Courses - $\mathbf{3 0}$ Hours

APH 494 - Special Topics
ARS 394 - Special Topics
ARS 430 - Art of Spain and Its Colonies
ARS 494 - Special Topics
ARS 498 - Pro-Seminar
ASB 322 - Peoples of Mesoamerica
ASB 337 - Pre-Hispanic Civilization of Middle America
ASB 394-Special Topics
ASB 494 - Special Topics
ASB 494-Special Topics
DAN 394- Special Topics

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GCU 323- Geography of Latin America
GCU 423-Geography of South America
GCU 424- Geography of Mexico and Middle America
GCU 591 - Seminar
GCU 598 - Special Topics
HON 394 - Special Topics
HST 305 - Studies in Latin American History
HST 331 - Mexican American History to 1900
OR
TCL 331 -
HST 332 - Mexican American History Since 1900
HST 375 - Colonial Latin America
HST 376 - Modern Latin America
HST 377 - Women in Colonial Latin America
HST 378 - Latin American Women: The National Period
HST 379 - Rebellion and Revolution in South America
HST 380-Cultural History of Latin America
HST 443 - The United States and Latin America
HST 445-20th-Century Cuba
HST 446 - Colonial Mexico
HST 447 - Modern Mexico
INT 494 - Special Topics
MHL 668 - Introduction to Ethnomusicology
MUP 387 - Ethnomusicology Ensembles
POR 321 - Luso-Brazilian Literature
POR 472 - Luso-Brazilian Civilization
POR 494 - Special Topics
REL 332 - South American Indian Religions
REL 494 - Special Topics
REL 498 - Pro-Seminar
SLC 494 - Special Topics
SPA 427 - Spanish American Literature
SPA 428 - Spanish American Literature
SPA 429 - Mexican Literature
SPA 454-19th-Century Spanish American Narrative
SPA 456-20th-Century Spanish American Fiction
SPA 471 - Civilization of the Spanish Southwest
SPA 472 - Spanish American Civilization
SPA 474 - Mexican Culture
SPA 494 - Special Topics
THE 426 - Theatre of the Americas
THE 494 - Special Topics
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## What you'll see on your DARS:

NOTE: Grade of C (2.00) or better required. Minimum 12 upper division hours required.

NOTE: Students may also pursue the certificate in Latin American Studies. See Latin American Studies advisor for details.
--> NEEDS: 33.00 HOURS
2 SUB-GROUPS

- 1) LANGUAGE - 3 hours

Proficiency through the 313 level is required.
NEEDS: 3.00 HOURS
COURSE LIST: POR 313 POR 314 SPA 313 SPA 314
SPA 315 SPA 316 SPA 319 SPA 412 SPA 413 SPA 417
SPA 420

- 2) CONTENT COURSES - 30 upper division hours in Latin

American content. Select courses in consultation with Latin American Studies advisor.
NEEDS: 30.00 HOURS
COURSE LIST: APH 494 [*LATIN AMERICA*] ART 302
ARS 394 [*PRE*COLUMBIAN*] ARS 430 OR ARS 530
ARS 494 [*AZTECS*] OR ARS 598 [*AZTECS*]
ARS 494 [*MEXICAN*] OR ARS 593 [*MEXICAN*]
ARS 498 [*PRE*COLUMBIAN*] OR
ARS 591 [*PRE*COLUMBIAN*]
ARS 498 [*LATIN AMERICAN*] OR
ARS 591 [*LATIN AMERICAN*] ARS 498 [*BORDER*] OR
ARS 591 [*BORDER*] ASB 322 ASB 337
ASB 394 [*PRE*COLUMBIAN] ASB 494 [*AZTECS*] OR
ASB 598 [*AZTECS*] ASB 494 [*ANDEAN*] OR
ASB 598 [*ANDEAN*] ASB 498 DAN 394 [*BRAZIL*]
DAN 394 [*CARIBBEAN*] GCU 323 GCU 423 GCU 424
GCU 583 GCU 591 GCU 598 HON 321
HON 394 [*LATIN AMERICA*] HON 395
HON 494 [*LATIN AMERICAN*] HST 305 HST 331 OR
TCL 331 HST 332 HST 375 HST 376 HST 377 HST 378
HST 379 HST 380 HST 443 HST 445 HST 446 HST 447
INT 494 MHL 668 MUP 387 [*LATIN*]
MUP 387 [*MARIACHI*] POR 321 POR 394 [*BRAZILIAN*]
POR 472 POR 494 [*BRAZILIAN*] POS 453 REL 332
REL 430 REL 494 [*ANDEAN*]
REL 498 [*SPANISH AMERICA*] SLC 494 [*ANDEAN*]
SLC 494 [*QUICHUA LANGUAGE*]
SPA 394 [*MEXICO TODAY*] SPA 427 SPA 428 SPA 429
SPA 454 SPA 456 SPA 471 SPA 472 SPA 474
SPA 494 [*MEXICAN*] SPA 494 [*LATIN AMERICAN*]
SPA 494 [*CUBAN*] TCL 310 TCL 314 TCL 350
TCL 444 THE 426 THE 494 [*AMERICAS*]
THE 494 [*LATIN*]

LANDSCAPE STUDIES
College of Design
2008-2009
CDN 162, Ph: 480.965.3536

## Description

The concentration in Landscape Studies is designed for students who have an interest in landscape aesthetics. 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

Students must complete a minimum of 18 semester hours of which 12 hours must be taken at the 300 or 400 levels. A cumulative GPA of 2.50 or better in Landscape courses.

## Required Courses:

ALA 102 Architecture and Landscape Architecture and Society HU, G (3)
LPH 310 History of Landscape Architecture H (3)
LPH 311 Contemporary Landscape Architecture HU (3)
Nine additional semester hours of electives in the landscape architectural history and theory concentration must be selected from the following list for a total of 18 : LAP 485 International Field Studies in Planning G (3)
LPH 394 Special Topics (3)
LPH 410 Social Factors in Landscape and Urban Planning (3)
LPH 411 Landscape Architecture Theory and Criticism L (3)
LPH 412 Landscape Ecology and Planning (3)
LPH 413 Southwest Landscape Interpretation (3)
LPH 494 Special Topics (3)
LPH 499 Individualized Instruction* (3)

* This course requires a petition to the School of Architecture and Landscape Architecture


## I. Core - 9 Hours

- ALA 102 - Architecture and Landscape Architecture and Society
- LPH 310 - History of Landscape Architecture
- LPH 311-Contemporary Landscape Architecture
II. Landscape Architectural History and Theory - 9 Hours
- APH 494-Special Topics
- LAP 485 - International Field Studies in Planning
- LPH 394-Special Topics
- LPH 410-Social Factors in Landscape and Urban Planning
- LPH 411-Landscape Architecture Theory and Criticism
- LPH 412-Landscape Ecology and Planning
- LPH 413-Southwest Landscape Interpretation
- LPH 494-Special Topics
- LPH 499-Individualized Instruction


## What you'll see on your DARS:

Minimum 2.50 GPA required.
Grade of "C" (2.00) or better required. Minimum 12 hours upper division required. Minimum 6 hours at ASU Main required.
--> NEEDS: 18.00 HOURS 2 SUB-GROUPS 2.50 GPA

- 1) CORE - 9 HOURS NEEDS: 9.00 HOURS
COURSE LIST: ALA 102 LPH 310 LPH 311
- 2) LANDSCAPE ARCHITECTURAL HISTORY \& THEORY - 9 HOURS NEEDS: 9.00 HOURS
COURSE LIST: APH 494 LAP 485 LPH 394 LPH 410
LPH 411 LPH 412 LPH 413 LPH 420 LPH 494 LPH 499

BIS Concentration Check Sheet

KINESIOLOGY
College of Liberal Arts \& Sciences
2008-2009
Physical Education West, Room 218, Ph: 480.965.3875

## Description:

The concentration of kinesiology acquaints students with the field of kinesiology. Students interested in knowing how the body responds to exercise training as well as the affects of biomechanical, physiological, and psychological principals are encouraged to study this concentration.
I. Prerequisites 15-21 hours

- BIO 201 - Human Anatomy and Physiology I
- BIO 202 - Human Anatomy and Physiology II
- CHM 101-Introductory Chemistry

OR
CHM 113-General Chemistry I
MAT 170 - Precalculus
PGS 101 - Introduction to Psychology
PHY 111 -General Physics
Core 3 hours

- KIN 200 - Introduction to Kinesiology
III. Upper Division Core 9 Hours
- KIN 335 - Biomechanics
- KIN 340 - Physiology of Exercise
- KIN 345 - Motor and Developmental Learning
- KIN 352 - Psychosocial Aspects of Physical Activity
IV. Upper Division Electives 9 Hours

What you'll see on your DARS:
--> NEEDS: 36.00 HOURS 4 SUB-GROUPS
NOTE: Grade of C (2.00) or better required.
Minimum 12 upper division hours required.

- 1) PREREQUISITES - 15 to 21 hours

NEEDS: 15.00 HOURS
COURSE LIST: BIO 201 BIO 202 CHM 101 OR CHM 113
MAT 170 PGS 101 PHY 111

- 2) CORE - 3 hours

NEEDS: 3.00 HOURS
COURSE LIST: KIN 200

- 3) UPPER DIVISION CORE - 9 hours

Select 3 courses
NEEDS: 9.00 HOURS
COURSE LIST: KIN 335 KIN 340 KIN 345 KIN 352
4) UPPER DIVISION ELECTIVES - 9 hours

NEEDS: 9.00 HOURS
-> NOT FROM: KIN 305 KIN 310 KIN 484 KIN 492
KIN 493 KIN 498 KIN 499
COURSE LIST: KIN 3 KIN 4

JUSTICE STUDIES<br>College of Liberal Arts \& Sciences<br>2008-2009<br>Wilson Hall, $2^{\text {nd }}$ Floor, Ph: 480.965.7682

## PROFILE:

The classroom experience for the student pursuing the Minor in Justice Studies is interdisciplinary, emphasizing ideas from the social sciences, philosophy, and legal studies. The minor is designed for students interested in supplementing their major by studying justice issues. The faculty wants students to develop an understanding of meanings of justice and injustice and analyze often controversial issues through critical inquiry and social science investigation. Primary focus is placed on theories of justice in these principle areas: (1) Economic Justice; (2) Social Justice, Law, and Society; (3) Cultural Transformation and Justice.

## REQUIREMENTS:

1. 18 hours of graded classroom course work (no " $Y$ " credit, pass/fail, or credit/no credit)
2. JUS 105 - Introduction to Justice Studies (freshman/sophomore level)

OR
JUS 305 - Principles of Justice Studies (junior/senior level)
3. JUS 303 - Justice Theory
4. A Minimum of 9 hours of Justice Studies resident credit at ASU Main.
5. A Minimum of 12 hours must be upper division credit.
6. Minimum grade of " C " for all courses in the minor.
7. Eligibility requirements and prerequisites must be met for each class.
*For non-Justice Studies students to take a 300 level JUS course (other than JUS 303 and 305), they must have earned a minimum
of 56 semester hours (junior status) and a minimum cumulative GPA of 2.00.
*For non - Justice Studies students to take a 400 level JUS course, they must have earned a minimum of 56 semester hours (junior status) and a minimum cumulative GPA of 2.50 .

## I. Core 6 Hours

JUS 105 - Introduction to Justice Studies
OR
JUS 305 - Principles of Justice Studies
JUS 303 - Justice Theory
II. Electives 12 Hours

- JUS - any 100, 200, 300, or 400 level JUS class

What you'll see on your DARS:

NOTE: Grade of "C" (2.00) or better required.
No pass/fail credit.
Minimum 12 hours upper division.
Minimum 9 hours at ASU Tempe.
--> NEEDS: 18.00 HOURS

- 1) CORE - 6 hours NEEDS: 6.00 HOURS
COURSE LIST: JUS 105 OR JUS 305 JUS 303(R)
- 2) ELECTIVES - 12 Hours

6 to 9 upper division hours required.
NEEDS: 12.00 HOURS
-> NOT FROM: JUS 105 JUS 303 JUS 305 JUS 484
JUS 498 JUS 499
COURSE LIST: JUS

## ANNN ARIZONA STATE UNIVERSITY

## JEWISH STUDIES

College of Liberal Arts \& Sciences
2008-2009
Language and Literature, Room 649D, Ph: 480.727.6906

NOTE: Grade of C (2.00) or better required.
Minimum 12 upper division hours required.

## I. Language - $\mathbf{6}$ Hours

HEB 101 - Elementary Modern Hebrew
HEB 102 - Elementary Modern Hebrew
HEB 201 - Intermediate Modern Hebrew
HEB 202 - Intermediate Modern Hebrew
HEB 313 - Advanced Modern Hebrew
HEB 314 - Advanced Modern Hebrew
II. Core - 9 Hours

See an advisor for list
III. Electives - 6 Hours

REL 210 - Introduction to Judaism
REL 315 - Hebrew Bible (Old Testament)
REL 317 - Introduction to Rabbinic Judaism
REL 373 - Women in Judaism
OR
WST 372 - Women in Judaism
REL 386 - America and the Holocaust
REL 410 - Judaism in Modern Times
REL 415 -
HEB 101 - Elementary Modern Hebrew
HEB 102 - Elementary Modern Hebrew
HEB 201 - Intermediate Modern Hebrew
HEB 202 - Intermediate Modern Hebrew
HEB 313 - Advanced Modern Hebrew
HEB 314 - Advanced Modern Hebrew
HEB 375 - Contemporary Culture of Israel
HEB 394 - Special Topic: War and Peace in the Middle East* (differs by semester)
HST 191-First-Year Seminar
HST 300 - Historical Inquiry: France During WWII
HST 304 - Studies in European History
IHP 494 - Special Topics
ENG 356 - The Bible as Literature

What you'll see on your DARS:
--> NEEDS: 21.00 HOURS

- 1) LANGUAGE - 6 hours

NEEDS: 6.00 HOURS
COURSE LIST: HEB 101 HEB 102 HEB 201 HEB 202
HEB 313 HEB 314

- 2) CORE - 9 hours

Select one course in three of the five following areas: Religious Studies, History, Humanities, Social Studies, or Literature. See Jewish Studies advisor for list of approved courses.
NEEDS: 9.00 HOURS
COURSE LIST: JUDEMPHX JUDEMPH2
3) ELECTIVES - 6 hours

Select two courses from the list. See Jewish Studies advisor for additional course choices.
NEEDS: 6.00 HOURS
COURSE LIST: REL 210 REL 315 REL 317 REL 373 OR
WST 372 REL 386 REL 410 REL 415 HEB 101 HEB 102
HEB 201 HEB 202 HEB 313 HEB 314 HEB 375 HEB 394
HEB 494 HST 191 [*FS:JEW* HIS*]
HST 300 [*HI:ANTI-SEM*] HST 304 [*SIEH:JEW* MY*]
IHP 494 ENG 356

ITALIAN
College of Liberal Arts \& Sciences
2008-2009
Language and Literature, Room 440, Ph: 480.965.6281

## NOTES FOR BIS EMPHASIS AREA:

- No more than 6 credits from 200-level ITA can be counted toward the ITA minor or BIS emphasis area
- A grade of C or better must be achieved in all courses to be counted toward the minor or BIS emphasis area.
- A minimum of 6 upper-division hours in the minor or BIS emphasis area must be taken in residence at ASU Tempe Campus.
- Pass/Fail courses cannot be used for the minor or BIS emphasis area.
- ITA 315 Italian for Professions or ITA 494 History of Italian Language may be substituted for either ITA 311 or for ITA 312. Email silcadvising@asu.edu to do this.
- Substitutions are permitted for ITA 325, Introduction to Italian Literature with approval of an Academic Advisor first. Email silcadvising@asu.edu if you have questions
I. Core - 6 Hours

ITA 311 - Italian Composition and Conversation OR
ITA 312-Italian Composition and Conversation
ITA 325 - Introduction to Italian Literature
II. 400-Level - 3 Hours

ITA 4 - any 400 -level class
III. Electives - 9 Hours

ITA 201 - Intermediate Italian I
ITA 202 - Intermediate Italian II
ITA 314-Advanced Italian*
ITA 315 -Italian for Professions*
ITA 415 - Italian Civilization*
ITA 420 - Italian Cinema
ITA 425 - Italian American Culture
ITA 430 - Italian Literature of the Middle Ages
ITA 441 - Dante: Divina Comedia
ITA 443 - Italian Literature of the Renaissance
ITA 446 - Italian Literature of the 18th \& 19th Centuries
ITA 449-20th Century Italian Literature
ITA 494 - Special Topics (see class schedule)
ITA 499 - Independent Study

What you'll see on your DARS:
NOTE: Grade of C (2.00) or better required.
Minimum 12 upper division hours required.
--> NEEDS: 18.00 HOURS

- 1) CORE - 6 hours NEEDS: 6.00 HOURS COURSE LIST: ITA 311 OR ITA 312 ITA 325
- 2) 400-LEVEL - 3 hours NEEDS: 3.00 HOURS COURSE LIST: ITA 4
- 3) ELECTIVES - 9 hours

Maximum of 6 hours allowed from 200-level courses NEEDS: 9.00 HOURS COURSE LIST: ITA 201 ITA 202 ITA 3 ITA 4

BIS Concentration Check Sheet

ISLAMIC STUDIES
College of Liberal Arts and Sciences
2008-2009
Ph: 480-965-7184

## Description:

The 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 societies

## Program Requirements:

Students must complete a minimum total of 26 semester hours, chosen in consultation with the Islamic Studies program coordinator. A minimum grade of $C(2.00)$ is required in each course. Students must complete these requirements:

1. eight semester 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,
2. Nine semester hours from REL 260 Introduction to Islam, REL 365 Islamic Civilization, and REL 366 Islam in the Modern World,
3. Three semester hours taken from REL 394 (topics may vary) or REL 460 Studies in Islamic Religion (topics may vary), and
4. Six semester hours drawn from an approved list of courses in Arabic, anthropology, French, geography, history, and religious studies, Spanish or from other courses approved by the program coordinator.

INTERNATIONAL STUDIES
College of Liberal Arts \& Sciences
2008-2009
Coor Hall, $6^{\text {th }}$ Floor, Ph: 480.965.655
I. Core - $\mathbf{3}$ hours (choose one)

POS 150 - Comparative Government
POS 160 - Global Politics
II. Concentration options - 3 hours (choose one)

POS 361 - American Foreign Policy
POS 364 - National Security, Intelligence, and Terrorism
III. Concentration options - 6 hours (choose two)

POS 300 - Contemporary Controversies in Global Politics
POS 465 - International Organization and Law
POS 467 - International Security
POS 486 - International Political Economy
IV. Concentration options - 6 hours (choose two)

POS 350 - Comparative Politics
POS 355 - Russia and Successor States
POS 356 - European Union
POS 357 - South Asia Politics
POS 358 - Southeast Asia
POS 359 - African Politics and Society
POS 360 - World Politics
POS 451 - China, Japan, and the Koreas
POS 452 - China
POS 453 - South America
POS 454 - Mexico
POS 455 - Central America and the Caribbean
POS 459 - South and Southern Africa
POS 463 - Inter-American Relations
POS 468 - Comparative Asian Foreign Policies

What you'll see on your DARS:
--> NEEDS: 18.00 HOURS 4 SUB-GROUPS 2.00 GPA
NOTE: Grade of C (2.00) or better required.
Minimum of 12 upper division hours required.

- 1) CORE - 3 hours

Select one course from the course list NEEDS: 3.00 HOURS
COURSE LIST: POS 150 POS 160

- 2) CONCENTRATION OPTIONS - 3 hours Select one course from the course list NEEDS: 3.00 HOURS
COURSE LIST: POS 361 POS 364
- 3) CONCENTRATION OPTIONS - 6 hours

Select two courses from the course list NEEDS: 6.00 HOURS
COURSE LIST: POS 300 POS 465 POS 467 POS 486
4) CONCENTRATION OPTIONS - 6 hours Select two courses from the course list NEEDS: 6.00 HOURS
COURSE LIST: POS 350 POS 355 POS 356 POS 357
POS 358 POS 359 POS 360 POS 451 POS 452 POS 453
POS 454 POS 455 POS 459 POS 463 POS 468

INTERNATIONAL GEOGRAPHY
College of Liberal Arts \& Sciences
2008-2009
Schwada Building, Room 131, Ph: 480.965.3652

## Description:

- The International Geography area of concentration requires 19 semester hours of which a minimum of 12 semester hours must be upper division.
- A letter grade of $C$ or better is required for all courses taken in the area of concentration.
- A minimum of six upper-division hours in the concentration must be taken in residence at ASU Main
I. Part 1-7 Hours

GCU 121 - World Geography
GCU 141 - Introduction to Economic Geography
II. Part 2-9 Hours ( 3 courses)

GCU 325-Geography of Europe
GCU 326 - Geography of Asia
GCU 328-Geography of Middle East and North Africa
GCU 332-Geography of Australia and Oceania
GCU 350 - The Geography of World Crises
GCU 359 - Cities of the World I
GCU 360 - Cities of the World II
GCU 364 - Energy in the Global Arena
III. Part 3-3 Hours (one course)

GCU 423 - Geography of South America
GCU 424 - Geography of Mexico and Middle America
GCU 425 - Geography of the Mexican American Borderland
GCU 433-Geography of Southeast Asia

## What you'll see on your DARS:

NOTE: Grade of C (2.00) or better required.
Minimum 12 upper division hours required.
--> NEEDS: 19.00 HOURS 3 SUB-GROUPS

- 1) PART 1 - 7 hours

NEEDS: 7.00 HOURS
COURSE LIST: GCU 121(R) GCU 141(R)
2) PART $2-9$ hours NEEDS: 9.00 HOURS
COURSE LIST: GCU 323 GCU 325 GCU 326 GCU 328 GCU 332 GCU 350 GCU 359 GCU 360 GCU 364
3) PART 3-3 hours NEEDS: 3.00 HOURS
COURSE LIST: GCU 423 GCU 424 GCU 425 GCU 433

INTERNATIONAL BUSINESS
W. P. Carey School of Business

2008-2009
Business Administration, Room 109, Ph: 480.965.4227

## Description:

You can expand your horizons and your opportunities by learning about the global economy. The W. P. Carey School has partnerships with universities in Europe, Asia and Latin America so you experience new cultures, visit new places and build intercultural and language skills. Overseas internships also are offered in conjunction with the international programs office at ASU.

## Requirements

- 9 credit hours of international business courses, including MGT 302 or ECN 306.
- 9 credit hours of international study outside of business.
- The equivalent of one year of college-level foreign language.
- Minimum grade point average of 2.5 with no grade lower than $C$ in courses applied toward the certificate.
- All business credits must be taken through the W. P. Carey School of Business or on an approved ASU international study program.


## I. Core - 3 Hours

- MGT 302 - Principles of International Business
- ECN 306-Survey of International Economics


## Business Electives - 6 Hours

- ECN 306-Survey of International Economics
- ECN 331 - Economics of the European Economic Union
- ECN 360 - Economic Development
- ECN 365 - Economics of Russia and Eastern Europe
- ECN 394 [*EURO* UNION*] - Special Topics
- ECN 394 [*GLOBAL*] - Special Topics
- ECN 394 [*LATIN AM*] - Special Topics
- ECN 436 - International Trade Theory
- ECN 438-International Monetary Economics
- ECN 494 [*EURO* UNION*] - Special Topics
- ECN 494 [*GLOBAL*] - Special Topics
- ECN 494 [*LATIN AM*] - Special Topics
- ECN 494 [*MULTI*] - Special Topics
- FIN 456 - International Financial Management
- MGT 400-Cultural Factors in International Business
- MGT 459-International Management
- MGT 302 - Principles of International Business
- MKT 350 - DNE

OR
MKT 360 - Seminar in International Business
OR

- MGT 350 - Seminar in International Business
- MKT 394 [*GLOBAL*] - Special Topics
- MKT 435-DNE

OR

- MKT 425-Global Marketing Management
- MKT 494 [*INTER*] - Special Topics
- SCM 463-Global Supply Chain Management
II. Language - $\mathbf{8}$ Hours

See advisor for details

## What you'll see on your DARS:

Students may also pursue the Certificate in International Business - See advisor for details.

Grade of "C" (2.00) or better required. Minimum 2.50 GPA required. Minimum 12 upper division hours required.
--> NEEDS: 18.0 HOURS 5 SUB-GROUPS

- 1) INTERNATIONAL BUSINESS CORE - 3 hours

Course must be taken at ASU Tempe campus.
NEEDS: 3.00 HOURS
COURSE LIST: MGT 302 ECN 306

- 2) INTERNATIONAL BUSINESS ELECTIVES - 6 hours

Courses must be taken at ASU Tempe campus.
NEEDS: 6.00 HOURS
COURSE LIST: ECN 306 ECN 331 ECN 360 ECN 365
ECN 394 [*EURO* UNION*] ECN 394 [*GLOBAL*]
ECN 394 [*LATIN AM*] ECN 436 ECN 438
ECN 494 [*EURO* UNION*] ECN 494 [*GLOBAL*]
ECN 494 [*LATIN AM*] ECN 494 [*MULTI*] FIN 456
MGT 400 MGT 459 MGT 302 MKT 350 OR MKT 360 OR
MGT 350 MKT 394 [*GLOBAL*] MKT 435 OR MKT 425
MKT 494 [*INTER*] SCM 463

- 3) ASU GLOBAL and AREA STUDIES

Choose 3 courses from the International Business Area Studies lists and/or the University General Studies Global Awareness list.

Requirement may be waived by an official exchange program. See International Business Program Coordinator for details.

NEEDS: 9.00 HOURS

- 4) LANGUAGE

One year of study at college level or equivalent.

See International Business Program Coordinator. NEEDS: I SET

- 5) INTERNATIONAL BUSINESS GPA - 2.50 required NEEDS: $\quad 2.50$ GPA


## INTERIOR DESIGN HISTORY

College of Design
2008-2009
CDS 115, Ph: 480.965.3536

## Description

The concentration in Interior Design History is available to students interested in design and culture. The courses designated for the concentration are part of the professional studies in interior design within the Department 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.

## I. Interior Design History - Needs 18 hours of the Following:

## Required (9 hours)

- DSC $101(\mathrm{R})$ - Introduction to Environmental Design
- INT 310(R) - History of Interior Design I
- INT 311(R) - History of Interior Design II


## Interior Design Electives (9 hours)

- INT 111 - Interior Design Issues and Theories

OR

- INT 223org - Drafting for Interior Design
- INT 412 - History of Decorative Arts in Interiors
- INT 413-History of Textiles in Interior Design


### 2.50 GPA required

What you'll see on your DARS:
Minimum 2.50 GPA required to fulfill this concentration. Grade of "C" (2.00) or better required in each course.
Minimum 12 hours upper division required.
--> NEEDS: 18.00 HOURS

1) INTERIOR DESIGN HISTORY - 18 hours NEEDS: 18.00 HOURS
COURSE LIST: DSC $101(\mathrm{R})$ INT 111 OR INT 223org
INT 310(R) INT $311(\mathrm{R})$ INT 412 INT 413

INTERDISCIPLINARY ARTS \& PERFORMANCE
New College of Interdisciplinary Arts \& Sciences
2008-2009
West Campus
FAB, Room N290C, Ph: 602.543.1650

## 24 Hours, Minimum 12 Upper Division

## Description:

Programs in interdisciplinary, collaborative studies in the arts are developing throughout the United States. ASU's West campus Bachelor of Arts degree in Interdisciplinary Arts and Performance (IAP) is the only one of its kind in the southwest. This unique program incorporates a variety of media in the arts world. Majors take course work in Digital Media Arts, Music and Electronic Sound Art, Performance Studies, Theatre/Performance Arts, Digital Graphics and more Traditional Visual Arts. Students who leave ASU at the West campus with a B.A. in Interdisciplinary Arts and Performance enter the arts world through a variety of professional opportunities with skill sets that prepare them for significant careers in the 21 st century.

## I. Core - 6 Hours

IAP 304 - Traditions of the Avant-Garde and Experimental Art
IAP 305-20 ${ }^{\text {th }} / 21^{\text {st }}$ Century Art, Performance, and Media
IAP 325 - Sound Performance: Exploring Alternative Performance Groups
IAP 334 - Conceptual Development in the Arts
IAP 354 - Visual Representations
IAP 361 - Digital Editing \& Media Literacy
II. Upper Division - 6 Hours

See an advisor for an approved list
III. Electives - $\mathbf{1 2}$ Hours

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## What you'll see on your DARS:

--> NEEDS: 24.00 HOURS 3 SUB-GROUPS

- 1) Upper Division IAP Core - 6 Hours Chose six (6) hours from the following course: IAP 304 or 305, IAP 325, IAP 334, IAP 354, IAP 361, or IAP 360
COURSE LIST: IAP 304 OR IAP 305 IAP 325 IAP 334
IAP 354 IAP 361
- 2) Upper Division IAP - 6 Hours

Must be selected in conjunction with an Academic Advisor NEEDS: 6.00 HOURS COURSE LIST: IAPMIN299 IAPMINUP IAPWESTX

- 3) Approved Electives - 12 Hours May include lower division courses NEEDS: 12.00 HOURS COURSE LIST: ARA ARS DAH DAN IAP MUE MUP MUS THE THP

Informatics
School of Computing and Informatics
2008-2009
Brickyard Suite 208, Ph: 480.965.3199

## INFORMATICS CERTIFICATE/BIS CONCENTRATION <br> VERIFICATION CHECKSHEET <br> SCHOOL OF COMPUTING AND INFORMATICS

The Informatics Certificate or the BIS concentration in Informatics provides recognition that the student has acquired an understanding of the capabilities and technologies of Informatics as it applies to domain specific problems in their field of study. The student is required to complete the five required and two elective courses with a grade of a "C" or higher for each class.

Required Courses:
COURSE TITLE
SEM/YR HOURS GRADE

| CPI 101 | Introduction to Informatics |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| CPI 200 | Mathematical Foundations of Informatics |  |  |  |
| STP 226 | Elements of Statistics * |  |  |  |
| CPI 310 | Information and Data Management |  |  |  |
| CPI 360 | Informatics and Decision Making |  |  |  |

PLEASE CHOOSE TWO OF THE FOLLOWING SEVEN COURSES **:

| COURSE | TITLE | SEM/YR | HOURS | GRADE |
| :--- | :--- | :--- | :--- | :--- |
| ART 345 | 3D Visualization and Rapid Prototyping |  |  |  |
| BIO 345 | Intro to Computational Molecular Biology |  |  |  |
| CPI 400 | Scientific Computing and Visualization |  |  |  |
| CPI 420 | Technology and Society |  |  |  |
| CPI 430 | Social Simulation |  |  |  |
| ENG 374 | Technical Editing |  |  |  |
| GPH 370 | Geographic Information Technologies |  |  |  |

[^8]
## Informatics Certificate

The School of Computing and Informatics is now offering an Informatics Certificate. Informatics is defined as the study of the ways in which computer technology can be used to gather, synthesize, store, visualize and interpret
information. These skills are critical to a broad range of disciplines. This certificate will be available to students in
most disciplines and will provide them with an understanding of the capabilities and technologies of Informatics as
it applies to domain specific problems in their field of study. The certificate can also be used as one of the areas of
concentration for the BIS degree. Students completing this certificate will be able to:

- Understand information management issues and become intelligent users of data management systems
- Develop, implement and analyze conceptual models with different information science techniques for
solving problems
Apply mathematical modeling, computing, and visualization techniques and tools to real data in order to
present results in a meaningful visual environment
- Understand ethical and social issues involving information science technology
- Utilize various information technology resources for making decisions
- Incorporate information technology to enhance their communication effectiveness
- Write simple programs in a high level programming language


## More Information

For more information on the Informatics certificate, students can make an appointment with an advisor by calling the SCI Advising
Center at 480-965-3199, sending an email to sci.advising@asu.edu or visiting http://sci.asu.edu/
NOTE: The certificate is approved for all non-computer related majors.

## Required Courses

(All students must take the following 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: Informatics and Decision Making (3)
STP 226: Elements of Statistics (3) *
*Please consult an SCl advisor about alternate statistics courses

## Elective Courses

(Students must select two from the following list) *
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)
*Certain departments may offer courses which could satisfy this elective requirement. Please consult with an SCl advisor for approvals.

HISTORY \& PHILOSOPHY OF SCIENCE
College of Liberal Arts \& Sciences
2008-2009
Life Sciences C-Wing, Room 206, Ph: 480.727.6277

NOTE: Grade of C (2.00) or better required.
Minimum 12 upper division hours required.
The 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 (of the belief-worthiness and interpretation of scientific claims as well as norms within or about science) both enrich and are enriched by their combination with historical study. Such philosophic and historical study will also often include the examination of contemporary sciences and their place within the larger society.
I. Part 1-3 Hours (choose one)

PHI 314 - Philosophy of Science
HPS 314 - Philosophy of Science
II. Part $2-9$ Hours

HPS - (any 100, 200, 300 or 400 -level courses)
III. Part 3-6 Hours

HPS - (any HPS course)
PHI 103 - History of Ancient Philosophy
PHI 302 - History of Modern Philosophy
PHI 312 - Theory of Knowledge
PHI 315 - Philosophy of Language
PHI 316 - Metaphysics
PHI 317 - Philosophy of Mind
PHI 319 - Philosophy of Computing
PHI 325 - Philosophy of Social Science
PHI 333 - Introduction to Symbolic Logic
PHI 401 - Rationalism
PHI 402 - Empiricism
PHI 403 - Contemporary Analytic Philosophy
PHI 413 - Advanced Symbolic Logic
PHI 420 - Topics in Philosophy

What you'll see on your DARS:
--> NEEDS: 18.00 HOURS
3 SUB-GROUPS

- 1) PART 1 - 3 hours

NEEDS: 3.00 HOURS
COURSE LIST: HPS 314 OR PHI 314

- 2) PART 2-9 hours NEEDS: 9.00 HOURS COURSE LIST: HPS
- 3) PART 3-6 hours NEEDS: 6.00 HOURS
COURSE LIST: HPS PHI 103 PHI 301 PHI 302 PHI 312
PHI 315 PHI 316 PHI 317 PHI 319 PHI 325 PHI 333
PHI 401 PHI 402 PHI 403 PHI 413 PHI 420

History and Culture<br>School of Applied Arts and Sciences, Polytechnic Campus<br>2008-2009<br>Location: Bell Hall Room J6 Ph: 480-727-1333

## Description:

The concentration in History and Culture at Arizona State University encourages students to develop their historical awareness, and their ability to use historical knowledge to make informed decisions. The program stresses cultural and information literacy. It encourages the study of historical events in their cultural context, and stresses the role of media and technology in historical study.

## BIS Concentration (18-21 hours)

- HTY 301 (3 semester hours)
- 9 semester hours of focus-area courses in their chosen track
- 6-9 semester hours of electives


## I. Core - 3 Hours

II. Focus Area - 9 Hours (From ONE Area)

- Archival Preservation and Digital Media
- GIT 294 Introduction to Digital Photography
- GIT 303 Digital Publishing
- HTY 220 Introduction to Digital Archives
- HTY 230 Introduction to Corporate Archiving
- HTY 334 Archival Preservation and Digital Media
- HTY 336 Editing Historical Documents
- HTY 370 History of Collecting
- HTY 410 Historic Preservation
- Environmental History and Culture
- HST 319 U.S. Urban History
- HTY 320 History of American Agriculture
- HTY 326 History of Landscaping
- HTY 350 Environmental History
- HTY 374 Western Rivers
- HTY 440 The Pre-Modern City
- HTY 450 History of Ecology and Conservation
- PHI 327 Environmental Philosophy
- History and Culture of the American Southwest
- HST 293 Historical Themes in Latin America
- HST 305 Studies in Latin American History
- HST 329 Women in 20th-Century U.S. West
- HST 330 Mexican Women in the United States: Conquests and Migrations
- HST 331 Mexican-American History to 1900
- HST 332 Mexican-American History Since 1900
- HST 337 American Indian History to 1900
- History and Philosophy of Science and Technology
- HTY 310 History of Technology
- HTY 312 History of Science
- HTY 314 History of Computing
- HTY 316 History of Engineering
- HTY 320 History of American Agriculture
- HTY 325 History of American Business
- HTY 326 History of Landscaping
- HTY 330 History of Printing and Media
- HTY 340 Exploration and Science
- HTY 350 Environmental History
- HTY 360 Women in Science
- PHI 306 Applied Ethics
- PHI 314 Philosophy of Science
- History and Public Policy
- HST 109 The United States to 1865
- HST 110 The United States Since 1865
- HST 210 American Social History
- HST 315 Political History of the United States
- HST 320 U.S. Urban History Since 1850
- HST 325 Immigration and Ethnicity in the United States
- HST 342 The U.S. West in the 20th Century
- HST 484 Internship
- POS 220 Political Issues and Public Policy
- POS 310 American National Government
- POS 325 Public Policy Development
- POS 426 Elements of Public Policy
- History for Secondary Teachers
- HST 101 Global History
- HST 102 Western Civilization
- HST 103 Western Civilization
- HST 104 Western Civilization
- HST 109 United States to 1865
- HST 110 United States Since 1865
- HST 210 American Social History
- HST 313 American Cultural History to 1865
- HST 314 American Cultural History Since 1865
- HST 325 Immigration and Ethnicity
- HST 337 American Indian History to 1900
- HST 338 American Indian History Since 1900
- HST 341 U.S. West, 19th Century
- HST 342 U.S. West, 20th Century
- REL 100 Religions of the World
III. Related Electives - 6 Hours
- Archival Preservation and Digital Media
- ARD
- ARS
- ART
- GIT
- HST
- Environmental History and Culture
- ABS
- AGB
- BIO
- HST
- HTY
- STS
- History and Culture of the American Southwest
- AIS
- CCS
- HST
- HTY
- History and Philosophy of Science and Technology
- ABS
- GIT
- HST
- HTY
- PHI

STS

- History and Public Policy
- HST
- HTY
- PVG
- PLS
- POS
- STS
- History for Secondary Teachers
- ASB
- ECN
- GCU
- GPH
- HST
- HTY
- PGV
- POL
- POS
- REL
- SOC
- STS

What you'll see on your DARS:
NOTE: Grade of C (2.00) or better required.
Minimum 12 upper division hours required.
--> NEEDS: 18.00 HOURS 3 SUB-GROUPS

- 1) CORE - 3 hours NEEDS: 3.00 HOURS
COURSE LIST: HTY 301 (R)
- 2) FOCUS AREA COURSES - 9 hours NEEDS: 9.00 HOURS
- 3) RELATED ELECTIVES - 6 HOURS NEEDS: 6.00 HOURS

HISTORY
New College of Interdisciplinary Arts \& Sciences
2008-2009
West Campus
FAB, Room N204, Ph: 602.543.6090

18 HOURS, MINIMUM 12 UPPER DIVISION
***MINIMUM C (2.00) GRADE***
Description:
The minor in History consists of 18 semester hours of history course work with a grade of "C" or better, of which six semester hours may be lower division.
I. Two-Semester Survey 6 Hours (2 courses):
a. European or World History: US

Choose one from:
AMS 310 -History of American Systems to 1865
AMS 320 -American Cultural History I
HIS 103 - The United States
HST 109 - The United States to 1865
HIS 303 - American Cultures I
HST 313 - American Cultural History to 1865
HIS 305 - American Systems I
Choose one from:
AMS 311 - History of American Systems Since 1865
AMS 321 - American Cultural History II
AMS 330 - Introduction to American Lives
HIS 104 - The United States
HST 110 - The United States Since 1865
HIS 304 - American Cultural History II
HST 314 - American Cultural History Since 1865
HIS 306 - History of American Systems Since 1865
b. European or World History: European

HIS 355 - Europe and the World I
HIS 356 - Europe and the World II
c. European or World History: World

HST 102 - Western Civilization
HIS 101 - Western Civilization
HST 103 - The United States
HIS 102 - Western Civilization
HST 104 - Western Civilization
II. Historical Methods - 3 Hours

HST 300 - Historical Methods
III. Electives - 9 Hours

See an advisor for approved list

## What you'll see on your DARS:

--> NEEDS: 18 Hours 3 SUB-GROUPS

- 1) Two-Semester Survey in U.S., European or World History - 6 Hours Lower or Upper Division U.S.: NEEDS: 2 COURSES
COURSE LIST: CHOOSE ONE: AMS 310 AMS 320 HIS 103 OR M HST 109 HIS 303 OR M HST 313 HIS 305
AND ONE FROM: AMS 311 AMS 321 AMS 330 HIS 104 OR M HST 110 HIS 304 OR M HST 314 HIS 306
- OR) Two-Semester Survey in U.S., European, or World History - 6 Hours Lower or Upper Division NEEDS: 2 COURSES
COURSE LIST: EUROPEAN: HIS 355 HIS 356
- OR) Two-Semester Survey in U.S., European, or

World History - 6 Hours Lower or Upper Division NEEDS: 2 COURSES
COURSE LIST: WORLD: HIS 100 OR M HST 102 HIS 101 OR
M HST 103 HIS 102 OR M HST 104

- 2) Historical Methods - 3 Hours

NEEDS: 1 COURSE
-> NOT FROM: HST 300
COURSE LIST: HIS 300(R)

- 3) History Electives - 9 Hours

Approval by History Advisor Required NEEDS: 9.00 HOURS

BIS Concentration Check Sheet

HISTORY Concentration
College of Liberal Arts \& Sciences
2008-2009
Coor Hall 4591, ph: (480) 965-8364

## Requirements:

A Bachelor of Interdisciplinary Studies (B.I.S.) concentration in history consists of 18 total semester hours of course work, of which at least 12 hours are upper division (300499). Students are also required to complete 12 hours within one of four different geographic concentrations. A grade of "C" (2.00) or better is required for all courses in the B.I.S. concentration with a minimum GPA of 2.00 in history course work. A minimum of six upper division hours must be taken at the Tempe campus.

## Geographic concentrations:

- United States (US)
- Europe (EU)
- Asia (AS)
- Latin America (LA)


## HST 300 and 498:

Students seeking a B.I.S. concentration in history must contact a history advisor to get clearance to take either HST 300 or HST 498. These courses are ordinarily reserved for majors only and are not required of B.I.S. students.

- HST 300, prerequisites: ENG 102 and junior standing.
- HST 498, prerequisites: HST 300 and senior standing.

What you will see on your DARS:
Check back soon-information not yet available!

HEALTHCARE INNOVATION
College of Nursing \& Healthcare Innovation
2008-2009
Downtown, Ph: (602) 496-0888

The BIS concentration in Health Care Innovation provides students at ASU an opportunity to prepare for a position in the health care industry. This concentration can be paired with any other concentration such as Business, Communications, Social Work, Therapeutic Recreation, Psychology, Biology, Chemistry, Kinesiology, etc.

A variety of students might benefit from having a Bachelor of Interdisciplinary Studies degree with a Health Care Innovation Concentration:

- pre-nursing students
- unable to meet the admission standard for the College of Nursing \& Healthcare Innovation Upper Division Nursing Program
- undecided about nursing as a career, but might be interested in the health care field
- Exploratory students
- Students seeking to change their major

The Healthcare Innovation Concentration requires six (6) courses for a total of 18 credits. At least four (4) of these classes must be upper-division. A minimum grade of "C" is required for all courses. For advice on the program, please contact the College of Nursing \& Healthcare Innovation Student Services Office: phone: (602) 496-0888; email: nur@asu.edu.

| COURSE REQUIREMENTS FOR CONCENTRATION IN HEALTHCARE INNOVATION |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Required Course | Title | Credit Hours | Semester Taken | Grade |
| HCR 220 | Health Care Organizations | 3 |  |  |
| HCR 230 | Culture and Health | 3 |  |  |
| HCR 394 | Special Topics | 3 |  |  |
| UD from list |  | 3 |  |  |
| UD from list |  | 3 |  |  |
| UD from list |  | 3 |  |  |
| Total Hours |  | 18 |  |  |

## Electives to be chosen from the following:

```
ABS 301 Technology and Biology
ABS 302 Ethical and Policy Issues in Biology
AFR 317 Genes, Race, and Society.
ASB 353 Death and Dying in Cross-Cultural Perspective
ASB 355 Shamanism, Healing, and Consciousness
ASB 462 Medical Anthropology: Culture and Health
ASB 353 Death and Dying in Cross-Cultural Perspective
BUA 330 Organizational Leadership.
CDE 337 Early Childhood Intervention
CDE 338 Child Development Practicum
CDE 430 Infant/Toddler Development in the Family
CDE 437 Infant Family Assessment and Observation
CDE 444 Risk and Variation in Child Development
COM 400 CIP: Communication in Professions
COM 414 Crisis Communication
COM 353 Professional Communication
COM 414 Crisis Communication
COM 417 Communication and Aging
COM 430 Leadership in Group Communication
CRJ 461 Domestic Violence
CSS 335 Latino Health Issues
ECN 384 Economics of Social Behavior
EXW 300 Foundations of Exercise and Wellness
EXW 302 Fundamentals of Wellness
EXW 311 Special Populations in Exercise and Wellness
EXW 315 Physiological Foundations of Movement
EXW 330 Kinesiological Foundations of Movement
EXW 342 Health Behavior Change
EXW 350 Substance Abuse and Addictive Behavior
EXW 380 Body Image and Wellness
EXW 400 Stress Management for Wellness
FAS 332 Human Sexuality
FAS 332 Human Sexuality
FSM 309 Emergency Medical Service Organization and Management
GRN 400 Perspectives on Aging
GRN 420 Health Aspects of Aging
GRN 430 Multidisciplinary Approaches to Gerontology
GRN 431 Caregiving
GRN 440 Aging and Wellness
GRN 450 Biology of Aging
GRN 460 Alzheimer's and Related Dementias
HPS 325 Chinese Science and Medicine
HPS 330 History of Biology: Conflicts and Controversies
HPS 331 History of Medicine
IAS 300 Adult Career Development
IAS 305 Work and Identity
IAS 340 Bioethics
IAS 406 Moral Dilemmas
IAS 430 Science and Religion
JUS 329 Domestic Violence
KIN 334 Functional Anatomy and Kinesiology
KIN 340 Physiology of Exercise
KIN 345 Motor and Developmental Learning
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KIN 352 Psychosocial Aspects of Physical Activity
KIN 450 Biopsychosocial Perspectives on Physical Activity and Health
KIN 452 Exercise Psychology
LSC 301 Life Sciences: History and Method
LSC 361 Human Sexual Biology
LSC 362 The Human Environment
LSC 365 The Human Organism
MGT }380\mathrm{ Management and Strategy for Nonmajors
MIC 302 Advanced Bacteriology Laboratory
MIC 380 Medical Parasitology
NTR 340 Applications in Human Nutrition
NTR 341 Introduction to Planning Therapeutic Diets
NTR }344\mathrm{ Nutrition Services Management
NTR 345 Development of Healthy Cuisines
NTR }346\mathrm{ Sports Nutrition
NTR 348 Cultural Aspects of Food
NTR }350\mathrm{ Nutrition Counseling
NTR 351 Nutrition and Health Communications
NTR 448 Community Nutrition
NTR 450 Nutrition in the Life Cycle I
NTR 451 Nutrition in the Life Cycle II
PGS 306 Environmental Psychology
PGS 350 Social Psychology
PGS 365 Community Psychology
PGS 427 Psychology of Aging
PGS 462 Health Psychology
PGS 465 Psychology of Stress and Coping
PGS 304 Effective Thinking
PGS 306 Environmental Psychology
PGS 344 Directed Child Study
PGS 427 Psychology of Aging
PGS 443 Abnormal Child Psychology
PHI 306 Applied Ethics
PHI }314\mathrm{ Philosophy of Science
PHI 316 Metaphysics
PHI 317 Philosophy of Mind
PHI 320 Bioethics
PHI 333 Introduction to Symbolic Logic
PHI 306 Applied Ethics
PHI 340 Bioethics
PHI 406 Moral Dilemmas
REC 364 Foundations of Therapeutic Recreation
REL 381 Religion and Moral Issues
RTM 302 Recreation and Tourism for Diverse Populations
RTM 345 Team Building Strategies
RTM 450 Leisure and Aging
RTM 451 Grant Writing for Human Service Professionals
SBS 461 Program Evaluation and Policy Research
SHS 310 Anatomical and Physiological Bases of Speech
SHS 350 Brain Memory and Language
SHS 367 Language Science
SOC 334 Technology and Society
SOC 417 Family Violence
SOC 418 Aging and the Life Course
SOC 424 Women and Health
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- SOC 427 Sociology of Health and IIIness
- SOC 448 Epidemics and Society
- SOC 353 Death and Dying in Cross-Cultural Perspective
- SOC 400 Perspectives on Aging
- SOC 418 Aging and the Life Course

WST 360 Women as Healers
WST 460 Women and the Body
WST 477 Women and Violence

HAZARDOUS MATERIALS \& WASTE MANAGEMENT
College of Science and Technology
2008-2009
480.727.1202

## Description:

The concentration 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 concentration program features instruction by ASU faculty, attorneys, and professionals who work in the specific area in which they teach.

## I. Core $\mathbf{-} \mathbf{1 5}$ Hours

ETM 401 - Hazardous Waste Management
OR
ETM 501 - Principles of Hazardous Materials and Waste Management
ETM 494-Special Topics
OR
ETM 502 - Regulatory Framework for Toxic and Hazardous Substances
ETM 503 - Principles of Toxicology
ETM 504 - Technology for Storage, Treatment, and Disposal of Hazardous Materials
ETM 505 - Quantitative Analysis and Practical Laboratory Techniques

## II. Electives - $\mathbf{6}$ Hours

ETM 402 - Unit Treatment Technologies
ETM 406 - Environmental Chemistry
ETM 407 - Occupational Hygiene
ETM 424 - Comprehensive Emergency Management
ETM 426 - Environmental Issues
ETM 428 - International Environmental Management
ETM 506 - Chemistry of Hazardous Materials
ETM 507 - Industrial Hygiene
ETM 494 - Special Topics
IST 494 - Special Topics
ETM 522 - Air Pollution and Toxic Chemicals
ETM 523 - Soils and Groundwater Contamination
ETM 524 - Integrated Emergency Management
ETM 525-Risk Assessment for Hazardous Materials
ETM 526 - Current Environmental Technology Issues
ETM 527 - Environmental/Resources Regulations Concepts


#### Abstract

Students may also pursue the Certificate in Hazardous Materials \& Waste Management. See program advisor for details.


NOTE: Grade of C (2.00) or better required.
Minimum 12 hours upper division.

## What you'll see on your DARS:

--> NEEDS: 21 hours 2 SUB-GROUPS

- 1) CORE - 15 hours

NEEDS: 15.00 HOURS
COURSE LIST: ETM 401 OR ETM 501 IST 501
ETM 494 [*REGUL* FRAME] OR ETM 502 IST 502
ETM 494 [*PRIN* TOXIC] ETM 503 ETM 494 [*TECH*]
OR ETM 504 IST 504 ETM 494 [*QUAN*] OR ETM 505
IST 505

- 2) ELECTIVES - 6 hours

NEEDS: 6.00 HOURS
COURSE LIST: ETM 402 ETM 406 ETM 407 ETM 424
ETM 426 ETM 428 ETM 506 ETM 507
ETM 494 [*AIR POL*] IST 494 [*AIR POL*] ETM 522
ETM 494 [*SOILS] IST 494 [*SOILS] ETM 523 ETM 524
ETM 494 [*RISK] IST 494 [*RISK] ETM 525
ETM 494 [*CURRENT] IST 494 [*CURRENT] ETM 526
ETM 494 [*ENVIR*] IST 494 [*ENVIR*] ETM 527

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Global Studies
School of Global Studies
2008-2009
West Hall 140, Ph: 480.727.8286
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## Description:

- The concentration in Global Studies consists of 18 credit hours carrying the SGS prefix.
- 12 of the 18 credit hours must be upper division SGS courses.
- SGS 101: Principles of Global Studies
or
- SGS 301: Principles of Global Studies
- SGS 102
- SGS 103: Contemporary Global Trends
or
- SGS 303: Contemporary Global Trends
- The student must earn at least a C (2.00) in a course for credit hours to be counted toward the minor.
- 12 of the 18 credit hours must be taken at the ASU Tempe Campus to meet Residence requirement.

GERMAN
College of Liberal Arts \& Sciences
2008-2009
Language and Literature, Room 440, Ph: 480.965.6281

NOTES FOR MINOR and BIS EMPHASIS AREA:

- A grade of C or better must be achieved in all courses to be counted toward the minor or BIS emphasis area.
- A minimum of 6 upper-division hours in the minor or BIS emphasis area must be taken in residence at ASU Tempe Campus.
- Pass/Fail courses cannot be used for the minor or BIS emphasis area.
- Only 6 credits of 200-level GER German courses are applicable to the minor or BIS emphasis area.
- GER 202 is a prerequisite for GER 311 , GER 312 and GER 313
- Course substitutions are permitted for heritage speakers and other advanced speakers of German.
- GER 319, when offered, also applies to the German minor.


## I. Core - 6 hours

GER 311-German Conversation
OR
GER 312-German Conversation
GER 313 - German Composition
II. 400-level - 3 hours

GER 4
III. Electives - 9 hours

GER 201 - Intermediate German I
GER 202 - Intermediate German II
GER 3
GER 4

## What you'll see on your DARS:

NOTE: Grade of C (2.00) or better required.
Minimum 12 upper division hours required.
--> NEEDS: 18.00 HOURS

1) CORE - 6 hours

NEEDS: 6.00 HOURS
COURSE LIST: GER 311 OR GER 312 GER 313

- 2) 400-LEVEL - 3 hours NEEDS: 3.00 HOURS
COURSE LIST: GER 4

3) ELECTIVES - 9 hours

Maximum of 6 hours allowed from 200-level courses NEEDS: 9.00 HOURS
-> NOT FROM: GER 311 GER 312
COURSE LIST: GER 201 GER 202 GER 3 GER 4

GEOLOGICAL SCIENCES<br>College of Liberal Arts \& Sciences<br>2008-2009<br>Schwada Building, Room 131, Ph: 480.965.3652

NOTE: Grade of C (2.00) or better required.
Minimum 12 upper division hours required.
I. Core - $\mathbf{1 5}$ Hours

GLG 101 - Introduction to Geology I (Physical)
GLG 102 - Introduction to Geology II (Historical)
GLG 103 - Introduction to Geology I-Laboratory
GLG 104 - Introduction to Geology II-Laboratory
GLG 310 - Structural Geology
GLG 321 - Mineralogy
GLG 400 - Geology Colloquium
II. Upper Division Electives - 6 Hours

GLG 3 - any GLG 300-level course (not GLG 300)
GLG 4 - any GLG 400-level course (not GLG 400)

What you'll see on your DARS:
--> NEEDS: 21.00 HOURS 2 SUB-GROUPS

1) CORE - 15 hours

NEEDS: 15.00 HOURS
COURSE LIST: GLG 101(R) GLG 103(R) GLG 102(R)
GLG 104(R) GLG 310(R) GLG 321 (R) GLG 400(R)

- 2) UPPER DIVISION ELECTIVES - 6 hours

NEEDS: 6.00 HOURS
-> NOT FROM: GLG 300 GLG 400
COURSE LIST: GLG 3 GLG 4

## 1S Arizona State UNIVERSITY

## GEOGRAPHY <br> College of Liberal Arts \& Sciences <br> 2008-2009 <br> Schwada Building, Room 131, Ph: 480.965.3652

## Description:

- The Geography area of concentration requires 18 semester hours of which a minimum of 12 hours must be upper division.
- A letter grade of $C$ or better is required for all courses taken in the area of concentration.
- The remaining courses needed to complete the 18 hour requirement are selected in conjunction with an advisor. At least one course should be a geographic skill, for example map reading (GPH 271), cartography (GPH 371), air photo interpretation (GPH 372), geographic field methods (GPH 491), or a class in geographic information systems (for example, GPH 471). At least 12 hours should be upper division classes in human, physical, or regional geography.
- A minimum of six upper-division hours in the concentration must be taken in residence at ASU Main.


## I. Core - 6 to $\mathbf{7}$ hours

- GCU 102 - Introduction to Human Geography
- GPH 111-Introduction to Physical Geography OR
- GPH 411-Physical Geography
II. Electives - $\mathbf{1 2}$ hours

GCU - any GCU course
GPH - any GPH course

## What you'll see on your DARS:

NOTE: Grade of C (2.00) or better required.
Minimum 12 upper division hours required.
--> NEEDS: 18.00 HOURS
2 SUB-GROUPS

1) CORE - 6 to 7 hours

NEEDS: 6.00 HOURS
COURSE LIST: GCU 102(R) GPH 111 OR GPH 411
2) ELECTIVES - 12 hours

NEEDS: 12.00 HOURS

COURSE LIST: GCU GPH

## GEOGRAPHY FOR BUSINESS

College of Liberal Arts \& Sciences
2008-2009
Schwada Building, Room 131, Ph: 480.965.3652

## Description:

- The Geography for Business area of concentration requires 19 semester hours of which a minimum of 12 semester hours must be upper division.
- A letter grade of $C$ or better is required for all courses taken in the area of concentration.
- A minimum of six upper-division hours in the concentration must be taken in residence at ASU Main.


## I. Part 1-6 hours

- GCU 141 - Introduction to Economic Geography
- GPH 373-Geographic Information Science I
II. Part 2-6 hours (choose two)

GCU 361 - Urban Geography
GCU 441 - Economic Geography
GCU 442-Geographical Analysis of Transportation
GCU 444-Geographic Studies in Urban Transportation
III. Part 3-3 hours (choose one)

- GCU 323-Geography of Latin America
- GCU 325-Geography of Europe
- M GCU 326-Geography of Asia
IV. Part 4 - 3 hours (choose one)
- GCU 351 - Population Geography
- GCU 364 - Energy in the Global Arena
- GPH 473-Geographic Information Science II


## What you'll see on your DARS:

NOTE: Grade of C (2.00) or better required.
Minimum 12 upper division hours required.
--> NEEDS: 18.00 HOURS
4 SUB-GROUPS

1) PART $1-6$ hours

NEEDS: 6.00 HOURS
COURSE LIST: GCU 141(R) GPH 373(R)
2) PART $2-6$ hours

NEEDS: 6.00 HOURS

COURSE LIST: GCU 361 GCU 441 GCU 442 GCU 444

- 3) PART 3-3 hours NEEDS: 3.00 HOURS
COURSE LIST: GCU 323 GCU 325 GCU 326

4) PART 4-3 hours

NEEDS: 3.00 HOURS
COURSE LIST: GCU 351 GCU 364 GPH 473

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GEOGRAPHIC INFORMATION SCIENCE
College of Liberal Arts and Sciences
2008-2009
SCOB 330, Ph: 480.965.7533
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NOTE: Grade of C (2.00) or better required.
Minimum 12 upper division hours required.
Minimum 12 hours in residency at Tempe campus.

## I. Core $\mathbf{- 1 6}$ hours

CSE 100 - Principles of Programming with C++ CS
OR
CSE 110 - Principles of Programming with Java
GCU 495 - Quantitative Methods in Geography CS
GPH 370-Geographic Information Technologies CS
GPH 373 - Geographic Information Science I CS
GPH 473 - Geographic Information Science II CS
II. Electives - 3 Hours

ABS 485 - GIS in Natural Resources
CSE 181 - Applied Problem Solving with Visual BASIC
GCU 361 - Urban Geography SB
GCU 442 - Geographical Analysis of Transportation SB
GCU 474 - Public Land Policy
GCU 484 - Internship
GPH 371 - Introduction to Cartography and Georepresentation CS
GPH 372 - Air Photo Interpretation
GPH 471 - Geographics: Interactive and Animated Cartography and Geovisualization CS
GPH 481 - Environmental Geography
GPH 483-Geographic Information Analysis
GPH 484 - Internship: GIS-Based
PLB 434 - Landscape Ecological Analysis and Modeling

## What you'll see on your DARS:

--> NEEDS: 19.00 HOURS 2 SUB-GROUPS

- 1) CORE-16 hours

NEEDS: 16.00 HOURS
COURSE LIST: CSE 100 OR CSE 110 GCU 495 GPH 370
GPH 373 GPH 473

- 2) ELECTIVES - 3 hours

NEEDS: 3.00 HOURS
COURSE LIST: ABS 485 CSE 181 GCU 361 GCU 442
GCU 474 GCU 484 GPH 371 GPH 372 GPH 471 GPH 481
GPH 483 GPH 484 PLB 434

# BIS Concentration Check Sheet 

FRENCH
College of Liberal Arts \& Sciences
2008-2009
Language and Literature, Room 440, Ph: 480.965.6281

NOTES FOR BIS EMPHASIS AREA:

- A grade of $C$ or better must be achieved in all courses to be counted toward the minor or BIS emphasis area.
- A minimum of 6 upper-division hours in the minor or BIS emphasis area must be taken in residence at ASU Tempe Campus.
- Pass/Fail courses cannot be used for the minor or BIS emphasis area.
- No lower-division (100- or 200-level) courses are applicable to the minor or BIS emphasis area.
- The pre-requisite for FRE 205, FRE 311 and FRE 312 is FRE 202.
- Course substitutions are permitted for heritage speakers and other advanced speakers of French.
I. Core - 9 hours

FRE 311 - French Conversation
FRE 312 - French Composition
FRE 321 - French Literature (Middle Ages-1 8th Century)
OR
FRE 322 - French Literature (19th and 20th Centuries)
II. 400-Level - 3 hours

FRE 4 - any 400 level FRE class
III. Electives - 6 hours

FRE 3 - any 300 level FRE class
FRE 4 - any 400 level FRE class, not used above

What you'll see on your DARS:
NOTE: Grade of C (2.00) or better required.
Minimum 18 upper division hours required.
--> NEEDS: 18.00 HOURS

- 1) CORE - 9 hours NEEDS: 9.00 HOURS
COURSE LIST: FRE 311 FRE 312 FRE 321 OR FRE 322
- 2) 400-LEVEL - 3 hours NEEDS: 3.00 HOURS COURSE LIST: FRE 4
- 3) ELECTIVES - 6 hours NEEDS: 6.00 HOURS COURSE LIST: FRE 3 FRE 4

FOOD \& NUTRITION MANAGEMENT
ASU Polytechnic: East College
2008-2009
HSC 1386, (480) 727-1 728

## Description:

The program 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, along with the ability to develop a food or menu that meets a specific nutrition guideline.

## Required Classes - 18 semester hours:

- NTR 100 - Introduction to Nutrition* or NTR 241 Human Nutrition* (3)
- NTR 142-Applied Food Principles** (3)
- NTR 300 - Computer Applications in Nutrition (3)
- NTR 343 - Food Service Purchasing (3)
- NTR 344 - Nutrition Services Management (3)
- NTR 445 - Quantity Food Production (3)
*- Avaliable courses on both Polytechnic and Tempe campus
**- Must get advisor approval before enrolling
I. Concentration Core - 18 Hours
- NTR 100 - Introduction to Nutrition OR
- NTR 241 - Human Nutrition
- NTR 142-Applied Food Principles
- NTR 300-Computer Applications in Nutrition
- NTR 343-Food Service Purchasing
- NTR 344-Nutrition Services Management
- NTR 445-Quantity Food Production


## What you'll see on your DARS:

NOTE: Grade of C (2.00) or better required.
Minimum 12 upper division hours required.
--> NEEDS: 18.00 HOURS 1 SUB-GROUP

1) CONCENTRATION CORE - 18 hours

NEEDS: 18.00 HOURS
COURSE LIST: NTR 100 OR NTR 241 NTR 142 NTR 300
NTR 344 NTR 343 OR NTR 442 NTR 445

Film \& Video Studies: Media \& Video Studies
New College of Interdisciplinary Arts \& Sciences
2008-2009
Ph: (602) 543-6052

## Description:

For more information please call 602.543.6052

## Select 2 from the following:

- COM 324 - Rhetoric and Media Criticism
- IAP 351 - Concept, Image, and Text
- IAP 465 - Media Technologies and the Arts
- SOC 365 - Sociology of Mass Communication


## Select 4 from the following:

- COM 324 - Rhetoric and Media Criticism
- COM 329 - Persuasion
- COM 421-Rhetoric of Social Issues
- COM 429 - Semiotics and Visual Communication
- ENG 451 - History of Film
- IAP 322 - Multitrack Digital Recording
- IAP 334 - Conceptual Development in the Arts
- IAP 351 - Concept, Image, and Text
- IAP 361 - Digital Editing and Media Literacy
- IAP 363 - Sound, Image, and Media
- IAP 364 - Documentaries
- IAP 365 - Digital Interactivity
- IAP 466 - Digital Interactivity, Advanced
- IAP 467 - Acoustic Ecology
- IAP 474 - Art and Film
- SOC 364 - Popular Culture
- SOC 365 - Sociology of Mass Communication
- SOC 366 - Film and Society
- THE 300 - Film: The Creative Process
- THE 394 - ST: Acting for the Camera OR ST: Television Production
- THE 400 - Focus on Film
- WST 431 - Women and Film

FILM AND VIDEO STUDIES<br>FILM STUDIES EMPHASIS<br>COLLEGE OF ARTS AND SCIENCES<br>2008-2009<br>West Campus<br>FAB, Room N290C, Ph: 602.543.6052

## Description

The concentration 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, as well as degrees in production, film studies, media studies, performance studies, and communication studies. Courses in the concentration in Film and Video Studies 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, and
- Develop practical skills that enable students to be competitive in film, video, television, and media-related production industries.

All students interested in Film and Video Studies must meet with an advisor in Film and Video Studies at the West campus prior to declaring this concentration.

## I. Foundational - 6 Hours (2 Courses)

CMN 324 - Rhetoric and Media Criticism
IAP 351 - Concept, Image, and Text
IAP 465 - Media Technologies and the Arts
SOC 365 - Sociology of Mass Communication
II. Theoretical, Critical, Performance, Production - 12 Hours (4 Courses)

CMN 329 - Persuasion
CMN 324 - Rhetoric and Media Criticism
COM 421 - Rhetoric of Social Issues
OR
CMN 421-Rhetoric of Social Issues
CMN 429 - Semiotics and Visual Communication
ENG 365 - History of Film
IAP 322 - Multitrack Digital Recording
IAP 334 - Conceptual Development in the Arts
IAP 351 - Concept, Image, and Text
IAP 361 - Digital Editing and Media Literacy
IAP 363 - Sound, Image, and Media

IAP 364 - Documentaries
IAP 365 - Digital Interactivity
IAP 465 - Media Technologies and the Arts
IAP 466 - Digital Interactivity, Advanced
IAP 467 - Acoustic Ecology
IAP 474 - Art and Film
SOC 364-Popular Culture
SOC 365 - Sociology of Mass Communication
SOC 366 - Film and Society
THE 394-Special Topics
THE 400 - Focus on Film
WST 431 - Women and Film
III. Capstone - 3 Hours (1 Course)

## What you'll see on your DARS:

21 Hours, 15 Upper Division
--> NEEDS: 21.00 HOURS 3 SUB-GROUPS

- 1) Foundational-2 Courses NEEDS: 2 COURSES
COURSE LIST: COM 324 [*RHET*MEDIA*] OR CMN 324 [*RHET*MEDIA*] IAP 351 IAP 465 SOC 365

2) Theoretical, Critical, Performance, Production 4 Courses from the list below or as approved by an Academic Advisor
NEEDS: 4 COURSES
COURSE LIST: COM 329 OR CMN 329 COM 324 [*RHET*MEDIA*]
OR CMN 324 [*RHET*MEDIA*] COM 421 OR CMN 421
COM 429 OR CMN 429 ENG 365 IAP 322 IAP 334
IAP 351 IAP 361 IAP 363 IAP 364 IAP 365 IAP 465
IAP 466 IAP 467 IAP 474 SOC 364 SOC 365 SOC 366
THE 300 THE 394 [*ACT*CAM] THE 394 [*TEL*PROD]
THE 400 WST 431

- 3) Capstone Project

NEEDS: 1 COURSE
COURSE LIST: IAP 480

FILM AND MEDIA STUDIES
College of Liberal Arts and Sciences
2008-2009
Durham Language and Literature 641, Ph: 480.965.6747

## Description:

The Film and Media Studies concentration 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 (HU)
- FMS 300 - Media and Cultural Studies (HU/L)
- Plus three upper division courses from the areas of emphasis course list Media and Society, Media Industries, Styles and Genres or Screenwriting.

FILM AND MEDIA PRODUCTION
School of Theatre and Film
Phone: 480/965-5337
Email: theatre@asu.edu, theatrefilm@asu.edu, or film@asu.edu
Location: GHALL 232

## Description

As a student pursuing this concentration, you will study the basic production processes of film while exploring its history and contemporary social issues.

## Program Requirements

The school offers a BIS concentration in Film and Media Production consisting of 18 semester hours of course work.

## The following courses are required:

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, Part 1 (3)
THE 403: Independent Film (3)
Upper division elective in FMP, THP, or THE related to film and media production (6 credits)

All prerequisites for the concentration courses must be met (see course listings).
Transfer students may transfer up to six semester hours toward their minor. A grade of $C$ (2.00) or higher is required for all courses in the concentration.

Contact the Herberger College of the Arts advising office for information: http://theatrefilm.asu.edu/students/current/undergrad-minors.php.

NOTE: Grade of "C" (2.00) or better required.
--> NEEDS: 18.0 HOURS
2 sub-groups

- 1) CORE - 12 hours

NEEDS: 12.0 HOURS
COURSE LIST: FMP 201 FMP 250 FMP 300 THE 403
2) Electives - 6 hours upper division

NEEDS: 6.0 HOURS
COURSE LIST: FMP THE OR THP

BIS Concentration Check Sheet

FAMILY STUDIES/CHILD DEVELOPMENT Concentration College of Liberal Arts \& Sciences 2008-2009
Social Sciences 114, Ph: (480) 965-6978

NOTE: FAS 331 is cross-listed with SOC 315 , students cannot receive for both courses.

## Description:

The concentration 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. Courses must be completed with grades of $C$ or better.
I. Core-9 credits (all required):

- CDE 232-Human Development
- FAS 331 - Marriage and Family Relationships
- FAS 370 - Family Ethnic \& Cultural Diversity
II. Electives-9 credits (one course must be a CDE course) :
- CDE 337-Early Childhood Intervention
- CDE 430 - Infant/Toddler Development in the Family
- CDE 444 - Risk and Variation in Child Development
- CDE 498 - Topic: (Language Development \& Psychology)
- FAS 431 - Parent-Adolescent Relationships
- FAS 440 - Fundamentals of Marriage and Family Therapy
- FAS 498 - Topic: (Conflict Resolution, Work \& Society, Deviant Behavior, and Popular Black Media/ Adolescence)

What you will see on your DARS:
NOTE: Grade of C (2.00) or better required.
Minimum 12 upper division hours required.
--> NEEDS: 18.00 HOURS 2 SUB-GROUPS

1) CORE - 9 hours

NEEDS: 9.00 HOURS
COURSE LIST: CDE 232(R) FAS $331(\mathrm{R})$ FAS 370(R)
2) ELECTIVES - 9 hours

NEEDS: 9.00 HOURS
COURSE LIST: CDE 337 CDE 430 CDE 444 CDE 498
FAS 431 FAS 440 FAS 498

EXERCISE AND WELLNESS
School of Applied Arts and Sciences- Polytechnic Campus
2008-2009
480.727.1932

## Description:

Promoting healthy lifestyles is a key component of a prosperous global society and is important for an individual's day-to-day health and wellbeing. Regular physical activity is the best prescription known to reduce the risks of many chronic diseases and disabling conditions and it is effective in improving mental health and physical function as one ages. The need for qualified, educated professionals in the areas of exercise and wellness and healthy lifestyle promotion is growing. Exercise and Wellness will provide you with the tools you need to find a successful career promoting healthy lifestyles.

## I. Core - Needs 12 Hours

EXW 300 - Foundations of Exercise and Wellness
EXW 325 - Fitness for Life
EXW 342 - Health Behavior Change
EXW 450 - Cultural and Social Issues in Exercise and Wellness
II. Electives - Needs 6 Hours

EXW 100 - Introduction to Health and Wellness
EXW 310 - Computer Skills and Technology for Exercise and Wellness
EXW 311 - Special Populations in Exercise and Wellness
EXW 320 - Program Development and Leadership
EXW 346 - Health Promotion and Program Evaluation
EXW 350 - Substance Abuse and Addictive Behavior
EXW 380 - Body Image and Wellness
EXW 400 - Stress Management for Wellness
EXW 442 - Physical Activity in Health and Disease
EXW 444 - Epidemiology
EXW 460 - Resistance Training Application and Theory
KIN 100 - Introduction to Health and Wellness
NTR 100 - Introductory Nutrition
NTR 241 - Human Nutrition
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
NTR 350 - Nutrition Counseling
NTR 351 - Nutrition and Health Communications
NTR 450 - Nutrition in the Life Cycle I
NTR 451 - Nutrition in the Life Cycle II

## What you'll see on your DARS:

NOTE: Grade of C (2.00) or better required.
Minimum 12 upper division hours required.
--> NEEDS: 18.00 HOURS 2 SUB-GROUPS

- 1) CONCENTRATION CORE - 12 hours NEEDS: 12.00 HOURS COURSE LIST: EXW 300 EXW 325 EXW 342 EXW 450
- 2) CONCENTRATION ELECTIVES - 6 hours

See department for list of approved courses
NEEDS: 6.00 HOURS
COURSE LIST: EXW 100 EXW 280 EXW 310 EXW 311
EXW 320 EXW 346 EXW 350 EXW 380 EXW 400 EXW 442
EXW 444 EXW 460 HES 100 KIN 100 KIN 370 NTR 100
NTR 241 NTR 340 NTR 341 NTR 345 NTR 346 NTR 348
NTR 350 NTR 351 NTR 450 NTR 451

## ASI ARzon State UNIVERSITY

ETHNIC STUDIES<br>New College of Interdisciplinary Arts and Sciences<br>2008-2009<br>West Campus<br>Ph: 602.543.6096

## 21 HOURS, 15 UPPER DIVISION

MAXIMUM 3 HOURS OF INDEPENDENT STUDY
MINIMUM "C" (2.00) GRADE

## 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 concentration 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 that 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.

## I. Core - 6 Hours

ETH 300 - Principles of Ethnic Studies
ETH 484 - Ethnic Studies Internship
II. Electives - 15 Hours

AMS 310 History of American Systems to 1865
AMS 322 Studies in American Literature
AMS 330 Introduction to American Lives
AMS 332 Studies in Race and Ethnicity
AMS 417 Religious Traditions of the American Southwest
AMS 422 Studies in American Literature
AMS 428 Chicano Cultures in the Southwest
AMS 432 Studies in Race and Ethnicity
ASB 319 Indigenous Peoples of North America
ASB 320 Indians of Arizona
ASB 321 Indians of the Southwest
ASB 340 Migration and Culture
ASB 346 Marriage and Family Diversity
ASB 350 Anthropology and Art
ASB 353 Death and Dying in Cross-Cultural Perspective
ASB 440 Women in the Global Factory
ASB 442 Urban Anthropology
TEL 212 Understanding the Culturally Diverse Child
COM 371 Language, Culture, and Communication
OR
CMN 371 Cross-Cultural Communication Perspectives
CRJ 306 Race, Ethnicity, and Justice
ENG 317 Cross-Cultural Writing

ENG 342 20th-Century British and Irish Literature
ENG 420 Multicultural Autobiographies
ENG 353 African American Literature: Beginnings through the Harlem Renaissance
ENG 463 African-American Literature
ENG 464 Studies in Drama
OR
ENG 359 American Indian Literature
ENG 363 Chicano Literature
ENG 460 Ethnic Women Writers
ENG 462 Africana Literature
ETH 100 Introduction to Ethnic Studies
FAS 331 Marriage and Family Relationships
GCU 361 Urban Geography
GLB 302 Culture and Diversity Management
HIS 305 History of American Systems to 1865
HIS 423 Mexico
OR
HST 447 Modern Mexico
HIS 424 The Hispanic Southwest
OR
HST 331 Mexican American History to 1900
HIS 331 American Indians
OR
HST 337 American Indian History to 1900
HIS 430 20th Century Chicano/a History
OR
HST 417 Topics in Mexican American History
HIS 431 Social History of American Women
HIS 439 Topics in American Race, Class, Gender, and Ethnicity
HIS 454 History of Genocide
HIS 462 The African Diaspora
HIS 465 Origins of Racism
HON 394 - Special Topics
IAP 302 Cross-Cultural Perspectives on the Arts
IAP 303 Artists and the Contemporary American Experience
IAP 464 Media and Diversity
IAS 220 Psychology, Multicultural Narratives, and Religion
IAS 407 Environmental Philosophy and Policy
IAS 420 Multicultural Autobiographies
PHI 407 Environmental Philosophy and Policy
PGS 480 Cross-Cultural Social Psychology
POL 320 Latino Politics
POL 430 Race and Politics in the Americas
POL 435 Women, Power, and Politics
POL 436 Gender, Sexuality, Nation-States
REC 302 -
RTM 302 Recreation and Tourism for Diverse Populations
OR
REL 305 Ritual, Symbol, and Myth
REL 390 Women and Religion
REL 420 Religion in American Life and Thought
SBS 301 Cultural Diversity
SBS 410 Topics in Identity/Difference
SBS 430 Topics in Power/Knowledge
SOC 331 Environmental Sociology

SOC 328 Migration
SOC 332 Urban Sociology
SPA 464 Mexican American Literature
SPF 301 Culture and Schooling
SWG 534 Diversity and Underserved Populations
SWG 697 Special Topics in Working with Diverse Groups
SWU 474 Ethnic/Cultural Variables in Social Work
WST 300 Women in Contemporary Society
WST 320 Women in Popular Culture
WST 350 Race, Class, and Gender
WST 370 Chronicling Women's Lives
WST 390 Women and World Religions
WST 467 Ethnic Women Writers
WST 473 Latina/Chicana Representation
WST 475 Women of the Diaspora Across Cultures

What you'll see on your DARS:
--> NEEDS: 21.00 HOURS 2 SUB-GROUPS 2.50 GPA

- 1) Core - 6 Hours

NEEDS: 6 HOURS 2 COURSES
COURSE LIST: ETH 300(R) ETH 484(R)

- 2) Electives - 15 Hours

SELECT IN CONSULTATION WITH ETHNIC STUDIES ADVISOR NEEDS: 15.00 HOURS
COURSE LIST: AMS 310 AMS 322 AMS 330 AMS 332
AMS 417 AMS 422 AMS 427 AMS 428 ASB 432 ASB 319
ASB 320 ASB 321 ASB 340 ASB 346 ASB 350 ASB 353
ASB 440 ASB 442 COE 212 OR TEL 212 W COM 371 OR
CMN 371 COM 416 OR CMN 416 CRJ 306 ENG 317
W ENG 341 W ENG 342 ENG 420 ENG 353 ENG 463
W ENG 464 OR ENG 359 W ENG 466 OR ENG 363
W ENG 467 OR ENG 460 W ENG 468 OR ENG 462 ETH 100
ETH 394 ETH 494 FAS 331 GCU 361 GLB 302
M HIS 305 HIS 423 OR M HST 447 HIS 424 OR
M HST 331 W HIS 331 OR M HST 337 HIS 430 OR
M HST 417 W HIS 431 W HIS 439 HIS 454 HIS 462
HIS 465 HON 394 [*CULT*DIV*] IAP 302 IAP 303
IAP 464 IAS 220 IAS 407 IAS 420 PHI 407 PGS 485
PGS 480 POL 320 POL 430 POL 435 POL 436 REC 302
RTM 302 OR REL 305 REL 390 REL 420 SBS 301
SBS 410 SBS 430 W SOC 331 OR SOC 328 SOC 332
SOC 370 SPA 464 SPF 301 (THROUGH FA03) SWG 534
SWG 697 SWU 474 WST 300 WST 320 WST 350 WST 370
WST 390 WST 467 WST 473 WST 475

ETHICS
College of Liberal Arts \& Sciences
2008-2009
Agriculture Building, Room 213, Ph: 480.727.7691

## 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, among others, may well find that training in ethics is beneficial for their career goals. The certificate program permits some flexibility about course selection, thereby facilitating particular students' interests.

## I. Core - $\mathbf{3}$ hours

- PHI 105-Introduction to Ethics
- OR
- PHI 335 - History of Ethics
II. Electives - $\mathbf{1 5}$ Hours
- PHI 105 - Introduction to Ethics
- PHI 304 - Existentialism
- PHI 305-Ethical Theory
- PHI 306 - Applied Ethics
- PHI 307 - Philosophy of Law
- PHI 309-Social and Political Philosophy
- PHI 310-Environmental Ethics
- PHI 320-Bioethics
- PHI 335-History of Ethics
- PHI 420 - Topics in Philosophy (with a focus on ethics)


## What you'll see on your DARS:

NOTE: Grade of C (2.00) or better required.
Minimum 12 upper division hours required.
--> NEEDS: 18.00 HOURS 2 SUB-GROUPS

- 1) CORE - 3 hours

NEEDS: 3.00 HOURS
COURSE LIST: PHI 305 OR PHI 335
2) ELECTIVES - 15 hours

NEEDS: 15.00 HOURS
COURSE LIST: PHI 105 PHI 304 PHI 305 PHI 306
PHI 307 PHI 309 PHI 310 PHI 320 PHI 335
PHI 420 [*ETHICS*]

ENVIRONMENTAL GEOGRAPHY
College of Liberal Arts \& Sciences
2008-2009
Schwada Building, Room 131, Ph: 480.965.3652

## Description:

- The Environmental Geography area of concentration requires 19-20 semester hours of which a minimum of 12 semester hours must be upper division.
- A letter grade of $C$ or better is required for all courses taken in the area of concentration.
- A minimum of six upper-division hours in the concentration must be taken in residence at ASU Main.
I. Part 1-4 Hours

GPH 111 - Introduction to Physical Geography
II. Part 2-3 to 4 Hours

M GPH 210 - Society and Environment
M GPH 211 - Landform Processes
GPH 212/214-Introduction to Meteorology \& Lab
III. Part 3-6 Hours (two courses)

GPH 314-Global Change
GCU 350 - The Geography of World Crises
GCU 364 - Energy in the Global Arena
GPH 373 - Geographic Information Science I
GPH 381 - Geography of Natural Resources
IV. Part 4-6 Hours (two courses)

GPH 405 - Energy and Environment
GPH 414 - Climate Change
GPH 418 - Landforms of the Western United States
GPH 422 - Plant Geography
GPH 433 - Alpine and Arctic Environments
GPH 481 - Environmental Geography
GCU 474 - Public Land Policy

What you'll see on your DARS:
NOTE: Grade of C (2.00) or better required.
Minimum 12 upper division hours required.
--> NEEDS: 19.00 HOURS 4 SUB-GROUPS

- 1) PART 1-4 hours NEEDS: 4.00 HOURS COURSE LIST: GPH 111 (R)
- 2) PART 2 - 3 to 4 hours NEEDS: 3.00 HOURS 1 SET COURSE LIST: GPH 210 GPH 211 GPH 212 \& GPH 214
- 3) PART 3-6 hours NEEDS: 6.00 HOURS
COURSE LIST: GPH 314 GCU 350 GCU 364 GPH 373 GPH 381
- 4) PART 4-6 hours NEEDS: 6.00 HOURS COURSE LIST: GPH 405 GPH 414 GPH 418 GPH 422 GPH 433 GPH 481 GCU 474


# BIS Concentration Check Sheet 

ENGLISH (LITERATURE)
College of Liberal Arts \& Sciences
2008-2009
Language and Literature, Room 549C, Ph: 480.965.3535

NOTES:

- To register for ENG 200, students must first make an advising appointment to obtain an eligibility override.
- Check the online Schedule of Classes for course prerequisites.
- A "C" minimum grade is required for all classes.
- A minimum of 12 upper-division hours is required, with at least 6 of these taken at ASU (any campus).
- BIS students may use only one concentration from the Department of English.


## I. Core

- ENG 200 Critical Reading and Writing about Literature
II. Areas and Periods
- Must fulfill three of the four areas/periods. At least one course must be at the 400 level. Students may, once only, use a course to satisfy two requirements.
- ENG/ENH ___-_ Literature and Culture before 1800
- ENG/ENH ___-_ Literature and Culture after 1800
- ENG/ENH ____ Literary Theory and Interdisciplinary Studies
- ENG/ENH _____ Transnational, Postcolonial, and Global Literatures


## III. Electives

- Additional courses needed to complete the 24 hours are free electives chosen from English offerings at the 200 level or above. Electives should also be chosen to meet the minimum 12 upper-division (300- or 400-level) units required for the minor/BIS concentration. Internships (ENG 484) are encouraged—see English Internship Coordinator.
ENG/ENH $\qquad$
ENG/ENH $\qquad$
ENG/ENH $\qquad$ ENG/ENH ____


## What you'll see on your DARS:

NOTE: Grade of C (2.00) or better required.
Minimum 12 upper division hours required.
--> NEEDS: 24.00 HOURS 3 SUB-GROUPS

- 1) CORE - 3 hours NEEDS: 3.00 HOURS
COURSE LIST: ENG 200
- 2) AREAS and PERIODS - 6 to 9 hours

One course from three of the distribution clusters, with at least one course at the 400 -level.
See English Department for list of course choices.
NEEDS: 6.00 HOURS
COURSE LIST: ENG-TEMPHX ENG-TEMPH2

- 3) ELECTIVES - 12 to 15 hours

Three to nine hours must be upper division.
NEEDS: 12.00 HOURS
COURSE LIST: ENG 2 ENH 2 ENG 3 ENH 3 ENG 4 ENH 4

ENGLISH
New College of Interdisciplinary Arts \& Sciences
2008-2009
West Campus
FAB, Room N 204, Ph: 602.543.6090

```
21 HOURS, MINIMUM 9 HOURS UPPER DIVISION
***MINIMUM C (2.00) GRADE***
```

The English curriculum requires 21 semester hours in English, at least nine of which must be in upper division courses.

## I. Lower Division - $\mathbf{1 2}$ Hours

ENG 221 - Survey of English Literature
ENG 222 - Survey of English Literature
ENG 241 - American Literature
ENG 242 - American Literature
II. Upper Division - 9 Hours

ENG 311 - Persuasive Writing
ENG 323 - Rhetoric and Grammar
ENG 421 - Shakespeare
OR
ENG 473 - Shakespeare

## What you'll see on your DARS:

--> NEEDS: 21 Hours 2 SUB-GROUPS

- 1) Lower Division Required Courses - 12 Hours NEEDS: 12.00 HOURS
COURSE LIST: ENG $221(\mathrm{R})$ ENG 222(R) ENG $241(\mathrm{R})$ ENG 242(R)

2) Upper Division Required Courses - 9 Hours

NEEDS: 9.00 HOURS
COURSE LIST: ENG 311 (R) ENG 323(R) ENG 421 OR ENG 473

ENGLISH (LINGUISTICS)
College of Liberal Arts \& Sciences
2008-2009
Language and Literature, Room 549C, Ph: 480.965.3535

## NOTES:

- To register for ENG 200, students must first make an advising appointment to obtain an eligibility override.
- Check the online Schedule of Classes for course prerequisites.
- A "C" minimum grade is required for all classes.
- A minimum of 12 upper-division hours is required, with at least 6 of these taken at ASU (any campus).
- BIS students may use only one concentration from the Department of English.


## I. Core - $\mathbf{1 8}$ Hours

ENG 200 - Critical Reading and Writing about Literature
ENG 213 - Introduction to the Study of Language
ENG 221 - Survey of English Literature to 1798
OR
ENG 222 - Survey of English Literature since 1798
OR
ENG 241 - Literatures of the United States to 1860
OR
ENG 242 - Literatures of the United States, 1860 to Present
ENG 312 - English in Its Social Setting
ENG 314 - Modern Grammar
ENG 413 - History of the English Language
II. Electives - 3 Upper Division Hours

ENG 3
ENG 4
ENH 3
ENH 4
III. Electives - 3 hours

ENG 2
ENG 3
ENG 4
ENH 2
ENH 3
ENH 4

What you'll see on your DARS:
NOTE: Students may use only one concentration from the Department of English.

NOTE: Grade of C (2.00) or better required.
Minimum 12 upper division hours required.
--> NEEDS: 24.00 HOURS 3 SUB-GROUPS

- 1) CORE - 18 hours

NEEDS: 18.00 HOURS
COURSE LIST: ENG 200 ENG 213 ENG 221 OR ENG 222 OR ENG 241 OR ENG 242 ENG 312 ENG 314 ENG 413

- 2) ELECTIVES - 3 upper division hours NEEDS: 3.00 HOURS
COURSE LIST: ENG 3 ENH 3 ENG 4 ENH 4
- 3) ELECTIVES - 3 hours

NEEDS: 3.00 HOURS
COURSE LIST: ENG 2 ENH 2 ENG 3 ENH 3 ENG 4 ENH 4

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EDUCATION
Mary Lou Fulton College of Education
2008-2009
Payne, Room L1-13, Ph: 480.965.5555
```

I. Core - 9 Hours

EDP 310 - Education Psychology for Non-Teachers OR

- MCE 230 - Understanding the Culturally Diverse Child

OR
MCE 446 - Understanding the Culturally Diverse Child

- SPF 301 - Culture and Schooling
II. Areas of Study - 9 hours in one area-choose from the following:
A. DIVERSITY/EDUC:
- BLE 335 - Language Diversity in Classrooms
- BLE 400 - Principles of language minority education
- IED 401 - Navajo Language and Culture I
- IED 403 - Navajo Language and Culture II
- IED 410 - History American Indian Education
- IED 422 - Methods/Teach Indian Students
- IED 430 - Lang/Literacy-Indig Peoples
- IED 433 - Counseling the Indian Student
- IED 444 - Govt Role-Native Ed Pol/Adm
- IED 460 - Yaqui History and Culture
- IED 494 - Special Topics OR
- IED 498 - Pro-Seminar
- SPE 309 - Basic Special Education Curriculum
- CED 111 - Exploration of Education
- SPE 222-Orientation to Education of Exceptional Children
B. EDUC PSYCH:
- EDP 303 - Human Development
- EDP 310 - Education Psychology for non-teachers OR
- EDP 311-Education Psychology for Future Teachers
- EDP 313 - Childhood and adolescence
- EDP 454 - Statistical Data Analysis in Education
- ECD 210-The Developing Child: Theory into Practice: Birth-Pre-K
- ECD 214-The Developing Child: Theory into Practice: K-3
C. EDU MEDIA/COMP:
- EDT 321-Computer Literacy
- EDT 323-Computer Applications
- EDT 394 - Special Topics
- EDT 455-Authoring Tools
- EDT 494-Special Topics


## What you'll see on your DARS:

NOTE: Grade of C (2.00) or better required. Minimum 12 hours upper division.
--> NEEDS: 18.00 HOURS 2 SUB-GROUPS

- 1) CORE - 9 Hours

NEEDS: 9.00 HOURS
COURSE LIST: EDP 310(THROUGH S207) OR EDP 311 MCE 446
OR MCE 230 SPF 301(R)

- 2) AREAS OF STUDY - 9 hours in one area NEEDS: 9.00 HOURS
COURSE LIST: DIVERSITY/EDUC: BLE 335 BLE 400 IED 401
IED 403 IED 410 IED 411 IED 422 IED 430
IED 433 IED 444 IED 460 IED 494 OR IED 498
SPE 309 SPF 111 OR CED 111 SPE 311 OR SPE 222
EDUC PSYCH: EDP 303 EDP 310(THROUGH S207) OR
EDP 311 EDP 313 EDP 454 ECD 210 ECD 214 EDU MEDIA/COMP: EDT 321 EDT 323 EDT 394 EDT 455 EDT 494

ECONOMICS
College of Liberal Arts \& Sciences
2008-2009
Stauffer Hall 412, Ph: 480.965.5095

## 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

The BIS area of concentration requires 18 semester 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.
I. Core-6 hours:

- ECN 211-Macroeconomic Principles OR
- ECN 213 - Honors Macroeconomics
- ECN 212 - Microeconomic Principles

OR

- ECN 214 - Honors Microeconomics
II. Electives- 12 Hours
- ECN 300/400-level


## What you will see on your DARS:

NOTE: Grade of C (2.00) or better required.
Minimum 12 upper division hours required.
--> NEEDS: 18.00 HOURS 2 SUB-GROUPS

- 1) CORE - 6 hours

NEEDS: 6.00 HOURS
COURSE LIST: ECN 211 OR ECN 213 ECN 212 OR ECN 214

- 2) UPPER DIVISION ELECTIVES - 12 hours

Minimum 6 hours at ASU Main.
NEEDS: 12.00 HOURS
COURSE LIST: ECN 3 ECN 4

BIS Concentration Check Sheet

EAST ASIAN STUDIES
College of Liberal Arts and Sciences
2008-2009
Ph: 480-965-7184

## Description:

The concentration in East Asian Studies demonstrates knowledge of an Asian language as well as knowledge of Asian history, art, culture, or society. This concentration 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, MBA programs, or PhD programs.

## Program Requirements:

The curriculum includes 24 semester hours of course work:

1. 15 semester 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); and
2. Nine additional semester 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.
```
Design Studies
College of Design
2008-2009
CDS Room 115 , Ph: 480.965.3584
```


## Description:

- The courses may appeal to students who wish to pursue the study of design within the Bachelor of Interdisciplinary Studies degree.
- Courses selected must satisfy the minimum requirement of 18 semester hours for the concentration.
- Twelve of the semester hours must be in 300- or 400-level course work.
- To pursue the concentration in Design Studies, students must have a minimum cumulative GPA of 2.50 .
- 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 concentration in design studies are lecture courses.
I. Core - $\mathbf{1 8}$ Hours

ALA 100 - Introduction to Environmental Design
ALA 102 - Architecture, Landscape Architecture, and Society
APH 313 - History of Architecture I
APH 314-History of Architecture II
APH 411 - History of Landscape Architecture
APH 598 - Special Topics
DSC 101 - Design Awareness
GRA 111 - Graphic Design History I
GRA 112 - Graphic Design History II
GRA 225 - Communication/Interaction Design Theory
GRA 345 - Design Rhetoric
GRA 440 - Finding Purpose
IND 242 - Materials and Design
IND 243 - Design -Ecology/Social Equity
IND 316 - 20th-Century Design I
IND 317 - 20th-Century Design II
IND 344 - Human Factors in Design
IND 354 - Principles of Product Design
IND 470 - Prof Practice-Industrial Desgn
INT 111 - Interior Design Issues and Theories
INT 121 - Introduction to Computer Modeling for Interior Design
INT 238 - Intro to CAD
INT 310 - History of Interior Design I
INT 311 - History of Interior Design II

- INT 412 - History of Decorative Arts in Interiors
- INT 413-History of Textiles in Interior Design

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    LPH 311 - Contemporary Landscape Architecture
    PUP 100 - Introduction to Environmental Design
    PUP 190-Sustainable Cities
    PUP200 - The Planned Environment
    PUP 301 - Introduction to Urban Planning
    PUP 363-History of Planning
    PUP 412 - History of the City
    PUP 425 - Urban Housing Analysis
    PUP 430 - Transportation Planning and the Environment
    PUP }432\mathrm{ - Planning and Development Control Law
    PUP 442 - Environmental Planning
    PUP 444 - Preservation Planning
    PUP445 - Women and Environments
    PUP 475 - Environmental Impact Assessment
    PUP 485 - International Field Studies in Planning
```

What you'll see on your DARS:

Minimum 2.50 GPA required to fulfill this concentration. Grade of "C" (2.00) or better required in each course. Minimum 12 upper division hours required.
--> NEEDS: 18.00 HOURS 1 SUB-GROUP 2.50 GPA

- 1) CORE Non-Studio - 18 hours

Note the semesters these courses are offered; some are sequential in nature and require prerequisites.
NEEDS: 18.00 HOURS
COURSE LIST: ALA 100 ALA 102 APH 313 APH 314 APH 411 APH 598 DSC 101 GRA 111 OR GRA 318org GRA 112 GRA 225 GRA 345 GRA 440 IND 242 IND 243 IND 316 IND 317 IND 344 IND 354 IND 470 INT 111 INT 121 INT 238 INT 310 INT 311 INT 412 INT 413 LPH 311 PUP 100 PUP 190 PUP 200 PUP 301 PUP 363 PUP 412 PUP 425 PUP 430 PUP 432 PUP 442 PUP 444 PUP 445 PUP 475 PUP 485

## 4- <br> UNIVERSITY

# BIS Concentration Check Sheet 

DANCE
Herberger College of the Arts
2008-2009
Dixie Gammage 116, Ph: 480.965.3468

## Description

The Department 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. Contemporary technique, performance and choreography define the core of the program, and the rich educational experience is further enhanced by studies in dance cultures, music, digital media, dance history, philosophy and criticism, movement science, somatics, and stage and screen production.

## Program Requirements

The department offers a BIS Concentration in Dance consisting of 18 semester hours of course work, including twelve upper-division hours. A minimum grade of $C$ (2.00) or higher is required in all courses that fulfill the Dance concentration. Students must maintain an overall cumulative GPA of 3.00 or higher for Dance courses.

Additional Dance requirements include the following:
Choose from the following courses (3 credits):

- DAH 101 Introduction to Dance G (3)
- DAH 201 Dance in World Cultures HU, G (3)

Choose from the following courses ( 3 credits):

- DAH 301 Philosophy and Criticism of Dance L/HU (3)
- DAH 302 Cross-Cultural Dance Studies L/HU, G (3)
- DAH 401 Dance History HU (3)

Choose from the following courses (4 credits):

- DAN 130 Dance (2)
- DAN 194 Special Topics (2)
- DAN 294 Special Topics (2)
- DAN 394 Special Topics (2)

Dance electives (8 credits)
Total 18

* Topics include Modern, Ballet, Jazz, Argentine Tango, Capoeira, Country Western, Dances of India, Tai Chi, Hip Hop, Latin Salsa, Latin/Swing/Ballroom, Pilates/Yoga, Oriental/Belly Dancing, and Dances of Africa. For more information, contact the Herberger Student Academic Services office.

Please contact the department for more information: http://dance.asu.edu/undergraduate/faq.htm.

```
CREATIVE WRITING
College of Liberal Arts & Sciences
2008-2009
Language and Literature, Room 549C, Ph: 480.965.3535
```

NOTE: Students may use only one concentration from the Department of English.
The concentration in Creative Writing requires 24 hours, of which 12 hours must be upper division (300/400-level); grades of C or better required for all courses.
I. Core 3 Hours

- ENG 200 - Critical Reading and Writing About Literature
II. Creative Writing 6 Hours
- ENG 210 - Topic: (Fiction, Poetry, Mixed Genre, Playwriting, Intro to Creative Writing)
- ENG 411 - Topic: (Poetry, and Fiction)
III. Creative Writing 6 Hours (one class from each topic)
- ENG 310-Topic: (Poetry, and Fiction)
IV. Additional Writing 3 Hours
- ENG 412 - Creative Nonfiction
- ENG 494 - Topic: (Magazine Writing, Satan, Arthurian Literature, Theorizing Restoration Drama, Story Analysis for Film and TV, Cultural Theories, Teaching the Novel Grades 6-12, Experimental Narrative, Romanticism, Society and Culture in Modern Europe, Information Matters: Media Teaching and Tools)
V. Electives 6 Hours


## What you will see on your DARS:

NOTE: Students may use only one concentration from the Department of English.

NOTE: Grade of C (2.00) or better required.
Minimum 12 upper division hours required.
--> NEEDS: 24.00 HOURS 5 SUB-GROUPS

1) CORE - 3 hours

NEEDS: 3.00 HOURS
COURSE LIST: ENG 200(R)

- 2) CREATIVE WRITING - 6 hours

NEEDS: 6.00 HOURS COURSE LIST: ENG 210(R) ENG 411 (R)

- 3) CREATIVE WRITING - 6 hours Select two writing courses from different genres NEEDS: 6.00 HOURS
COURSE LIST: ENG 310

4) ADDITIONAL WRITING - 3 hours

NEEDS: 3.00 HOURS
COURSE LIST: ENG 412 [*PROF* WRIT*]
ENG 494(THROUGH FAO1) [*ST:CRE* NON*]
ENG 412 [*CRE* NON*]

- 5) ELECTIVES - 6 hours

NEEDS: 6.00 HOURS
COURSE LIST: ENG 2 ENG 3 ENG 4 ENH 2 ENH 3 ENH 4

BIS Concentration Check Sheet

CREATIVE CITY<br>School of Public Affairs<br>2008-2009<br>UCENT 455, Ph: 602.496.0468

The check sheet for Creative City is not available at this time. For additional information, please check with the department offering this concentration, or consult with your BIS advisor.

COMPUTER GAMING
School of Computing and Informatics
2008-2009
Ph: 480.965.3199

## Description

The School of Computing and Informatics offers a computer gaming certificate. The 18credit hour certificate is open to any BIS student is designed to provide a comprehensive game development skill set that the student can apply to his or her other concentration area. The goal is not to teach the student to create recreational video games, but to apply gaming technology to domain-specific problems.
The gaming certificate teaches skills that not only make the student attractive to the rapidly-growing video game industry, but also to a variety of other enterprises, including business, medicine, geography, education, and biotechnology, among others.
Students completing the computer gaming certificate will take 6 semester hours of core courses, then specialize in one of three tracks ( 9 credit hours), each of which will culminate in a capstone project ( 3 credit hours):

- Programming: In this track, students focus on how game engines work and writing software to work within the game engine. This concentration has direct industry applicability in a number of areas. For example, a student might create a game architecture to help patients with physical therapy, or design a game platform that incorporates geographic information systems.

Art: In this track, students focus on the visual aspects of game design, including 2D/3D modeling, animation, and texturing. Real world applications might include creating an interactive virtual world for corporate training, inventing a surgical simulation to educate medical students, or creating content for the film industry.

Education: In this track, students discover how to apply game design skills to achieve educational goals, learning to build virtual worlds that complement an educational setting. For example, a student might build a game that teaches linear algebra by incorporating trigonometric rules into the game design, or a game that teaches correct sentence construction to early English learners.

## Program Requirements

I. Core courses - 9 Hours

- CPI 111-Game Development I
- CPI 211-Game Development II
- CPI 441 - Gaming Capstone

PICK ONE FROM THE FOLLOWING THREE:

## II. Programming - 9 Hours

- CPI 311-Game Engine Development
- CPI 411-Graphics for Games
- CPI 412-Cognitive Systems and Intelligent Agents III. Art - 9 Hours
- CPI 321 - Introduction to Game Art
- CPI 421 - Modeling and Texturing
- CPI 422-3D Animation and Rigging IV. Education - 9 Hours
- EDT 329 - Games, Simulations and Virtual Environments
- RDG 440 - Computer Gaming Learning and Literacy
- DCI 451 - Design Research and Educational Gaming

What you'll see on your DARS:

COMPUTATIONAL MATHEMATICAL SCIENCES
College of Liberal Arts and Sciences
2008-2009
PSA 211 , Ph: 480.965 .3951

## 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 concentration in Computational Mathematical Sciences consists of a minimum of 18 semester hours.

## Required courses:

- 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) Total 18

COMMUNICATION STUDIES
College of Human Services
2008-2009
West; 602.543.6600

## REQUIRED: MEETING WITH COMMUNICATION STUDIES FACULTY ADVISOR TO CONSTRUCT MINOR THAT REFLECTS A PARTICULAR AREA OF SPECIALTY AND INTEREST.

## COMMUNICATION STUDIES

The concentration consists of 18 credit hours of Communication Studies courses. Students wishing to pursue a concentration must meet with a Communication Studies faculty advisor to construct a concentration that reflects a particular area of specialty and interest. At least 12 semester hours must come from upper division courses. To graduate with the concentration, students must earn a minimum cumulative GPA of 2.0 in Communication Studies courses. All courses must be passed with a minimum grade of "C".
I. Required Coursework - Select 3 of the Following:

- CMN 320 Communication \& Consumerism
- CMN 329 Persuasion
- CMN 353 Professional Communication
- CMN 454 Rhetorical \& Critical Approaches to Public Relations
II. Elective Coursework - Select 3 of the following:

CMN 414 Crisis Communication

- CMN 453 Communication Training \& Development
- CMN 484 Internship*
- ENG 311 Persuasive Writing
- ENG 315 Writing for the Professions
- ENG 412 Writing for Publication
- MKT 301 Fundamentals of Marketing
- MKT 410 Consumer Behavior
- RTM 404 Marketing Recreation \& Tourism
- RTM 486 Special Events Management
III. Other Approved Classes:
- CMN 394 Special Topics
- ENG 394 Public Relations Writing
- IAP 361 Digital Editing \& Media Literacy

What you'll see on your DARS:
--> NEEDS: 18 HOURS 1 SUB-GROUP 2.00 GPA

- 1) Communication Studies Minor - 18 Hours

Minimum 12 Hours Upper Division
Minimum Grade of "C" (2.00), Minimum 2.00 GPA
NEEDS: 18.00 HOURS
COURSE LIST: COM CMN

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COMMUNICATION
College of Liberal Arts \& Sciences
2008-2009
Stauffer Hall, Room 412, Ph: 480.965.5095
```

NOTE: Grade of "C" (2.00) or better required.
No pass/fail credit.
Minimum 9 hours at Tempe campus.
Minimum 12 hours upper division.

## Description:

The concentration in Communication consists of 18 semester hours of courses. Nine of the 18 semester hours must be Tempe campus resident credits. No pass/fail, " $Y$ " credit, or credit/no-credit courses are allowed. All prerequisite and GPA requirements must be met. The "C" (2.00) minimum requirement must be met for each class.
I. Core - $\mathbf{6}$ Hours

COM 100 - Introduction to Human Communication
COM 225 - Public Speaking
OR
COM 259 - Communication in Business and the Professions
II. Electives - 12 Hours

COM 3 - any 300-level COM course
COM 4 - any 400 -level COM course

## What you'll see on your DARS:

--> NEEDS: 18.00 HOURS 2 SUB-GROUPS

- 1) CORE - 6 hours

NEEDS: 6.00 HOURS
COURSE LIST: COM 100 COM 225 OR COM 259

- 2) ELECTIVES - 12 upper division hours

At least 6 hours must be taken at Tempe campus. One course substitution is permitted.
See department for list of approved courses.
NEEDS: 12.00 HOURS
COURSE LIST: COM 3 COM 4

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CLASSICAL STUDIES (LATIN)
College of Liberal Arts \& Sciences
2008-2009
Language and Literature, Room 440, Ph: 480.965.6281
```


## I. Language - 19 Hours

LAT 101 - Elementary Latin
LAT 102 - Elementary Latin
LAT 201 - Intermediate Latin I
LAT 202 - Intermediate Latin II
LAT 421 - Roman Literature
LAT 422 - Roman Literature
II. Electives - 6 Hours

ARS 394 - Special Topics
ARS 402 - Art of Ancient Egypt
ARS 404 - Greek Art
ARS 406 - Roman Art
ASB 222 - Buried Cities and Lost Tribes: Our Human Heritage
ENG 303 - Classical Backgrounds of English Literature
ENG 422 - Studies in Shakespeare
GRK 394 - Special Topics
HPS 322 - History of Science
HST 304 - Studies in European History
HST 347 - Ancient Greece
HST 348 - Rome
HST 349 - the Early middle Ages
HST 350 - the Later middle Ages
HST 362 - Sex and Society in Classical and Medieval Europe
HUM 494 - Special Topics
LAT 394 - Special Topics
PHI 420 - Topics in Philosophy
PHI 301 - History of Ancient Philosophy
POS 340 - History of Political Philosophy I
III. Upper Division Electives - 6 hours

ARS 394-Special Topics
ARS 402 - Art of Ancient Egypt
ARS 404 - Greek Art
ARS 406 - Roman Art
ENG 303 - Classical Backgrounds of English Literature
ENG 422 - Studies in Shakespeare
GRK 394 - Special Topics
HPS 322 - History of Science
HST 304 - Studies in European History
HST 347 - Ancient Greece
HST 348 - Rome
HST 349 - the Early middle Ages

HST 350 - the Later middle Ages
HST 362 - Sex and Society in Classical and Medieval Europe
HUM 494 - Special Topics
LAT 394 - Special Topics
LAT 421 - Roman Literature
LAT 422 - Roman Literature
PHI 420 - Topics in Philosophy
POS 340 - History of Political Philosophy I
PHI 301 - History of Ancient Philosophy

What you'll see on your DARS:
NOTE: Grade of C (2.00) or better required.
Minimum 12 upper division hours required.
--> NEEDS: 31.00 HOURS 3 SUB-GROUPS

- 1) LANGUAGE - 19 hours NEEDS: 19.00 HOURS
COURSE LIST: LAT 101 LAT 102 LAT 201 LAT 202
LAT 421 LAT 422
- 2) ELECTIVES - 6 hours

NEEDS: 6.00 HOURS
COURSE LIST: ARS 394 [*EGYP* ART*] ARS 402 ARS 404
ARS 406 ASB 222 ENG 303 ENG 422
GRK 394 [*TROJAN*] HPS 322 HST 304 [*GREEK* WAR*]
HST 304 [*ATHENIAN*] HST 347 HST 348 HST 349
HST 350 HST 362 HUM 301 HUM 494 [*ANC* PER* CUL*]
HUM 494 [*GEND* ANC*] LAT 394 [*TROJAN*] PHI 301
PHI 420 [*GREEK*] POS 340 *** 294 [*CLA* MYTH*]
*** 294 [*GREEK* ROMAN*] *** 494 [*LATIN* PALEO*]

- 3) UPPER DIVISION COURSES - 6 hours

NEEDS: 6.00 HOURS
COURSE LIST: ARS 394 [*EGYP* ART*] ARS 402 ARS 404
ARS 406 ENG 303 ENG 422 GRK 301 GRK 302
GRK 394 [*TROJAN*] HPS 322 HST 304 [*GREEK* WAR*]
HST 304 [*ATHENIAN*] HST 347 HST 348 HST 349
HST 350 HST 362 HUM 301 HUM 494 [*ANC* PER* CUL*]
HUM 494 [*GEND* ANC*] LAT 394 [*TROJAN*] LAT 421
LAT 422 PHI 301 PHI 420 [*GREEK*] POS 340
*** 494 [*LATIN* PALEO*]

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CLASSICAL STUDIES (Greek)
College of Liberal Arts & Sciences
2008-2009
Language and Literature, Room 440, Ph: 480.965.6281
```

NOTE: Grade of C (2.00) or better required.
Minimum 12 upper division hours required.

## I. Language - 19 Hours

GRK 101 - Elementary Ancient Greek
GRK 102 - Elementary Ancient Greek
GRK 301 - Ancient Greek Literature I
GRK 302 - Ancient Greek Literature II
II. Electives - 6 Hours

ARS 394-Special Topics
ARS 402 - Art of Ancient Egypt
ARS 404 - Greek Art
ARS 406 - Roman Art
ASB 222 - Buried Cities and Lost Tribes: Our Human Heritage
ENG 303-Classical Backgrounds of English Literature
ENG 422 - Studies in Shakespeare
GRK 394 - Special Topics
HPS 322 - History of Science
HST 304 - Studies in European History
HST 347 - Ancient Greece
HST 348 - Rome
HST 349 - the Early middle Ages
HST 350 - the Later middle Ages
HST 362 - Sex and Society in Classical and Medieval Europe
HUM 494-Special Topics
LAT 394 - Special Topics
PHI 420 - Topics in Philosophy
PHI 301 - History of Ancient Philosophy
POS 340 - History of Political Philosophy I
III. Upper Division Electives - $\mathbf{6}$ hours

ARS 394-Special Topics
ARS 402 - Art of Ancient Egypt
ARS 404 - Greek Art
ARS 406 - Roman Art
ENG 303 - Classical Backgrounds of English Literature
ENG 422 - Studies in Shakespeare
GRK 394 - Special Topics
HPS 322 - History of Science
HST 304 - Studies in European History
HST 347 - Ancient Greece

HST 348-Rome
HST 349 - the Early middle Ages
HST 350 - the Later middle Ages
HST 362 - Sex and Society in Classical and Medieval Europe
HUM 494 - Special Topics
LAT 394 - Special Topics
LAT 421 - Roman Literature
LAT 422 - Roman Literature
PHI 420 - Topics in Philosophy
POS 340 - History of Political Philosophy I
PHI 301 - History of Ancient Philosophy

What you'll see on your DARS:
--> NEEDS: 29.00 HOURS
3 SUB-GROUPS

- 1) LANGUAGE-17 hours

NOTE: GRK 301/302 repeatable for credit
NEEDS: 17.00 HOURS
COURSE LIST: GRK 101 GRK 201 GRK 301 GRK 302

- 2) ELECTIVES - 6 hours

NEEDS: 6.00 HOURS
COURSE LIST: ARS 394 [*EGYP* ART*] ARS 402 ARS 404 ARS 406 ASB 222 ENG 303 ENG 422 GRK 394 [*TROJAN*] HPS 322 HST 304 [*GREEK* WAR*] HST 304 [*ATHENIAN*] HST 347 HST 348 HST 349 HST 350 HST 362 HUM 301 HUM 494 [*ANC* PER* CUL*] HUM 494 [*GEND* ANC*] LAT 394 [*TROJAN*] PHI 301 PHI 420 [*GREEK*] POS 340 *** 294 [*CLA* MYTH*] *** 294 [*GREEK* ROMAN*] *** 494 [*LATIN* PALEO*]

- 3) UPPER DIVISION COURSES - 6 hours

NEEDS: 6.00 HOURS
COURSE LIST: ARS 394 [*EGYP* ART*] ARS 402 ARS 404
ARS 406 ENG 303 ENG 422 GRK 301 GRK 302
GRK 394 [*TROJAN*] HPS 322 HST 304 [*GREEK* WAR*]
HST 304 [*ATHENIAN*] HST 347 HST 348 HST 349
HST 350 HST 362 HUM 301 HUM 494 [*ANC* PER* CUL*]
HUM 494 [*GEND* ANC*] LAT 394 [*TROJAN*] LAT 421
LAT 422 PHI 301 PHI 420 [*GREEK*] POS 340
*** 494 [*LATIN* PALEO*]

BIS Concentration Check Sheet

CIVIC EDUCATION
College of Liberal Arts \& Sciences
2008-2009
Coor Hall, $6^{\text {th }}$ Floor, Ph: 480.965.655

## I. Core - 9 Hours

POS 210 - Political Ideologies
POS 346 - Problems of Democracy
POS 442 - American Political Thought
II. Concentration Options - 3 Hours ( one course)

POS 340 - History of Political Philosophy I
POS 341 - History of Political Philosophy II
POS 443 - Topics in Contemporary Political Theory
III. Concentration Options - 6 Hours (two courses)

POS 110 -Government and Politics
OR
POS 310 - American National Government
POS 150 - Comparative Government
POS 160 - Global Politics
POS 270 - American Legal System
POS 300 - Contemporary Controversies in Global Politics
POS 313 - The Congress
POS 314 - The American Presidency
POS 315 - The Supreme Court
POS 330 - Contemporary Controversies in Domestic Politics
POS 332 - American Political Parties
POS 333 - Interest Groups
POS 370 - Law and Society
POS 417 - The Arizona Political System
POS 435 - Women and Politics
POS 439 - Minority Group Politics in America

What you'll see on your DARS:
NOTE: Grade of C (2.00) or better required.
Minimum of 12 upper division hours required.
--> NEEDS: 18.00 HOURS 3 SUB-GROUPS 2.00 GPA

- 1) CORE - 9 hours NEEDS: 9.00 HOURS COURSE LIST: POS $210($ SP07 or after) POS 346 POS 442
- 2) CONCENTRATION OPTIONS - 3 hours

Select one course from the course list NEEDS: 3.00 HOURS
COURSE LIST: POS 340 POS 341 POS 443

- 3) CONCENTRATION OPTIONS - 6 hours

Select two courses from the course list NEEDS: 6.00 HOURS
COURSE LIST: POS 110 OR POS 310 POS 150 POS 160
POS 270 POS 300 POS 313 POS 314 POS 315 POS 330
POS 332 POS 333 POS 370 POS 417 POS 435 POS 439

## ASI ARzon Statt UNIVERSITY

CHINESE
College of Liberal Arts \& Sciences
2008-2009
Language and Literature, Room 440, Ph: 480.965.6281

## Description:

The BIS emphasis area in Chinese requires 18 semester hours, including a minimum of 12 upper division hours. No more than 6 credits of 200 -level CHI courses may be counted toward the BIS emphasis area

RECOMMENDED COURSES General Studies Credits
CHI 201 Second-Year Chinese I G (5)
CHI 202 Second-Year Chinese II G (5)
CHI 205 Calligraphy (1)
TOTAL (6)

## REQUIRED COURSES:

CHI 301 Third-Year Chinese I (Formerly CHI 313 ) G (5)
CHI 302 Third-Year Chinese II (Formerly CHI 314) G (5)
TOTAL (10)
OTHER COURSES: (to complete 18 total hours)
CHI 307 Introduction to Classical Chinese I (Formerly CHI 413) HU (3)
CHI 308 Introduction to Classical Chinese II (Formerly CHI 414) HU (3)
CHI 321 Chinese Literature HU (3)
CHI 322 Chinese Literature HU, G (3)
CHI 345 Chinese Film and Civilization (3)
CHI 394/494 Special Topics (titles vary, see class schedule) (1-3)
TOTAL (2+)
TOTAL FOR CHINESE MINOR OR BIS EMPHASIS AREA (18)

## NOTES FOR BIS EMPHASIS AREA:

- A grade of $C$ or better must be achieved in all courses to be counted toward the BIS emphasis area.
- A minimum of 6 upper-division hours in the minor or BIS emphasis area must be taken in residence at ASU Tempe Campus.
- Pass/Fail courses cannot be used for the BIS emphasis area.
- CHI 101 and 102 are not applicable to the BIS emphasis area.
- CHI 301 and CHI 302 must be taken in sequence.
- Course substitutions are permitted for Heritage speakers and other advanced speakers of Chinese with approval first by the Chinese Section Coordinator.

CHEMISTRY
College of Liberal Arts \& Sciences
2008-2009
Physical Sciences D-Wing, Room 102, Ph: 480.965.3461

## I. Core - $\mathbf{8}$ hours

- CHM 113-General Chemistry I
- CHM 116-General Chemistry II
II. Core - 4 hours
- CHM 325-Analytical Chemistry
- CHM 326 - Analytical Chemistry Laboratory
III. Groups -8 hours ( select 1 group)
A.
- BCH 361-Principles of Biochemistry
- BCH 367 - Elem. Biochemistry Lab
- CHM 231-Elem. Organic Chemistry
- CHM 235 - Elem. Organic Chemistry Lab
B.
- CHM 233-Gen. Organic Chemistry I
- CHM 237-Gen. Organic Chemistry Lab I
- CHM 234-Gen. Organic Chemistry II
- CHM 238-Gen. Organic Chemistry Lab II
IV. Groups - 4 to 8 hours (select one group)
A.
- CHM 341-Elem. Physical Chemistry
- CHM 343-Physical Chemistry Lab B.
- CHM 345-Physical Chemistry I
- CHM 348-Physical Chemistry Lab I
- CHM 346-Physical Chemistry II
- CHM 349 - Physical Chemistry Lab II C.
- CHM 441
- CHM 442
- CHM 444

What you'll see on your DARS:

NOTE: Grade of C (2.00) or better required. Minimum 12 upper division hours required.
--> NEEDS: 24.00 HOURS

- 1) CORE - 8 hours NEEDS: 8.00 HOURS
COURSE LIST: CHM 113 CHM 116
- 2) CORE - 4 hours

NEEDS: 4.00 HOURS
COURSE LIST: CHM 325 CHM 326

- 3) GROUPS - 8 hours

Select one group from the course list
NEEDS: 8.00 HOURS
COURSE LIST: GROUP \#1: CHM 231 \& CHM 235 \& BCH 361 \& BCH 367
GROUP \#2: CHM 233 \& CHM 237 \& CHM 234 \& CHM 238

- 4) GROUPS - 4 to 8 hours

Select one group from the course list
NEEDS: 4.00 HOURS
COURSE LIST: GROUP \#1: CHM 341 \& CHM 343
GROUP \#2: CHM 345 \& CHM 346 \& CHM 348 \& CHM 349
GROUP \#3: CHM 441 \& CHM 442 \& CHM 444

BUSINESS
W. P. Carey School of Business

2008-2009
Business Administration, Room 109, Ph: 480.965.4227

A Minor in Business is available to students across the University who have an interest in business courses but wish to pursue majors in other colleges. The courses available for the minor are designed to appeal to and inform the non-business student while covering a broad range of topics important to modern managers.
I. Take three of the following five courses (9 credit hours):

| ACC | 382/394 | Accounting and Financial Analysis (See a business advisor if ACC 230 has been taken) |
| :---: | :---: | :---: |
| ECN | 382 | Managerial Economics |
| FIN | 380 | Personal Financial Management |
| MGT | 380 | Management and Strategy for Non-Majors |
| $\begin{aligned} & \text { MKT } \\ & \text { or } \end{aligned}$ | 395/382* | Essentials of Advertising and Marketing Communication |
| MKT | 394* | Special Topics |

## II. Take three elective courses (9 credit hours):

Any of the above, including both MKT
CIS 300
(courses may not double count in area I and area II)

CIS 300
Web Design and Development
REA 380 Real Estate Fundamentals
LES 380
Consumer Perspectives of Business Law
*Cannot take both MKT 395/382 and MKT 394 to meet area I. requirements.
Note: ACC 382 and ACC 394 are the same course; prefix / \# change beginning Fall 2007.

Note: MKT 395 and MKT 382 are the same course; prefix / \# change beginning Fall 2007.

Students must complete 18 credit hours of the specified business courses with a grade of "C" or better in each course.

Eligibility
The upper division courses specified for the concentration will be restricted to students with 56 earned credit hours and good standing in the University (2.0 ASU cum. GPA).

NOTE: If you have taken one of the above approved courses and it is not showing in your DARS audit, please call (480)965-4227 or come in person to BA 109 for assistance.

## What you will see on your DARS:

Grade of C (2.00) or better required.
--> NEEDS: 18.00 HOURS 2 SUB-GROUPS

1) REQUIRED COURSES - 9 hours NEEDS: 9.00 HOURS
COURSE LIST: ACC 382 ECN 382 FIN 380 MGT 380 MKT 395

- 2) ELECTIVE COURSES - 9 hours NEEDS: 9.00 HOURS
COURSE LIST: ACC 382 CIS 300 ECN 382 FIN 380
MKT 391 OR MKT 393 OR MKT 394 OR MKT 395 LES 380 REA 380

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BIOLOGICAL SCIENCES
College of Liberal Arts \& Sciences
2008-2009
Life Sciences C-Wing, Room 226, Ph: 480.965.9537
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## Description:

The concentration is designed to provide students interested in the biological sciences with a flexible curriculum that can be tailored to their interests. The minor consists of 24 semester hours, including BIO 187 General Biology I and BIO 188 General Biology II. PLB 200 Biology of Plants and PLB 201 Biology Plants Laboratory OR MIC 206
Microbiology Laboratory and MIC 220 Biology of Microorganisms may together be substituted for either BIO 187 or BIO 188. Alternatively, MBB 245 Cellular and Molecular Biology and MBB 246 Cellular and Molecular Laboratory may be substituted for BIO 188. The remaining 16 hours are selected by the student with the approval of a School of Life Science's advisor.
I. Core 8 Hours- 2 course groups

- BIO 187 - General Biology I \& BIO 188-General Biology II OR
- PLB 200 - Biology of Plants \& PLB 201 - Biology of Plants Laboratory OR
- MIC 206-Microbiology Laboratory \& MIC 220-Biology of Microorganism
II. Electives 16 Hours
- Select in consultation with an advisor in the School of Life Sciences

Notes:

1. At least 12 of the remaining 16 hours must be in upper division courses in the life sciences.
2. 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, and BIO 201 Human Anatomy and Physiology I).

What will appear on your DARS:

NOTE: Grade of C or Better required in all courses.
Minimum 12 upper division hours required.
--> NEEDS: 24.00 HOURS

1) CORE - 8 hours

Select two course groups:
(In some cases MBB 245 \& 247 may be used in
this area -- See department for details.)
NEEDS: 8.00 HOURS 2 SETS
COURSE LIST: BIO 187 BIO 188 PLB 200 \& PLB 201
MIC 206 \& MIC 220

- 2) ELECTIVES - 16 hours

12 upper division hours required.
Select in consultation with a departmental advisor.
NEEDS: 16.00 HOURS
-> NOT FROM: BIO 201 BIO 202 BIO 300 BIO 301
BIO 302 BIO 303 BIO 319 BIO 336 BIO 390 BIO 490
BIO 499 BIO 484 MIC 402 PLB 320
COURSE LIST: BIO 3 BIO 4 MIC 3 MIC 4 PLB 3 PLB 4 MBB 3 MBB 4

BIOCHEMISTRY
College of Liberal Arts \& Sciences
2008-2009
Physical Sciences D-Wing, Room 102 Ph: 480.965.5065
I. Core - 6 Hours

BCH 461 - General Biochemistry
BCH 462-General Biochemistry
II. Core Groups - 8 Hours (choose one group)

> A.

CHM 113-General Chemistry I
CHM 116 -General Chemistry II B.

CHM 117-General Chemistry for Majors I
CHM 118-General Chemistry for Majors II
III. Core Groups - 8 Hours (choose one group)
A.

CHM 233-General Organic Chemistry I
CHM 237-General Organic Chemistry Lab I
CHM 234 - Organic Chemistry II
CHM 238 - Organic Chemistry Lab II
B.

CHM 333 -Organic Chemistry for Majors I
CHM 237-General Organic Chemistry Lab I
CHM 234 - Organic Chemistry II
CHM 238-Organic Chemistry Lab II
IV. Core - 3 Hours

CHM 341 - Elementary Physical Chemistry
CHM 345 -Physical Chemistry I

## What you'll see on your DARS:

NOTE: Grade of C (2.00) or better required.
Minimum 12 upper division hours required.
--> NEEDS: 25.00 HOURS

1) CORE - 6 hours

NEEDS: 6.00 HOURS
COURSE LIST: BCH 461 BCH 462

- 2) CORE GROUPS - 8 hours

Select one group from the course list NEEDS: 8.00 HOURS
COURSE LIST: GROUP \#1 CHM 117 \& CHM 118
GROUP \#2 CHM 113 \& CHM 116
3) CORE GROUPS - 8 hours

Select one group from the course list
NEEDS: 8.00 HOURS
COURSE LIST: GROUP \#1: CHM 333 \& CHM 337 \& CHM 334 \&
CHM 338
GROUP \#2: CHM 233 \& CHM 237 \& CHM 234 \& CHM 238

- 4) CORE - 3 hours

NEEDS: 3.00 HOURS
COURSE LIST: CHM 341 OR CHM 345

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ASTRONOMY
College of Liberal Arts and Sciences
2008-2009
Physical Sciences F-Wing, Room 470, Ph: 480.965.9075
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NOTE: Grade of C (2.00) or better required.
Minimum 12 upper division hours required.

## I. Core - 8 Hours

AST 113 -Astronomy Laboratory I
AST 114 - Astronomy Laboratory II
AST 321 - Introduction to Planetary and Stellar Astrophysics
AST 322 - Introduction to Galactic and Extragalactic Astrophysics
II. Physics $\mathbf{- 1 2}$ Hours

PHY 150 - Physics I
PHY 151 - Physics II
PHY 252 - Physics III
III. Electives - 6 upper division hours

See advisor for list

What you'll see on your DARS:
--> NEEDS: 26.00 HOURS

1) CORE - 8 hours

NEEDS: 8.00 HOURS
COURSE LIST: AST 321 (R) AST $113(\mathrm{R})$ AST 322(R) AST 114(R)

- 2) PHYSICS - 12 hours PHY 121 \& 122 and PHY 131 \& 132 can be taken in lieu OF PHY 150 \& 151
NEEDS: 12.00 HOURS
COURSE LIST: PHY 150 PHY 151 PHY 252

3) ELECTIVES - 6 upper division hours Select in consultation with a departmental advisor NEEDS: 6.00 HOURS
COURSE LIST: ASTEMPHX ASTEMPH3

## ASI ARTOM State UNIVERSITY

ASIAN STUDIES
College of Liberal Arts \& Sciences
2008-2009
Coor 6 ${ }^{\text {th }}$ Floor, Ph: 480.965.71 84

## Description:

The Asian Studies concentration is offered through the Center for Asian Research. It demonstrates knowledge of an Asian language as well as general knowledge of Asian history, art, culture, and society. The concentration provides students with official transcript recognition of specialization in Asian Studies.

## Program Requirements:

The concentration curriculum includes 23 semester hours of course work:

1. 15 semester 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), and
2. 8 additional semester 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, concentration 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, and Vietnamese.
I. Language - $\mathbf{1 0}$ Hours

- CHI - any CHI

IDN - any IDN
JPN - any JPN
KOR - any KOR
THA - any THA
or
VTN - any VTN
II. Asian Studies Core - 12 Hours

See an advisor for list
III. Electives - 3 to 6 Hours

APH 301 -
ARS 201 - Art of Asia
ARS 472 - Art of China
ARS 473 - Art of Japan
ARS 475 - Chinese Painting
ARS 498 - Pro-Seminar

- ARS 575 - Approaches to Chinese Painting
- ARS 591-Seminar
- ASB 240 - Introduction to Southeast Asia

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ASB 314- Comparative Religion
ASB 324-Peoples of the Pacific
ASB 325 - Peoples of Southeast Asia
ASB 480 - Introduction to Linguistics
ASB 591 - Seminar
COM 263-Elements of Intercultural Communication
COM 371 - Language, Culture, and Communication
COM 463 - Intercultural Communication Theory and Research
COM 465 - Intercultural Communication Workshop
COM 494-Special Topics
ECN 306 - Survey of International Economics
ECN 436-International Trade Theory
ECN 438 - International Monetary Economics
ECN 503-Global Business Environment
EDP 591 - Seminar
ENG 547-Public Economics
FAS 370 - Family, Ethnic, and Cultural Diversity
GCU 121 - World Geography
GCU 240 - Introduction to Southeast Asia
GCU 326-Geography of Asia
GCU 350 - The Geography of World Crises
GCU 359 - Cities of the World I
GCU 360-Cities of the World II
GCU 433-Geography of Southeast Asia
GCU 494-Special Topics
GCU 591 - Seminar
HST 101-Global History Since 1500
HST 106-Asian Civilizations
HST 107-Asian Civilizations
HST 108-Introduction to Japan
HST 201-Historical Themes in Asia
HST 240-Introduction to Southeast Asia
HST 316-20th-Century U.S. Foreign Relations
HST 383-China
HST 384-China
HST 385-Chinese Science and Medicine
HST 387-Japan
HST 388-Japan
HST 389-Japanese Society and Values: Premodern
HST 391 - Modern Southeast Asia
HST 451 - Chinese Cultural History
HST 452 - Chinese Cultural History
HST 453 - The People's Republic of China
HST 455 - The United States and Japan
HST 456 - The Vietnam War
HST 394-Special Topics
HST 555 - Comparative Historical Topics
HUM 310-Japanese Cities and Cultures to 1800
MCO 430-International Mass Communication
MGT 459 - International Management
MGT 559 - International Management
MGT 598-Special Topics
MHL 344 - Music in World Cultures
MKT 435 - International Marketing
MKT 394-Special Topics
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MUS 494-Special Topics
POS 101 - Government and Politics
    OR
POS 210 - Political Ideologies
POS 150 - Comparative Government
POS 160-Global Politics
POS 240 - Introduction to Southeast Asia
POS 260 - Current Issues in International Politics
POS 357 - South Asia Politics
POS 358 - Southeast Asia
POS 360 - World Politics
POS 445 - Asian Political Thought
POS 451 - China, Japan, and the Koreas
POS 452-China
POS 467 - International Security
POS 468 - Comparative Asian Foreign Policies
POS 486 - International Political Economy
POS 498 - Pro-Seminar
POS 550 - Comparative Politics
POS 560 - International Relations
POS 563 - Comparative Asian Security Policies
REL 100 - Religions of the World
REL 200 - The Study of Religious Traditions
REL 240 - Introduction to Southeast Asia
REL 301 - Comparative Mysticism
REL 343-Taoism
REL 344 - Religion and Values in Japanese Life
REL 345 - Asian Religious Traditions
REL 350 - Hinduism
REL 351 - Buddhism
REL 352 - Modern Buddhism
REL 355 - Japanese Cities and Cultures to 1800
REL 365 - Islamic Civilization
REL 366 - Islam in the Modern World
REL 394 - Special Topics
REL 405 - Problems in Religious Studies
REL 444 - Religion in Japan
REL 460 - Studies in Islamic Religion
REL 494 - Special Topics
REL 598 - Special Topics
SGS 294 - Special Topics
SGS 394 - Special Topics
SOC 451 - Comparative Sociology
WST 457-Gender, Culture, and Development
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## What you'll see on your DARS:

NOTE: Grade of C (2.00) or better required. Minimum 12 upper division hours required.

NOTE: Students may also pursue a certificate in ASIAN STUDIES or EAST ASIAN STUDIES. See advisor for details.
--> NEEDS: 23.00 HOURS 3 SUB-GROUPS

- 1) LANGUAGE - 10 hours Six hours of upper division language courses can be taken in lieu of this 10 hour requirement. See Asian Studies advisor for more information. Select from CHI, IDN, JPN, KOR, THA, or VTN NEEDS: 10.00 HOURS
- 2) ASIAN STUDIES CORE - 12 upper division hours Select at least two disciplines different from language and literature studies. See advisor for list of acceptable courses.
NEEDS: 12.00 HOURS
COURSE LIST: ASNEMPH2
- 3) ELECTIVES - 3 to 6 hours to meet the Asian Studies 23 hour minimum. See advisor for additional course options.
NEEDS: 3.00 HOURS
COURSE LIST: APH 301 APH [*COL* POS*] ARS 201
ARS 472 ARS 473 ARS 473 ARS 475
ARS 498 [*CHIN* ART*] ARS [*CHINA*]
ARS [*JAPAN*] ARS 575 ARS 591 [*DYN* PAINT*]
ASB [*ASIAN*] ASB [*SOUTHEAST ASIA]
ASB [*CHINA*] ASB 240 ASB 242 ASB 314 ASB 324
ASB 325 ASB 480 ASB 591 [*PEOPLE* PACIF*]
ASM [*PEOP* WORLD*] COM 263 COM 363 COM 371
COM 463 COM 465 COM 494 [*INTER*] COM 563
ECN [*MULTI*] ECN [*INTER*] ECN 306 ECN 436
ECN 438 ECN 503 ECN 536 ECN 538
EDP 591 [*INTERGEN*] ENG [*ASIA*]
ENG [*CHINESE*] ENG [*SOUTHEAST ASIA] ENG 547
FAS 370 FAS 494 [*THIRD* WORLD]
FAS 598 [*INTERGEN*] GCU 121 GCU 240 GCU 326
GCU 350 GCU 359 GCU 360 GCU 431 GCU 433
GCU 494 ["JAPAN*] GCU 591 [*CULTURAL*]
HST [*JAPAN*] HST [*ASIA*]
HST [*SOUTHEAST ASIA] HST [*ASIAN*]
HST [*CHINA*] HST [*CHINESE*] HST 101 HST 106
HST 107 HST 108 HST 201 HST 240 HST 316 HST 383
HST 384 HST 385 HST 387 HST 388 HST 389 HST 391
HST 451 HST 452 HST 453 HST 455 HST 456
HST 394 [*SAMURAI*] HST 555 [*ORAL* TRAD*]
HUM [*SOUTHEAST ASIA] HUM [*CHINA*]
HUM [*HINDUISM*] HUM [*ISLAMIC*]
HUM [*CHINESE*] HUM [*JAPAN*] HUM [*BUDDHISM*]
HUM 310 IBS [*ASIA] MCO 430 MGT 459 MGT 559

MGT 598 [*INTER*] MHL 344 MHL 545 MHL 566
MKT 435 MKT 394 [*GLOBAL*] MKT [*INTER*]
MUS 494 [*WORLD* CULT*] NUR 230 POS 101 OR
POS 210 POS 150 POS 160 POS 240 POS 260
POS 294 [*SOUTHEAST ASIA] POS 357 POS 358 POS 360
POS 394 [*INTERN* SECUR*] POS 445 POS 451 POS 452
POS 458 POS 460 POS 467 POS 468 POS 486
POS 494 [*ASIA*] POS 494 [*JAPANESE*]
POS 498 [*ASIA*] POS 550 POS 560 POS 563
PUP [*DEVEL* COUNTR*] REL 100 REL 200 REL 240
REL 294 [*ISLAM] REL 301 REL 343 REL 344 REL 345
REL 350 REL 351 REL 352 REL 355 REL 365 REL 366
REL 394 [*MYSTICISMS*] REL 394 [*ASIAN*]
REL 394 [*JAPANESE*] REL 394 [*SAINT* SINNER*]
REL 405 REL 444 REL 460 REL 494
REL 598 [*MYSTICISMS*] SGS 294 [*ASIA*]
SGS 394 [*ASIA*] SGS 394 [*CHINA*]
SGS 394 [*COLONIAL*] SOC 361 SOC 451
THE [*ASIAN* THEA*] WST 457

ASIAN PACIFIC AMERICAN STUDIES
College of Liberal Arts \& Sciences 2008-2009
Wilson Hall, Room 344, Ph: 480.965.9711
I. Core -9 Hours

APA 200 - Intro to APAS
APA 360 - APA Experience: Rotating Topics
APA 484 - Internship/Community Service
OR
APA 494 - APA Communities
II. Electives - 9 Hours

APA 210 - Introduction to Ethnic Studies
APA 310 - APA Arts and Culture
APA 315 -APA Literature
APA 330 - APA Genders and Sexualities
APA 340 - APA and Media
APA 345 - APA and Film
APA 360 - APA Experiences: Rotating topics
(different topic from previous APA 360)
APA 394-APA Special Topics
APA 450 - APA Contemporary Issues
APA 494 - APA Special Topics
(different topic from previous APA 394)
APA 499 -Individualized Instruction
ASB 242 - APA: An Anthropological Perspective
COM 263 - Elements of Intercultural Communication
MCO 460 - Race, Gender, and Media
SOC 470 - Racial and Ethnic Minorities

## What you'll see on your DARS:

NOTE: Grade of "C" (2.00) or better required.
Minimum 12 hours upper division required.
--> NEEDS: 18.00 HOURS

- 1) CORE - 9 hours

NEEDS: 9.00 HOURS
COURSE LIST: APA 200 APA 360 APA 484 OR
APA 494 [*COMMUNITIES*]
2) ELECTIVES - 9 hours

NEEDS: 9.00 HOURS
COURSE LIST: APA 210 APA 310 APA 315 APA 330

APA 340 APA 345 APA 360 APA 394 APA 450 APA 494 APA 499 ASB 242 COM 263 MCO 460 SOC 470

# BIS Concentration Check Sheet 

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ART HISTORY
Herberger College of the Arts
2008-2009
Dixie Gammage 116, Ph: 480.965.3468
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## Program Requirements

The School of Art offers a BIS concentration in Art History consisting of 18 semester hours of course work, including 12 upper-division electives. A minimum grade of $C(2.00)$ is required in all classes in the BIS concentration. For those pursuing a BIS concentration, a minimum overall GPA of 2.00 is required. Courses may not be double counted in a major and the BIS concentration, and a minimum of 12 semester hours of resident credit at the Tempe campus is required.

ARS 100 or 300 may be used toward a BIS concentration.

Required Courses: Select two of the following four required courses:
ARS 101 Art from Prehistory Through Middle Ages HU, H (3)
ARS 102 Art from Renaissance to Present HU, H (3)
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 BIS concentration select four three-semester-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.

## ARCHITECTURAL STUDIES

College of Design
2008-2009
CDN 162, Ph: 480.965.3536

## Description:

The Architectural Studies concentration is available in this field who wish to pursue another concentration as well. 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 semester hours are required for the minor.
I. Core - $\mathbf{1 2}$ Hours

- ALA 100-Introduction to Environmental Design
- ALA 102-Architecture, Landscape Architecture, and Society
- APH 313 - History of Architecture I
- APH 314-History of Architecture II
II. History and Theory - 6 Hours
- APH 305-Contemporary Architecture
- APH 300 - World Architecture I/Western Cultures
- APH 441 - Ancient Arch
- APH 394-Special Topics
- APH 411- History of Landscape Architecture
- APH 414 - History of the City
- APH 446-20th-Century Architecture I
- APH 447-20th-Century Architecture II
- APH 494 - Special Topics
- APH 499 - Individualized Instruction
- APH 511 - Energy Environment Theory
- APH 598-Special Topics

Minimum 3.0 GPA required to pursue this concentration.
Minimum 3.0 GPA required to complete this concentration.

## What you'll see on your DARS:

Minimum 3.0 GPA required to pursue this concentration.
Minimum 3.0 GPA required to complete this concentration.
Grade of "C" (2.00) or better required in each course.

Minimum 12 upper division hours required.
--> NEEDS: 18.00 HOURS 2 SUB-GROUPS 3.00 GPA

- 1) CORE - 12 hours NEEDS: 12.00 HOURS COURSE LIST: ALA 100 ALA 102 APH 313 APH 314
- 2) ARCHITECTURAL HISTORY and THEORY - 6 hours NEEDS: 6.00 HOURS
COURSE LIST: APH 305 APH 300 APH 441 APH 444
APH 394 APH 411 APH 414 APH 446 APH 447 APH 494
APH 499 APH 511 APH 598 ARP 451 LPH 420


## ASI ARTovi State UNIVERSITY

## ARABIC STUDIES

School of International Letters and Cultures
2008-2009
Language and Literature, Room 440, Ph: 480.965.6281

## Description:

A 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: speaking, listening, reading and writing. In addition to these communicative skills, students will simultaneously gain a broad knowledge and understanding of the culture, literature, and traditions of the vast Arabic-speaking world. The Certificate provides critically-needed educational and cultural diversity that will enrich ASU 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.

## Requirement

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 would be responsible for fulfilling the minimum requirement of 18 hours (in addition to the basic language requirement) to earn the Arabic Studies Certificate. These hours can be chosen in consultation with the Certificate coordinator. A minimum grade of "C" or better is required in each course.

## I. Language - 4 Hours

ARB 202 - Intermediate Arabic I

## II. Core - 9 hours

## ARB 311 - Advanced Arabic Skills I

OR
ARB 411 - Advanced Arabic Skills II
ARB 321 - Arabic Conversation I
OR
ARB 421 - Arabic Conversation II
ARB 331 - Arabic/Islamic Culture and Literature
ARB 341-Quran Text and Women
ARB 351-Classical Arabic Literature
HST 372 - History of the Modern Middle East
III. Electives - 9 hours

- ARB 394-Special Topics (subjects vary)
- AFS 394 - Subjects vary
- ARB 590-Topics vary

OR
ARB 598 - Topics vary

- GCU 328-Geography of the Middle East and North Africa
- HST 307-Studies in African History
- REL 365-Islamic Civilization
- REL 366 - Islam in the Modern World
- REL 369-Women in Islam
- REL 394-Special Topics
- REL 460 - Topics vary
- REL 494 - Different Voices in Contemporary Islamic Discourse
- POS 494 - Different Voices in Contemporary Islamic Discourse


## What you'll see on your DARS:

NOTE: Grade of C (2.00) or better required.
Minimum 12 upper division hours required.
--> NEEDS: 22.00 HOURS 3 SUB-GROUPS

- 1) LANGUAGE-4 hours

Language proficiency required (ARB 202 or higher)
NEEDS: 4.00 HOURS
COURSE LIST: ARB 202
2) CORE - 9 hours

NEEDS: 9.00 HOURS
COURSE LIST: ARB 311 OR ARB 411 ARB 321 OR ARB 421 ARB 331 ARB 341 ARB 351 HST 372
3) ELECTIVES - 9 hours

See Arabic Studies program coordinator for additional course choices.
NEEDS: 9.00 HOURS
COURSE LIST: ARB 394 AFS 394 [ST:*ARABIC*] ARB 590
OR ARB 598 GCU 328 HST 307 REL 365 REL 366
REL 369 REL 394 [ST*INTRO* QU*] REL 460
REL 494 [ST:*CON* ISL*] OR POS 494 [ST:*CON* ISL*]

APPLIED PSYCHOLOGY
SCHOOL OF APPLIED ARTS AND SCIENCES
2008-2009
Polytechnic Campus; 480.727.1333

## Description:

The theories and methods of experimental psychology and cognitive science can be applied to many domains, making products easier to use, making work places more productive, improving the way products are sold, improving sports performance and improving the way we learn and teach. If you are interested in human perception, cognition, innovation or group processes then you may want to learn about applied psychology. Our program is hands-on, and challenging, and the field is growing quickly, creating opportunities for further study and employment.
I. Core - $\mathbf{1 3}$ Hours

PGS 101 - Introduction to Psychology
PSY 230 - Introduction to Statistics
PSY 290 - Research Methods
PSY 437 - Human Factors
OR
PSY 438 - Human-Computer Interaction
OR
PSY 440 - Industrial/Organizational Psychology
II. Electives - 9 Hours (Upper Division)

PGS 3 - any 300 -level PGS course
PGS 4 - any 400 -level PGS course
PSY 3 - any 300 -level PSY course
PSY 4 - any 400 -level PSY course

## What you'll see on your DARS:

--> NEEDS:
2 SUB-GROUPS

1) CORE - 13 hours

NEEDS: 13.00 HOURS
COURSE LIST: PGS 101(R) PSY 230(R) PSY 290(R) PSY 437 OR PSY 438 OR PSY 440

- 2) ADDITIONAL ELECTIVES - 9 Upper Division Hours Select courses with a PSY and/or PGS prefix Maximum of 3 credits of PGS 399 or PGS/PSY 499 or PSY 492 can be used to satisfy minor requirements
NEEDS: 9.00 HOURS
COURSE LIST: PGS 3 PGS 4 PSY 3 PSY 4


## BIS Concentration Check Sheet

APPLIED BIOLOGICAL SCIENCES
School of Applied Arts and Sciences
2008-2009
Polytechnic Campus; 480.727.1333

## Description:

The Applied Biological Sciences concentration requires 24 semester hours. Required courses are:

- BIO 187 General Biology I
- BIO 188 General Biology II
- 16 semester hours selected with the approval of an advisor in the Department of Applied Biological Sciences. At least 12 semester hours must be from an emphasis area and chosen with the approval of an advisor. At least 12 hours must also be upper division ( 300 and 400 level) courses offered by the Department of Applied Biological Sciences.

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ANTHROPOLOGY
College of Liberal Arts & Sciences
2008-2009
SHESC 233, Ph: (480) 965-6215
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## Description:

For students majoring in the Bachelor of Interdisciplinary Studies (BIS) an emphasis in Anthropology requires 24 or 25 semester hours. All three of the introductory courses (ASB 102, ASM 104, and ASB 222/223) are required. The other 15 hours must be upperdivision and represent all of the three subfields of anthropology. The three subfields are: (1) sociocultural anthropology (with linguistics), (2) archaeology, and (3) physical anthropology. The courses chosen to represent the three subfields must be drawn from the "Distribution Requirements" lists of those three subfields (see above). A minimum grade of "C" is required for all courses taken for the emphasis in Anthropology for BIS majors.

## I. Core - 9 Hours

- ASM 104 - Bones, Stones, and Human Evolution
- ASB 102-Topic: Intro Cul/Soc Anthro(Hc)
- ASB 222 - Buried Cities and Lost Tribes

OR

- ASB 223-Buried Civilizations of the Americas


## II. Groups - 6 upper division hours

-Select one course from two of the three groups:
A. SOCIOCULTURAL/LINGUISTICS

ASB 311 - Principles of Social Anthropology
ASB 314-Comparative Religion
ASB 350-Anthropology and Art
ASB 351 - Psychological Anthropology
ASB 353 - Death and Dying in Cross-Cultural Perspective
ASB 412 - History of Anthropology
ASB 416 - Economic Anthropology
ASB 417 - Political Anthropology
ASB 421 - Education and Society
ASB 462 - Medical Anthropology: Culture and Health
ASB 466 - Peoples and Cultures of Africa
ASB 480 - Principles of Linguistics
ASB 481 - Language and Culture
ASB 483 - Sociolinguistics and the Ethnography of Communication
ASB 498 - Topic: 16 th Century Mexico
B. ARCHAEOLOGY

ASB 326 - Human Impacts on Ancient Environments
ASB 330-Principles of Archaeology
ASB 335-Prehistory /Southwest

- ASB 337-Pre-Hispanic Civilization of Middle America
- ASB 338-Archaeology of North America

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- ASB 361 - Pleistocene Archaeology
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- ASB 362 - The Neolithic Revolution and its Consequences
- ASB 368 - Prehistoric and Historic Hunter-Gatherers
- ASM 338-Anthropological Field Session
- ASM 365 - Laboratory Methods in Archaeology
- ASM 435-Archaeological Pollen Analysis
- ASM 472-Archaeological Ceramics
- ASB 498 - Topic: 16 th Century Mexico
- ASM 494 - Topic: (Principles of Human Genetics, and Dynamic Modeling in Social and Ecological Systems)


## C. PHYSICAL

- ASM 301 - Peopling of the World
- ASM 341 - Human Osteology
- ASM 342-Human Biological Variation
- ASM 343 - Primatology
- ASM 344-Fossil Hominids
- ASM 345-Disease and Human Evolution
- ASM 348-Social Issues in Human Genetics
- ASM 450 - Bioarchaeology
- ASM 452 - Dental Anthropology
- ASM 454-Comparative Primate Anatomy
- ASM 455 - Primate Behavior Laboratory
III. Electives - 9 Hours


## What you'll see on your DARS:

NOTE: Grade of C (2.00) or better required. Minimum 12 upper division hours required.
--> NEEDS: 24.00 HOURS
3 SUB-GROUPS

- 1) CORE - 9 hours

NEEDS: 9.00 HOURS
COURSE LIST: ASM 104 OR ASM 101 ASB 102 ASB 222 OR ASB 223

- 2) GROUPS - 6 upper division hours

Select one course from two of the three groups:
SOCIOCULTURAL/LINGUISTICS, ARCHAEOLOGY \& PHYSICAL
NEEDS: 6.00 HOURS
COURSE LIST: SOC/LING: ASB 311 OR ASB 314 OR ASB 350
OR ASB 351 OR ASB 353 OR ASB 411 OR ASB 412 OR
ASB 416 OR ASB 417 OR ASB 421 OR ASB 462 OR
ASB 466 OR ASB 480 OR ASB 481 OR ASB 483 OR
ASB 498 [*APP* ANTHRO*]
ARCHAEOLOGY: ASB 326 OR ASB 330 OR ASB 335 OR
ASB 337 OR ASB 338 OR ASB 361 OR ASB 362 OR
ASB 368 OR ASM 338 OR ASM 365 OR ASM 435 OR
ASM 472 OR ASB 426 OR ASB 498 [*LITHIC* AN*] OR
ASM 494 [*GEOARCH*]
PHYSICAL: ASM 301 OR ASM 341 OR ASM 342 OR ASM 343

OR ASM 344 OR ASM 345 OR ASM 348 OR ASM 450 OR ASM 452 OR ASM 454 OR ASM 455

- 3) ELECTIVES - 9 upper division hours NEEDS: 9.00 HOURS
COURSE LIST: ASB 3 ASB 4 ASM 3 ASM 4

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AMERICAN STUDIES
New College of Interdisciplinary Arts & Sciences
2008-2009
West Campus FAB, Room N204, Ph: 602.543.6090
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18 HOURS, MINIMUM 12 UPPER DIVISION
***MINIMUM "C" (2.00) GRADE***

## Description:

The concentration in American Studies offers students the opportunity to pursue an interest in the interdisciplinary study of American Culture. This interdisciplinary concentration is particularly appropriate for students majoring in one of the humanities or social sciences disciplines. The concentration consists of 18 semester hours, 12 of which must be upper division hours.
I. Core $\mathbf{- 1 2}$ Hours

AMS 301 - Introduction to American Studies
AMS 310 - American Systems
AND
AMS 311 - American Systems
OR
AMS 320 - American Cultures
AND
AMS 321 - American Cultures
AMS 330 - Introduction to American Lives
II. Supporting Courses - $\mathbf{6}$ Hours

See advisor for list

What you'll see on your DARS:
--> NEEDS: 18.00 HOURS 2 SUB-GROUPS

1) Core - 12 Hours

NEEDS: 12.00 HOURS
COURSE LIST: AMS 301 (R) AMS 310 \& AMS 311 (OR)
AMS 320 \& AMS 321 AMS 330(R)

- 2) Supporting Courses - 6 Hours

COURSES MUST BE APPROVED BY AMERICAN STUDIES PROGRAM ADVISOR
NEEDS: 6.00 HOURS

AMERICAN INDIAN STUDIES
College of Liberal Arts \& Sciences
2008-2009
Agriculture Building, Room 356, Ph: 480.727.7056

## I. Core - 9 Hours

- AIS 180 - Introduction to American Indian Studies
- AIS 380-Contemporary Issues of American Indian Studies
- AIS 285 - Federal Indian Policy

OR

- AIS 385 - Federal Indian Policy
II. Emphasis Areas - 9 hours

See an advisor for list

## What you'll see on your DARS:

NOTE: Grade of "C" (2.00) or better required.
No pass/fail credit.
Minimum 12 hours upper division required.
Minimum 9 hours at Tempe campus required.
--> NEEDS: 18.00 HOURS 2 SUB-GROUPS

- 1) CORE - 9 hours

NEEDS: 9.00 HOURS
COURSE LIST: AIS 180 AIS 285 OR AIS 385 AIS 380

- 2) EMPHASIS AREAS - 9 hours

See American Indian Studies Advisor for list.
NEEDS: 9.00 HOURS

Aging and Lifespan Development<br>College of Human Services<br>2008-2009<br>602.543.6600

## Requirements:

- The concentration in Gerontology requires 18 semester hours of course work.
- Students select two of the three gerontology core courses and four additional aging-related courses that are approved as electives.
- The Gerontology program allows double counting of courses from the student's two concentration areas; however, students should consult with their advisor to determine if their program has more stringent requirements.
- A 2.50 GPA or higher must be earned in the six courses. Undergraduates may begin taking courses for the concentration upon completion of 56 semester hours with a minimum cumulative GPA of 2.00.
I. Core - $\mathbf{6}$ Hours ( $\mathbf{2}$ courses)

GRN 400 - Perspectives on Aging
GRN 420 - Health Aspects of Aging
PGS 427 - Psychology of Aging
GRN 494 - Special Topics (Mental Health and Aging OR Psychology of Aging)
II. Related Courses - 12 Hours

ASB 353 - Death and Dying in Cross-Cultural Perspective OR
SOC 353 - Death and Dying in Cross-Cultural Perspective
CMN 417 - Communication and Aging
GRN 499 - Individualized Instruction
GRN 484 - Undergraduate Internship
PGS 427 - Psychology of Aging
RTM 450 - Leisure and Aging
SOC 418 - Aging and the Life Course

## What you'll see on your DARS:

18 Hours, 2.50 GPA
--> NEEDS: 18 HOURS 2 SUB-GROUPS 2.50GPA

- 1) Core - 6 Hours NEEDS: 2 COURSES
COURSE LIST: GRN 400(R) GRN 420 PGS 427
GRN 494 [*PSYC*OF*AGI*] GRN 494 [*MEN*HEA*\&*AGI*]
- 2) Related Courses selected with advisor - 12 Hours NEEDS: 12.00 HOURS
COURSE LIST: ASB 353 OR SOC 353 COM 417 OR CMN 417 GRN 499 GRN 484 NUR 411 PGS 427 REC 450 OR RTM 450 SOC 318 SOC 418

AFRICAN \& AFRICAN AMERICAN STUDIES<br>College of Liberal Arts \& Sciences<br>2008-2009<br>Wilson Hall, Room 140, Ph: 480.965.4399

## I. Core - 9 Hours

- AFH 300-Precolonial Africa
- AFS 200 - Introduction to African and African Diaspora Studies
- AFH 319 - Black Experience in Latin America

OR

- AFR 210 - Introduction to African American Studies

OR

- AFS 340-The Making of Modern Africa

OR

- AFS 355 - Democracy and Civil Society in Africa
II. Thematic Areas - 9 Hours (Select one course from each thematic area)


## A. Culture/ Literature

AFH 303 - African and African American Art
AFH 318 - African and African Diaspora Women Writers
AFH 331 - Studies in African American Women Writers of Pre-Harlem Renaissance
AFH 333 - American Ethnic Literature
AFH 335 - Survey of African Literatures
AFH 353 - African American Literature: Beginnings Through the Harlem Renaissance
AFH 354 - African American Literature: Harlem Renaissance to the Present
AFH 459 - Studies in African American/Caribbean Literatures

## B. Governance

AFS 301 - Race and Racism in Africa/African Diaspora
AFS 304 - Islands of Globalization: Caribbean Political Economy
AFS 320 - Africa: Politics, Environment, and Development
AFS 327 - Human Rights in Africa
AFS 355 - Democracy and Civil Society in Africa
AFS 377
C. Gender/ Family

AFR 375 - Race, Gender and Sport

- AFR 428-Critical Race Theory
- AFR 460 - Race, Gender and Media
- AFS 312 - Contemporary African and African Diaspora Women
- AFS 360 - Black Families in the Diaspora: U.S. and Caribbean
- AFS 370 - Family, Ethnic, and Cultural Diversity

Note: At least nine hours of the 18 must be completed at ASU

## What you'll see on your DARS:

NOTE: Grade of C (2.00) or better required.
Minimum 12 upper division hours required.
Minimum 9 hours must be completed at ASU.
--> NEEDS: 18.00 HOURS 2 SUB-GROUPS

- 1) CORE - 9 hours

NEEDS: 9.00 HOURS
COURSE LIST: AFH 300 AFS 200 AFH 319 OR AFR 210 OR AFS 340 OR AFS 355

- 2) THEMATIC AREAS - 9 hours

Select one course from each thematic area
NEEDS: 9.00 HOURS
COURSE LIST: CULTURE/LIT: AFH 303 AFH 318 AFH 331
AFH 333 AFH 335 AFH 353 AFH 354 AFH 459
GOVERNANCE: AFS 301 AFS 304 AFS 320 AFS 327
AFS 355 AFS 377(THROUGH SP06)
GENDER/FAM AFR 375 AFR 428 AFR 460 AFS 312
AFS 360 AFS 370

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YOUTH SERVICES LEADERSHIP
College of Human Services
2008-2009
602.543.6600
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18 HOURS, MINIMUM 12 UPPER DIVISION
***9 HOURS OF UPPER DIVISON MUST BE COMPLETED AT ASU***
MINIMUM "C" (2.00) GRADE
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***Not available to Recreation and Tourism
Management majors***

## Description:

The concentration consists of 12 semester hours of required courses and 6 semester hours of electives selected in consultation with a faculty advisor. At least 12 semester hours must be completed at West campus in upper division classes. To earn the concentration, students must complete all course work in the minor with a minimum grade of C (2.00).

## I. Core - $\mathbf{1 2}$ Hours

RTM 301 - Leadership in Recreation and Tourism
RTM 303 - Programming Recreation and Tourism Services
OR
PRM 303 - Program Planning
RTM 394 - ST: Recreation and Leisure Services for Youth Development
RTM 454 - Human Services for At-Risk Youth
II. Electives - 6 Hours

CRJ 340 - The Adjudication Function
CRJ 441 - Prevention of Crime and Delinquent Behavior
CRJ 462 - Gangs
IAP 331 - Performance, Acting, and the Individual
IAP 347 - Movement in Education
PGS 341 - Developmental Psychology
PGS 443 - Abnormal Child Psychology
RTM 302 - Recreation and Tourism for Diverse Populations
OR
PRM 302 - Inclusive Community Development
OR
NLM 302 - Inclusive Community Development
OR
TDM 302 - Inclusive Community Development
RTM 303 - Programming Recreation and Tourism Services
OR
PRM 303 - Program Planning
RTM 345 - Team Building Strategies

RTM 451 - Grant Writing for Human Service Professionals
RTM 484-Internship
OR
PRM 463 - Senior Internship
OR
NLM 463-Senior Internship
OR
TDM 463-Senior Internship
RTM 494 - ST: Leadership and Professional Development in Youth Services
SOC 340 - The Sociology of Deviance
SPE 222 - Orientation to Education of Exceptional Children
SPE 322 - Behavior Management and Consultation

## What you'll see on your DARS:

--> NEEDS: 18 Hours 2 SUB-GROUPS

- 1) Core - 12 Hours NEEDS: 4 COURSES COURSE LIST: RTM 301 RTM 303 OR REC 330 OR PRM 303 RTM 394 [*REC*LEI*FOR*YO*] RTM 454
- 2) Youth Services Leadership Electives - 6 Hours SELECT IN CONSULTATION WITH A RECREATION AND TOURISM MANAGEMENT FACULTY ADVISOR Choose two courses from the following: NEEDS: 6.00 HOURS
COURSE LIST: CRJ 340 CRJ 441 CRJ 462 IAP 331 IAP 347 PGS 341 PGS 443 RTM 302 OR PRM 302 OR NLM 302 OR TDM 302 RTM 303 OR REC 303 OR REC 330 OR PRM 303 RTM 345 RTM 451 RTM 484 OR REC 463 OR PRM 463 OR NLM 463 OR TDM 463
RTM 494 [*LEAD*A*PROF*DEV*] SOC 340 SPE 222
SPE 322

Major Map: History - Bachelor of Arts (B.A.)
College of Liberal Arts \& Sciences, Tempe Campus
Catalog Year: 2008-2009

## 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:

The history major requires students to take HST electives within one geographical concentration. Visit the History Undergraduate Advising Office for geographical concentrations and for a list of Related Fields courses.

There is room in this degree to add a concurrent degree, a minor, or a certificate.

Major Map：International Letters and Cultures－<br>Bachelor of Arts（B．A．）

College of Liberal Arts and Sciences，Tempe Campus
Catalog Year：2008－2009

|  |  |  | Completed ATP：$\square$ Yes $\quad \square$ No |  | Completed AGEC：$\square$ Yes $\square$ No |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { Course Subject and Title } \\ & \text { (courses in bold/shading are critical) } \end{aligned}$ | Hrs． | $\begin{aligned} & \text { Upper } \\ & \text { Division } \end{aligned}$ | Transfer Course／Grade | $\begin{aligned} & \text { Minimum Grade if } \\ & \text { Required } \end{aligned}$ | Additional Critical Requirement Notes |
| TERM ONE： 015 CREDIT HOURS |  |  |  |  |  |
| SLC 194：Introduction to SILC Transdisciplinary Studies | 1 | $\square$ |  | Grade of 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> －Minimum 2.34 cumulative ASU GPA． <br> －Foreign Language must be offered by SILC． <br> －Contact a SILC academic advisor for approved listings． <br> －Students taking Romanian and Portuguese should be at least at the 313 level by the end of semester 1 ． <br> －Students taking Greek should be at least at the 301 level by the end of semester 1 ． |
| Complete one course from： <br> SLC 201：Introduction to Linguistics OR <br> SLC 202：Introduction to Literacy \＆Cultural Theory（G） | 3 | $\square$ |  | Grade of C |  |
| WAC 101：Introduction to Academic Writing <br> ENG 101／107：First－Year Composition／English for Foreign Students <br> ENG 102／108：First－Year Composition／English for Foreign Students <br> ENG 105：Advanced First－Year Composition | 3 | $\square$ |  | Grade of C |  |
| MAT 142：College Mathematics（MA） | 3 | $\square$ |  | Grade of C |  |
| Foreign Language $\geq 201$（see note） | 3－5 | $\square$ |  | Grade of C |  |
| Social／Behavioral Science（SB） | 3 | $\square$ |  |  |  |
| TERM TWO： 1630 CREDIT HOURS |  |  |  |  |  |
| Complete remaining course from： <br> SLC 201：Introduction to Linguistics OR <br> SLC 202：Introduction to Literacy \＆Cultural Theory（G） | 3 | $\square$ |  | Grade of C | －Minimum 2.34 cumulative ASU GPA． <br> Foreign Language must be offered by SILC． <br> Contact a SILC academic advisor for approved listings． <br> －Students taking Romanian and Portuguese should be at least at the 314 level by the end of semester 1 ． <br> －Students taking Greek should be at least at the 302 level by the end of semester 1. <br> －Meet with SILC Academic Advisor to discuss semester 3 milestones． |
| ENG 101／107：First－Year Composition／English for Foreign Students ENG 102／108：First－Year Composition／English for Foreign Students ENG 105：Advanced First－Year Composition | 3 | $\square$ |  | Grade of C |  |
| Computer／Statistics／Quantitative applications（CS） | 3 | $\square$ |  |  |  |
| Humanities，Fine Arts \＆Design（HU） | 3 | $\square$ |  |  |  |
| Foreign Language $\geq 202$（see note） | 3－5 | $\square$ |  | Grade of C |  |
| TERM THREE： 3145 CREDIT HOURS |  |  |  |  |  |
| Historical Awareness（H） | 3 | $\square$ |  | Grade of C | －MILESTONE：Write personal statement and submit by end of term． <br> －MILESTONE：Receive Program of Study approval by end of term． <br> －MILESTONE：Must have cumulative 3.0 GPA in primary target language courses． <br> －Minimum 2.34 cumulative ASU GPA． <br> －Complete First Year Composition requirement： ENG 101 \＆ 102 OR ENG 107 \＆ 108 OR ENG 105 <br> －Complete Mathematical Studies Requirement （MA） |
| Natural Science－Quantitative（SQ） | 4 | $\square$ |  |  |  |
| Social／Behavioral Science（SB） | 3 | $\square$ |  |  |  |
| Humanities，Fine Arts \＆Design（HU） | 3 | $\square$ |  |  |  |
| Foreign Language $\geq 300$（see note） | 3 | 区 |  | Grade of C |  |
| TERM FOUR： $46 \mathbf{6 0}$ CREDIT HOURS |  |  |  |  |  |
| Cultural Diversity in the US（C） | 3 | $\square$ |  | Grade of C | －Minimum 2.34 cumulative ASU GPA． <br> －Approved Program of Study courses to be selected from approved and current Program of Study． |
| Approved Program of Study Course（see note） | 3 | $\square$ |  | Grade of C |  |
| Approved Program of Study Course（see note） | 3 | $\square$ |  | Grade of C |  |
| Natural Science－Quantitative（SQ）or General（SG） | 4 | $\square$ |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| TERM FIVE： 6175 CREDIT HOURS |  |  |  |  |  |
| Approved Program of Study Course（see note） | 3 | $\square$ |  | Grade of C | －Maintain minimum 2.34 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 Course（see note） | 3 | $\square$ |  | Grade of C |  |
| Approved Program of Study Course（see note） | 3 | $\square$ |  | Grade of C |  |
| Literacy and Critical Inquiry（L） | 3 | $\square$ |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| TERM SIX： $76 \mathbf{9 0}$ CREDIT HOURS |  |  |  |  |  |
| Approved Program of Study upper division Course（see note） | 3 | 区 |  | Grade of C | －Maintain minimum 2.34 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 | 区 |  | Grade of C |  |
| Upper－Division Elective | 3 | 区 |  |  |  |
| Upper Division Literacy and Critical Inquiry（L） | 3 | 区 |  |  |  |
| TERM SEVEN： 91105 CREDIT HOURS |  |  |  |  |  |
| Approved Program of Study upper division Course（see note） | 3 | 区 |  | Grade of C | －Maintain minimum 2.34 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 |  |  |  |


| $\begin{aligned} & \begin{array}{l} \text { Course Subject and Title } \\ \text { (courses in bold/shading are critical) } \end{array} \end{aligned}$ | Hrs． | Upper Division | Transfer Course／Grade | Minimum Grade if Required | Additional Critical Requirement Notes |
| :---: | :---: | :---: | :---: | :---: | :---: |
| TERM EIGHT： $106 \mathbf{1 2 0}$ CREDIT HOURS |  |  |  |  |  |
| SLC 498：Pro－Seminar | 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 2.34 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 | 区 |  | Grade of C |  |

## Graduation Requirements Summary：

| Total Hours（120 <br> minimum） | Total Hrs at ASU（30 <br> minimum） | Hrs Resident Credit for Academic <br> Recognition（56 minimum） | Major GPA <br> $(2.00$ Min．$)$ | Total UD Hrs <br> $(45$ 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）
－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 (120 <br> minimum) | Total Hrs at ASU (30 <br> minimum) | Hrs Resident Credit for Academic <br> Recognition ( 56 minimum) | Major GPA <br> $(2.00 \mathrm{Min})$. | Total UD Hrs <br> $(45$ minimum $)$ | Total Comm. College <br> Hrs. ( 64 maximum) |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |

## General University Requirements: Legend

- General Studies Core Requirements:

$$
\begin{array}{ll}
\circ & \text { Literacy and Critical Inquiry (L) } \\
\circ & \text { Mathematical Studies (MA) } \\
\circ & \text { Computer/Statistics/Quantitative applications (CS) } \\
\circ & \text { Humanities, Fine Arts, and Design (HU) } \\
\circ & \text { Social and Behavioral Sciences (SB) } \\
\circ & \text { Natural Science-Quantitative (SQ) } \\
\circ & \text { Natural Science-General (SG) }
\end{array}
$$

- General Studies Awareness Requirements
- Cultural Diversity in the US (C)
- Global Awareness (G)
- Historical Awareness (H)
- First-Year Composition


## Additional Notes:

Minimum grade of "C" in all ITA, SLC and Italian Related Fields courses

Major Map: Justice Studies -
Bachelor of Science (B.S.)
College of Liberal Arts \& Sciences, Tempe Campus
Catalog Year: 2008-2009


Major Map：Justice Studies－
Bachelor of Science（B．S．）
College of Liberal Arts \＆Sciences，Tempe Campus
Catalog Year：2008－2009

| $\begin{aligned} & \hline \begin{array}{l} \text { Course Subject and Title } \\ \text { (courses in bold/shading are critical) } \end{array} \end{aligned}$ | Hrs． | Upper <br> Division | Transfer Course／Grade | Minimum Grade if Required | Additional Critical Requirements Notes |
| :---: | :---: | :---: | :---: | :---: | :---: |
| TERM EIGHT： $106 \mathbf{1 2 0}$ CREDIT HOURS |  |  |  |  |  |
| J－4 JUS course（JUS 484 Internship recommended or if JUS 200 completed earlier，upper division elective） | 3 | 区 |  | Grade of C |  |
| Upper division related field or Discipline Specific Focus course | 3 | 囚 |  | Grade of C |  |
| Upper division elective | 3 | 区 |  |  |  |
| Elective | 4 | $\square$ |  |  |  |

## Graduation Requirements Summary：

| Total Hours（120 <br> minimum） | Total Hrs at ASU（30 <br> minimum） | Hrs Resident Credit for Academic <br> Recognition（ 56 minimum $)$ | Major GPA <br> $(2.00$ Min．$)$ | Total UD Hrs <br> $(45$ 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：


Major Map: Kinesiology - Bachelor of Science (B.S.)
College of Liberal Arts and Sciences, Tempe Campus
Catalog Year: 2008-2009

| Course Subject and Title <br> (courses in bold/shading are critical) | Hrs. | Upper <br> Division | Transfer <br> Course/Grade | Minimum Grade if <br> Required | Additional Critical Requirement Notes |
| :--- | :---: | :---: | :---: | :--- | :--- | :--- | :--- |

Graduation Requirements Summary:

| Total Hours (120 <br> minimum) | Total Hrs at ASU (30 <br> hours minimum) | Hrs Resident Credit required <br> for Academic Recognition <br> $(56)$ | Major GPA (2.000 <br> Minimum) | 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:

Additional Kinesiology and Other Course Work
Choose 24 semester hours from among the courses below ${ }^{1}$ :
KIN 100 Introduction to Health and Wellness SB (3)
KIN 191 First-Year Seminar (1-3)
KIN 283 Prevention and Care of Athletic Injuries (3)
KIN 294 ST: Introduction to Research Methods (3)
KIN 334 Functional Anatomy and Kinesiology (3)
KIN 348 Psychological Skills for Optimal Performance $S B$ (3)
KIN 412 Biomechanics of the Skeletal System (3)
KIN 413 Qualitative Analysis in Sport Biomechanics (3)
KIN 414 Electromyographic Kinesiology L (3)
KIN 421 Human Motor Control $L$ (3)
KIN 422 Motor Control in Special Populations L (3)
KIN 423 Motor Control and Aging L (3)
KIN 440 Exercise Biochemistry (3)
KIN 441 Physiology of Women in Sport $L$ (3)
KIN 442 Fuel Metabolism (3)
KIN 443 Exercise Endocrinology L (3)
KIN 444 Metabolic Adaptations to Exercise Training (3)
KIN 445 Exercise Physiology for Children and Adolescents (3)
KIN 448 Applied Sport Psychology L (3)
KIN 450 Biopsychosocial Perspectives on Physical Activity and Health (3)
KIN 452 Exercise Psychology SB (3)
KIN 460 Theory of Strength Training $L$ (3)
KIN 484 Internship (3-6)
KIN 492 Honors Directed Study: Research (1-6)
KIN 493 Honors Thesis (1-6)
KIN 494 ST: Advanced Exercise Physiology (3)
KIN 494 ST: EKG: Interpretation of Exercise Electrocardiogram (3)
KIN 494 ST: Environmental Exercise Physiology (3)
KIN 494 ST: Interpretation of Exercise Performance (3)
KIN 494 ST: Muscle Physiology (3)
KIN 494 ST: Neurophysiological Bases of Movement (3)
KIN 498 Pro-Seminar: Kinesiology and the Future (1)
KIN 499 Individualized Instruction (1-3)
BCH 361 Principles of Biochemistry (3)
BIO 340 General Genetics (4)
BIO 353 Cell Biology (3)
BIO 360 Animal Physiology (3)
CHM 231 Elementary Organic Chemistry SQ (3) or CHM 233 General Organic Chemistry I (3)
MBB 245 Introductory Cellular and Molecular Biology SQ (4)
Students may also take other upper-division courses from BCH, BIO, BME, CHM, HPS, MBB, PGS, PHY, or PSY.
Other KIN courses may be substituted with advisor approval.
${ }^{1}$ A minimum of 18 semester hours must be comprised of courses with a KIN prefix.

## Bachelor of Liberal Studies Degree

## 2008-2009 Curriculum Check Sheet

| I. First Year Composition (3-6 hours) |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| ENG 101:First Year Comp 1 (3) and | ASU <br> Hours | Trans <br> Hours | Grade | Upp <br> Div |
| 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: |  |  |  | X |
| Natural Sciences (8 hours) |  |  |  |  |
| SQ: |  |  |  |  |
| SG: |  |  |  |  |
| Literacy and Critical Inquiry (6 hours) |  |  |  |  |
| L: |  |  |  |  |
| L: |  |  |  |  |
| Mathematics \& Statistics/Computer Applications (6 hours) |  |  |  |  |
| 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 in the US (C): |  |  |  |  |
|  |  |  |  |  |


| 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 |
| AGEC Completed? | AA Completed? |  |  |  |
| $\mathrm{Y} \square$ or $\mathrm{N} \square$ | $\mathrm{Y} \square$ or N $\square$ |  |  |  |

V. Electives (as needed for 120 total) ${ }^{2}$

|  |  |  |  |  |
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[^9]BLS Major ${ }^{1}$

| 30 hours required; all $\mathbf{3 0 0}$ - $\mathbf{4 0 0}$ level | ASU <br> Hrs | Trans <br> Hrs | Grade | UD |
| :--- | :---: | :---: | :---: | :---: |
| POS 301 Empirical Political Inquiry <br> (Research Methods) |  |  |  | $X$ |

CLAS Humanities: AFH, AFR, ARB, ENG, FMS, HST, REL, TCL, WSH
(12 hours Upper division)

|  |  |  |  | $x$ |
| :--- | :--- | :--- | :--- | :--- |
|  |  |  |  | $x$ |
|  |  |  |  | $x$ |
|  |  |  |  | $x$ |

CLAS Social Sciences: ASB, AFS, APA, CDE, COM, FAS, GCU, JUS, PGS, POS,
SOC, TCL, WST (12 hours upper division)

|  |  | ${ }^{3}$ |  | $x$ |
| :--- | :--- | :--- | :--- | :--- |
|  |  |  |  | $x$ |
|  |  |  |  | $x$ |
|  |  |  |  | $x$ |


| LIA 498 Capstone |  |  |  | $\mathbf{X}$ |
| :--- | :--- | :--- | :--- | :--- |

- This check sheet is for reference only; please consult your DARS report for official information about your requirements.

| $\begin{aligned} & \begin{array}{l} \text { Course Subject and Title } \\ \text { (courses in bold/shading are critical) } \end{array} \end{aligned}$ | Hrs． | Upper Division | Transfer Course／Grade | Minimum Grade if Required | Additional Critical Requirement Notes |
| :---: | :---: | :---: | :---: | :---: | :---: |
| TERM SEVEN： 91105 CREDIT HOURS |  |  |  |  |  |
| Upper division MAT／STP（additional）course | 3 | 区 |  | Grade of 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 Field course | 3 | 区 |  |  |  |
| Upper division Related Field course | 3 | 区 |  |  |  |
| Upper division general elective | 3 | 区 |  |  |  |
| TERM EIGHT： $106 \mathbf{1 2 0}$ CREDIT HOURS |  |  |  |  |  |
| Upper division MAT／STP（additional）course | 3 | 区 |  | Grade of 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 Field course | 3 | 区 |  |  |  |
| Additional upper division course | 3 | 区 |  |  |  |
| Upper division general elective | 3 | 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：



## 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:

Major Map: Mathematics (Statistics) -
Bachelor of Science (B.S.)
College of Liberal Arts and Sciences, Tempe Campus Catalog Year: 2008-2009

| $\begin{aligned} & \begin{array}{l} \text { Course Subject and Title } \\ \text { (courses in bold/shading are critical) } \end{array} \end{aligned}$ | Hrs. | Upper Division | Transfer Course/Grade | Minimum Grade if Required | Additional Critical Requirement Notes |
| :---: | :---: | :---: | :---: | :---: | :---: |
| TERM EIGHT: 106120 CREDIT HOURS |  |  |  |  |  |
| Upper division MAT or STP (advanced) course | 3 | 囚 |  | Grade of 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 Field course | 3 | 区 |  | Grade of C |  |
| General Elective | 3 | $\square$ |  |  |  |
| General Elective | 3 | $\square$ |  |  |  |

## 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:

| $\circ$ | 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) |
| $\circ$ | Natural Science-General (SG) |

- General Studies Aw
- Cultural Diversity in the US (C)
- Global Awareness (G)
- Historical Awareness (H)
- First Year Composition


## Additional Notes:

|  |  |  | Completed ATP：$\quad \square$ Yes $\quad \square$ No |  | Completed AGEC：$\square$ Yes $\square$ No |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 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： 015 CREDIT HOURS |  |  |  |  |  |
| CHM 113：General Chemistry I | 4 | $\square$ |  | Grade of 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 critical courses must be completed by the end of semester 4 <br> －Maintain 2．0 GPA in all critical courses，major courses，and related fields <br> －MAT 251 or equivalent to be completed by end of term 2 <br> －Consult an academic advisor for Learning Community，Academic Success Clusters and First Year Seminar options |
| ENG 101 and 102：First－Year Composition OR ENG 107 and 108：English for Foreign Students OR ENG 105：Advanced First－Year Composition | 3 | $\square$ |  | Grade of C |  |
| MAT 251 （MA）：Calculus for Life Sciences | 3 | $\square$ |  | Grade of C |  |
| 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 Diversity in the US（C）， Global Awareness（G）or Historical Awareness（H） | 3 | $\square$ |  |  |  |
| TERM TWO： 1630 CREDIT HOURS |  |  |  |  |  |
| BIO 187：General Biology I OR BIO 188：General Biology II | 4 | $\square$ |  | Grade of C | －All critical courses must be completed by the end of semester 4 <br> －Maintain 2．0 GPA in all critical courses，major courses，and related fields <br> －MAT 251 or equivalent to be completed by end of term 2 |
| CHM 116：General Chemistry II | 4 | $\square$ |  | Grade of C |  |
| ENG 101 and 102：First－Year Composition OR ENG 107 and 108：English for Foreign Students OR ENG 105：Advanced First－Year Composition | 3 | $\square$ |  | Grade of C |  |
| Social \＆Behavioral Science（SB）and Cultural Diversity in the US（C）， Global Awareness（G）or Historical Awareness（H） | 3 | $\square$ |  |  |  |
| TERM THREE： 3145 CREDIT HOURS |  |  |  |  |  |
| BIO 187：General Biology I OR BIO 188：General Biology II | 4 | $\square$ |  | Grade of C | －All critical requirement courses must be completed by the end of semester 4 <br> －Maintain 2.0 GPA in all critical requirement courses，major courses，and related fields <br> －Choose between the following combinations（8 hrs）：CHM 231／235 \＆BCH 361／367 OR CHM 233／237 \＆CHM 234／238 <br> －Complete first year composition requirement |
| CHM 231 Elem Organic Chemistry \＆CHM 235 Laboratory OR CHM 233 Gen Organic Chemistry I \＆CHM 237 Laboratory | 3／1 | $\square$ |  | Grade of C |  |
| STP 226：Elements of Statistics OR <br> STP 231：Statistics for Life Science | 3 | $\square$ |  | Grade of C |  |
| CLAS Science and Society | 3 | $\square$ |  | Grade of C |  |
| TERM FOUR： $46 \mathbf{6 0}$ CREDIT HOURS |  |  |  |  |  |
| MIC 220：Biology of Microorganisms | 3 | $\square$ |  | Grade of C | －All critical requirement courses must be completed by the end of semester 4 <br> －Maintain 2.0 GPA in all critical courses，major courses，and related fields <br> －Choose between the following combinations（8 hrs）：CHM 231／235 \＆BCH 361／367 OR CHM 233／237 \＆CHM 234／238 |
| MIC 206：Microbiology Laboratory | 1 | $\square$ |  | Grade of C |  |
| CHM 234 Gen Organic Chemistry II \＆CHM 238 Laboratory OR，if CHM 231／235 completed take General Elective | $\begin{gathered} \hline 3 / 1 \\ \text { or } \\ 4 \\ \hline \end{gathered}$ | $\square$ |  | Grade of C in CHM 234／238 |  |
| Humanities，Fine Arts \＆Design（HU） | 3 | $\square$ |  |  |  |
| Literacy and Critical Inquiry（L） | 3 | $\square$ |  |  |  |
| TERM FIVE： 6175 CREDIT HOURS |  |  |  |  |  |
| BIO 340：General Genetics | 4 | 区 |  | Grade of C | －Both MIC 302 and 401 must be completed for Literacy \＆Critical Inquiry（L）credit |
| MIC 302：Advanced Bacteriology Laboratory | 2 | 区 |  | Grade of C |  |
| PHY 111：General Physics \＆PHY 113：Laboratory | 3／1 | $\square$ |  | Grade of C |  |
| Upper Division CLAS Science and Society | 3 | 区 |  | Grade of C |  |
| Upper division general elective | 3 | 区 |  |  |  |
| TERM SIX： $76 \mathbf{9 0}$ CREDIT HOURS |  |  |  |  |  |
| BCH：361／367：Principles of Biochemistry／Laboratory OR if CHM 233／237 \＆234／238 completed，take Upper division general elective | $\begin{gathered} 3 / 1 \\ \text { or } \\ 3 \\ \hline \end{gathered}$ | 区 |  | Grade of C in BCH 361／367 | －Choose between the following combinations（8 hrs）：CHM 231／235 \＆BCH 361／367 OR CHM 233／237 \＆CHM 234／238 |
| PHY 112：General Physics \＆PHY 114：Laboratory | 3／1 | $\square$ |  | Grade of C |  |
| Complete one course from： <br> MIC 421：Experimental Immunology（2） <br> MIC 442：Bacterial Genetics Lab（1） <br> MIC 446：Techniques in Molecular Biology／Genetics Lab（2） <br> MIC 470：Bacterial Diversity \＆Systematics（4） <br> MIC 484：Internship（3） <br> MIC 494：ST：Clinical Bacteriology Lab（3） <br> MIC 495：Undergraduate Research（2） | $\begin{gathered} 1, \\ 2,3 \\ \text { or } 4 \\ \hline \end{gathered}$ | 囚 |  | Grade of C |  |
| Upper division Humanities，Fine Arts \＆Design（HU）OR Social \＆Behavioral Science（SB） | 3 | 区 |  |  |  |
| General Elective | 4 | $\square$ |  |  |  |


| $\begin{aligned} & \begin{array}{l} \text { Course Subject and Title } \\ \text { (courses in bold/shading are critical) } \end{array} \end{aligned}$ | Hrs． | Upper Division | Transfer Course／Grade | $\begin{aligned} & \text { Minimum Grade if } \\ & \text { Required } \end{aligned}$ | Additional Critical Requirement Notes |
| :---: | :---: | :---: | :---: | :---: | :---: |
| TERM SEVEN： 91105 CREDIT HOURS |  |  |  |  |  |
| MIC 360：Bacterial Physiology | 4 | 区 |  | Grade of C |  |
| Upper division Major Elective | 3 | 囚 |  | Grade of C |  |
| Complete one course from： <br> MIC 421：Experimental Immunology（2） <br> MIC 442：Bacterial Genetics Lab（1） <br> MIC 446：Techniques in Molecular Biology／Genetics Lab（2） <br> MIC 470：Bacterial Diversity \＆Systematics（4） <br> MIC 484：Internship（3） <br> MIC 494：ST：Clinical Bacteriology Lab（3） <br> MIC 495：Undergraduate Research（2） | $\begin{gathered} 1,2, \\ 3 \text { or } \\ 4 \end{gathered}$ | 区 |  | Grade of C |  |
| Upper division general elective | 3 | 区 |  |  |  |
| Upper division general elective | 3 | 区 |  |  |  |
| TERM EIGHT： $106 \mathbf{1 2 0}$ CREDIT HOURS |  |  |  |  |  |
| MIC 401：Research Paper | 1 | 囚 |  | Grade of C | －Both MIC 302 and 401 must be completed for Literacy \＆Critical Inquiry（L）credit |
| Upper division Major Elective | 3 | 区 |  | Grade of C |  |
| Upper division Major Elective（Lab） | 3 | 区 |  | Grade of C |  |
| Upper division Major Elective | 2 | 区 |  | Grade of C |  |
| Upper division General Elective | 3 | 区 |  |  |  |
| Upper division General 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：

－Humanities，Literacy and Critical Inquiry，Social Behavioral Sciences，and Science and Society courses are interchangeable in sequencing

## 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:

Major Map：Philosophy－Bachelor of Arts（B．A．）
College of Liberal Arts \＆Sciences，Tempe Campus
Catalog Year：2008－2009

|  |  |  | Completed ATP：$\square$ Yes $\square$ No |  | Completed AGEC：$\square$ Yes $\quad \square$ No |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 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： 015 CREDIT HOURS |  |  |  |  |  |
| ENG 101 and 102：First－Year Composition OR ENG 107 and 108：English for Foreign Students OR ENG 105：Advanced First－Year Composition | 3 | $\square$ |  | Grade of C | －An SAT，ACT，Accuplacer，or TOEFL score determines placement into first－year composition courses |
| MAT 142：College Mathematics（MA） | 3 | $\square$ |  | Grade of C | ASU Math Placement Exam score determines |
| Second Language | 4 | $\square$ |  | Grade of C | ment in Mathematics course <br> plete Mathematical Studies（MA）by semester 4. |
| Elective（recommend：PHI 1＊＊－Any 3 hour 100 level PHI course） | 3 | $\square$ |  | Grade of C in PHI course | －Complete all critical courses by the end of semester 4. |
| Elective | 3 | $\square$ |  |  | －Consult an academic advisor for Learning Community，Academic Success Clusters and First Year Seminar options <br> －Maintain 2.00 cumulative GPA in critical courses |
| TERM TWO： 1630 CREDIT HOURS |  |  |  |  |  |
| ENG 101 and 102：First－Year Composition OR ENG 107 and 108：English for Foreign Students OR ENG 105：Advanced First－Year Composition | 3 | $\square$ |  | Grade of C | －Maintain 2.00 cumulative GPA in critical courses |
| Second Language | 4 | $\square$ |  | Grade of C |  |
| Natural Science－Quantitative（SQ） | 4 | $\square$ |  |  |  |
| Elective（recommend：PHI 1＊＊－Any 3 hour 100 level PHI course） | 3 | $\square$ |  | Grade of C in PHI course |  |
| Elective | 3 | $\square$ |  |  |  |
| TERM THREE： 3145 CREDIT HOURS |  |  |  |  |  |
| Computer／Statistics／Quantitative applications（CS） | 3 | $\square$ |  |  | －Maintain 2.00 cumulative GPA in critical courses |
| Continue Second Language if necessary or Elective | 4 | $\square$ |  | Grade of C | －Complete First Year Composition requirement： ENG 101 \＆ 102 OR ENG 107 \＆ 108 or 105 |
| Social and Behavioral Science（SB）and Cultural Awareness Area（C） | 3 | $\square$ |  |  |  |
| Awareness Area－Global（G）－if needed | 3 | $\square$ |  |  |  |
| Elective（recommend：PHI 1＊＊－Any 3 hour 100 level PHI course） | 3 | $\square$ |  | Grade of C in PHI course |  |
| TERM FOUR： $46 \mathbf{6 0}$ CREDIT HOURS |  |  |  |  |  |
| PHI 300 ${ }^{1}$ ：Philosophical Argument and Exposition（L） | 3 | 区 |  | Grade of C |  |
| Natural Science－Quantitative or General（SQ／SG） | 4 | $\square$ |  |  | Complete Mathematical Studies（MA）requirement． |
| Continue Second Language if necessary or Elective | 4 | $\square$ |  | Grade of C | ${ }^{1}$ Open to Philosophy majors only；student must meet |
| Social and Behavioral Science（SB） | 3 | $\square$ |  |  | with advisor prior to enrolling． |
| Major Elective | 3 | $\square$ |  |  |  |
|  |  |  |  |  |  |
| TERM FIVE： 6175 CREDIT HOURS |  |  |  |  |  |
| PHI 301：History of Ancient Philosophy（HU，H） | 3 | 区 |  | Grade of C | －Complete second language． |
| PHI 312：Theory of Knowledge（HU）or PHI 314：Philosophy of Science（HU）OR <br> PHI 316：Metaphysics（HU）or PHI 317：Philosophy of Mind（HU） | 3 | 区 |  | Grade of C |  |
| Upper Division Major Elective | 3 | 区 |  |  |  |
| Major Elective | 3 | $\square$ |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| TERM SIX： $76 \mathbf{9 0}$ CREDIT HOURS |  |  |  |  |  |
| PHI 302：History of Modern Philosophy | 3 | 区 |  | Grade of C | －Select one course from PHI 312 or PHI 314 and |
| $\begin{aligned} & \text { PHI 305²: Ethical Theory (HU) OR } \\ & \text { PHI 335: History of Ethics (HU) } \end{aligned}$ | 3 | 区 |  | Grade of C | another one from PHI 316 or PHI 317. |
| PHI 312：Theory of Knowledge（HU）or PHI 314：Philosophy of Science（HU）OR <br> PHI 316：Metaphysics（HU）or PHI 317：Philosophy of Mind（HU） | 3 | 区 |  | Grade of C | 305 has a prerequisite of PHI 105 or PHI 306. |
| Major Elective if needed，or Elective | 3 | $\square$ |  | Grade of C |  |
| Literacy and Critical Inquiry（L） | 3 | $\square$ |  |  |  |
| TERM SEVEN： 91105 CREDIT HOURS |  |  |  |  |  |
| PHI 400－Level ${ }^{3}$ | 3 | 区 |  | Grade of C | ${ }^{3}$ The 400 －level requirement is met by taking two |
| Upper Division Major Elective | 3 | 区 |  | Grade of C | courses from the list PHI 401：Rationalism，402： Empiricism，403：Contemporary Analytic |
| Upper Division Elective | 3 | 区 |  |  | Philosophy，413：Advanced Symbolic Logic，420： |
| Upper Division Elective | 3 | 区 |  |  | Topics in Philosophy（420 may be taken multiple times．） |
| TERM EIGHT： 106120 CREDIT HOURS |  |  |  |  |  |
| PHI 4＊＊ | 3 | 区 |  | Grade of C |  |
| Upper Division Major Elective | 3 | 区 |  | Grade of C |  |
| Upper Division Elective | 3 | 区 |  |  |  |
| Upper Division Elective | 3 | 区 |  |  |  |

## Graduation Requirements Summary:

| Total Hours (120 <br> minimum) | Total Hrs at ASU (30 <br> minimum) | Hrs Resident Credit for Academic <br> Recognition ( 56 minimum) | Major GPA <br> $(2.00 \mathrm{Min})$. | Total UD Hrs <br> $(45$ minimum $)$ | Total Comm. College <br> Hrs. ( 64 maximum) |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |

## General University Requirements: Legend

- General Studies Core Requirements:

$$
\begin{array}{ll}
\circ & \text { Literacy and Critical Inquiry (L) } \\
\circ & \text { Mathematical Studies (MA) } \\
\circ & \text { Computer/Statistics/Quantitative applications (CS) } \\
\circ & \text { Humanities, Fine Arts, and Design (HU) } \\
\circ & \text { Social and Behavioral Sciences (SB) } \\
\circ & \text { Natural Science-Quantitative (SQ) } \\
\circ & \text { Natural Science-General (SG) }
\end{array}
$$

- General Studies Awareness Requirements
- Cultural Diversity in the US (C)
- Global Awareness (G)
- Historical Awareness (H)
- First-Year Composition

Additional Notes:

Major Map：Physics（Option 1）－<br>Bachelor of Science（B．S．）<br>College of Liberal Arts and Sciences，Tempe Campus<br>Catalog Year：2008－2009

|  |  |  | Completed ATP：$\square$ Yes $\quad \square$ No |  | Completed AGEC：$\square$ Yes $\square$ No |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 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： 015 CREDIT HOURS |  |  |  |  |  |
| MAT 270：Calculus with Analytic Geometry I（MA） | 4 | $\square$ |  | Grade of 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 critical courses must be completed by the end of semester 4 <br> －Maintain 2.6 cumulative GPA in all critical courses <br> －PHY 121／122 and 131／132（or other equivalents） may be used in place of PHY 150 and 151， respectively <br> －Consult academic an advisor for Learning Community，Academic Success Clusters and First Year Seminar options |
| ENG 101 and 102：First－Year Composition OR ENG 107 and 108：English for Foreign Students OR ENG 105：Advanced First－Year Composition | 3 | $\square$ |  | Grade of C |  |
| Elective（PHY 190 preferred） | 1 | $\square$ |  |  |  |
| Humanities，Fine Arts \＆Design（HU）and Cultural Diversity in the US（C）or Historical Awareness（H） | 3 | $\square$ |  |  |  |
| Social \＆Behavioral Science（SB） | 3 | $\square$ |  |  |  |
| TERM TWO： 1630 CREDIT HOURS |  |  |  |  |  |
| MAT 271：Calculus with Analytic Geometry II | 4 | $\square$ |  | Grade of C | －All critical courses must be completed by the end of semester 4 <br> －Maintain 2.6 cumulative GPA in all critical requirement courses <br> －PHY 121／122 and 131／132（or other equivalents） may be used in place of PHY 150 and 151， respectively |
| PHY 150：Physics I（SQ） | 4 | $\square$ |  | Grade of C |  |
| Humanities，Fine Arts \＆Design（HU）and Cultural Diversity in the US（C）or Historical Awareness（H） | 3 | $\square$ |  |  |  |
| ENG 101 and 102：First－Year Composition OR ENG 107 and 108：English for Foreign Students OR ENG 105：Advanced First－Year Composition | 3 | $\square$ |  | Grade of C |  |
| TERM THREE： 3145 CREDIT HOURS |  |  |  |  |  |
| MAT 272：Calculus with Analytic Geometry III | 4 | $\square$ |  | Grade of C | －First year composition completed． <br> －All critical courses must be completed by the end of semester 4 <br> －Maintain 2.6 cumulative GPA in all critical courses <br> －PHY 121／122 and 131／132（or other equivalents） may be used in place of PHY 150 and 151， respectively |
| PHY 151：Physics II（SQ） | 4 | $\square$ |  | Grade of C |  |
| CLAS Science and Society | 3 | $\square$ |  | Grade of C |  |
| Humanities，Fine Arts \＆Design（HU） | 3 | $\square$ |  |  |  |
| Social \＆Behavioral Science（SB）AND Global Awareness（G） | 3 | $\square$ |  |  |  |
| TERM FOUR： $46 \mathbf{6 0}$ CREDIT HOURS |  |  |  |  |  |
| PHY 252：Physics III | 4 | $\square$ |  | Grade of C | －All critical courses must be completed by the end of semester 4 <br> －Maintain 2.6 cumulative GPA in all critical courses <br> －PHY 121／122 and 131／132（or other equivalents） may be used in place of PHY 150 and 151， respectively |
| PHY 201：Mathematical Methods in Physics I | 3 | $\square$ |  | Grade of C |  |
| PHY 333：Electronic Circuits and Measurements | 3 | 区 |  | Grade of C |  |
| Upper division Humanities，Fine Arts \＆Design（HU）OR Social \＆Behavioral Science（SB） | 3 | 囚 |  |  |  |
| Upper division CLAS Science and Society | 3 | 区 |  | Grade of C |  |
| TERM FIVE： 6175 CREDIT HOURS |  |  |  |  |  |
| PHY 302：Mathematical Methods in Physics II | 2 | 区 |  | Grade of C | －Physics Option 1A also includes an Astronomy （AST）emphasis．This course sequence replaces 15 elective credits |
| PHY 310：Classical Particles，Fields，and Matter I | 3 | 区 |  | Grade of C |  |
| PHY 314：Quantum Physics I | 3 | 区 |  | Grade of C |  |
| Upper division Elective OR <br> AST 321：Introduction to Planetary and Stellar Astrophysics | 3 | 区 |  | Grade of C in AST 321 |  |
| General Elective | 3 | $\square$ |  |  |  |
| TERM SIX： $76 \mathbf{9 0}$ CREDIT HOURS |  |  |  |  |  |
| PHY 311：Classical Particles，Fields，and Matter II | 3 | ® |  | Grade of C | －Physics Option 1A also includes an Astronomy （AST）emphasis．This course sequence replaces 15 elective credits |
| PHY 315：Quantum Physics II | 3 | 区 |  | Grade of C |  |
| PHY 334：Advanced Laboratory I | 2 | 区 |  | Grade of C |  |
| Literacy and Critical Inquiry（L） | 3 | $\square$ |  |  |  |
| Upper division elective OR <br> AST 322：Introduction to Galactic and Extragalactic Astrophysics | 3 | $\square$ |  | Grade of C in AST 322 |  |
| TERM SEVEN： 91105 CREDIT HOURS |  |  |  |  |  |
| PHY 412：Classical Particles，Fields，and Matter III | 3 | 区 |  | Grade of C | －Physics Option 1A also includes an Astronomy （AST）emphasis．This course sequence replaces 15 elective credits |
| PHY 416：Quantum Physics III | 3 | 区 |  | Grade of C |  |
| PHY 441：Statistical and Thermal Physics | 3 | 区 |  | Grade of C |  |
| Upper division elective OR AST 421：Astrophysics I | 3 | 区 |  | Grade of C in AST 421 |  |
| General Elective | 3 | $\square$ |  |  |  |
| TERM EIGHT： 106120 CREDIT HOURS |  |  |  |  |  |
| PHY 465：Advanced Laboratory II | 2 | 区 |  | Grade of C | －Physics Option 1A also includes an Astronomy （AST）emphasis．This course sequence replaces 15 elective credits |
| Upper division Literacy and Critical Inquiry（L） | 3 | 区 |  |  |  |
| Upper division elective OR AST 422：Astrophysics II | 3 | $\boxtimes$ |  | Grade of C in AST 422 |  |
| Upper division elective OR AST 499：Individualized Instruction | 3 | 区 |  | Grade of C in AST 499 |  |
| General Elective | 3 | $\square$ |  |  |  |
| General Elective | 2 | $\square$ |  |  |  |

Major Map: Physics (Option 1) Bachelor of Science (B.S.)
College of Liberal Arts and Sciences, Tempe Campus Catalog Year: 2008-2009

## 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:

There is room in this roadmap to add a concurrent degree, minor or concentration.

Major Map：Physics（Option 2）－<br>Bachelor of Science（B．S．）<br>College of Liberal Arts and Sciences，Tempe Campus<br>Catalog Year：2008－2009

|  |  |  | Completed ATP：$\square$ Yes $\square$ No |  | Completed AGEC：$\square$ Yes $\square$ No |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 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： 015 CREDIT HOURS |  |  |  |  |  |
| MAT 270：Calculus with Analytic Geometry I（MA） | 4 | $\square$ |  | Grade of 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 critical courses must be completed by the end of semester 4 <br> －Maintain 2.6 cumulative GPA in all critical courses <br> －PHY 121／122 and 131／132（or other equivalents） may be used in place of PHY 150 and 151， respectively <br> －Consult academic an advisor for Learning Community，Campus Match and First Year Seminar options |
| ENG 101 and 102：First－Year Composition OR ENG 107 and 108：English for Foreign Students OR ENG 105：Advanced First－Year Composition | 3 | $\square$ |  | Grade of C |  |
| Elective（PHY 190 preferred） | 1 | $\square$ |  |  |  |
| Humanities，Fine Arts \＆Design（HU）and Cultural Diversity in the US （C）or Historical Awareness（H） | 3 | $\square$ |  |  |  |
| Social \＆Behavioral Science（SB） | 3 | $\square$ |  |  |  |
| TERM TWO： 1630 CREDIT HOURS |  |  |  |  |  |
| MAT 271：Calculus with Analytic Geometry II | 4 | $\square$ |  | Grade of C | －All critical courses must be completed by the end of semester 4 <br> －Maintain 2.6 cumulative GPA in all critical requirement courses <br> －PHY 121／122 and 131／132（or other equivalents） may be used in place of PHY 150 and 151 ， respectively |
| PHY 150：Physics I（SQ） | 4 | $\square$ |  | Grade of C |  |
| Humanities，Fine Arts \＆Design（HU）and Cultural Diversity in the US （C）or Historical Awareness（H） | 3 | $\square$ |  |  |  |
| ENG 101 and 102：First－Year Composition OR ENG 107 and 108：English for Foreign Students OR ENG 105：Advanced First－Year Composition | 3 | $\square$ |  | Grade of C |  |
| TERM THREE： 3145 CREDIT HOURS |  |  |  |  |  |
| MAT 272：Calculus with Analytic Geometry III | 4 | $\square$ |  | Grade of C | －First year composition completed． <br> －All critical courses must be completed by the end of semester 4 <br> －Maintain 2.6 cumulative GPA in all critical courses <br> －PHY 121／122 and 131／132（or other equivalents） may be used in place of PHY 150 and 151， respectively |
| PHY 151：Physics II（SQ） | 4 | $\square$ |  | Grade of C |  |
| CLAS Science and Society | 3 | $\square$ |  | Grade of C |  |
| Humanities，Fine Arts \＆Design（HU） | 3 | $\square$ |  |  |  |
| Social \＆Behavioral Science（SB）AND Global Awareness（G） | 3 | $\square$ |  |  |  |
|  |  |  |  |  |  |
| PHY 252：Physics III | 4 | $\square$ |  | Grade of C | －All critical courses must be completed by the end of semester 4 <br> －Maintain 2.6 cumulative GPA in all critical courses <br> －PHY $121 / 122$ and $131 / 132$（or other equivalents） may be used in place of PHY 150 and 151， respectively |
| PHY 201：Mathematical Methods in Physics I | 3 | $\square$ |  | Grade of C |  |
| PHY 333：Electronic Circuits and Measurements | 3 | 区 |  | Grade of C |  |
| Upper division Humanities，Fine Arts \＆Design（HU）OR Social \＆Behavioral Science（SB） | 3 | 区 |  |  |  |
| Upper division CLAS Science and Society | 3 | 区 |  | Grade of C |  |
| TERM FIVE： 6175 CREDIT HOURS |  |  |  |  |  |
| PHY 302：Mathematical Methods in Physics II | 2 | 区 |  | Grade of C | －Physics Option 2A includes an Astronomy（AST） emphasis．This course sequence replaces option II related area elective credits |
| PHY 310：Classical Particles，Fields，and Matter I | 3 | 区 |  | Grade of C |  |
| PHY 314：Quantum Physics I | 3 | 区 |  | Grade of C |  |
| Option II related area elective OR <br> AST 321：Introduction to Planetary and Stellar Astrophysics | 3 | 区 |  | $\begin{aligned} & \text { Grade of C in AST } \\ & 321 \\ & \hline \end{aligned}$ |  |
| General Elective | 3 | $\square$ |  |  |  |
| TERM SIX： $76 \mathbf{9 0}$ CREDIT HOURS |  |  |  |  |  |
| PHY 311：Classical Particles，Fields，and Matter II | 3 | 区 |  | Grade of C | －Physics Option 2A includes an Astronomy（AST） emphasis．This course sequence replaces option II related area elective credits |
| PHY 315：Quantum Physics II | 3 | 囚 |  | Grade of C |  |
| PHY 334：Advanced Laboratory I | 2 | 区 |  | Grade of C |  |
| Literacy and Critical Inquiry（L） | 3 | $\square$ |  |  |  |
| Option II related area elective OR <br> AST 322：Introduction to Galactic and Extragalactic Astrophysics | 3 | $\square$ |  | $\begin{aligned} & \text { Grade of C in AST } \\ & 322 \end{aligned}$ |  |
| TERM SEVEN： 91105 CREDIT HOURS |  |  |  |  |  |
| PHY 412：Classical Particles，Fields，and Matter III | 3 | 区 |  | Grade of C | －Physics Option 2A includes an Astronomy（AST） emphasis．This course sequence replaces option II related area elective credits |
| PHY 441：Statistical and Thermal Physics | 3 | 区 |  | Grade of C |  |
| General Elective | 3 | 区 |  |  |  |
| Option II related area elective OR AST 421：Astrophysics I | 3 | 区 |  | $\begin{aligned} & \hline \text { Grade of C in AST } \\ & 421 \\ & \hline \end{aligned}$ |  |
| General Elective | 3 | $\square$ |  |  |  |

Major Map：Physics（Option 2）－
Bachelor of Science（B．S．）
College of Liberal Arts and Sciences，Tempe Campus
Catalog Year：2008－2009

| Course Subject and Title （courses in bold／shading are critical） | Hrs． | $\begin{aligned} & \hline \text { Upper } \\ & \text { Division } \\ & \hline \end{aligned}$ | Transfer Course／Grade | Minimum Grade if Required | Additional Critical Requirement Notes |
| :---: | :---: | :---: | :---: | :---: | :---: |
| TERM EIGHT： 106120 CREDIT HOURS |  |  |  |  |  |
| General Elective | 2 | 区 |  |  | －Physics Option 2A includes an Astronomy（AST） emphasis．This course sequence replaces option II related area elective credits |
| Upper division Literacy and Critical Inquiry（L） | 3 | 区 |  |  |  |
| Option II related area elective OR <br> AST 422：Astrophysics II | 3 | 囚 |  | $\begin{aligned} & \text { Grade of C in AST } \\ & 422 \\ & \hline \end{aligned}$ |  |
| Option II related area elective OR AST 499：Individualized Instruction | 3 | 区 |  | $\begin{aligned} & \text { Grade of C in AST } \\ & 499 \end{aligned}$ |  |
| General Elective | 3 | $\square$ |  |  |  |
| General 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：

There is room in this roadmap to add a concurrent degree，minor or concentration．

|  |  |  | Completed ATP：$\square$ Yes $\quad \square$ No |  | Completed AGEC：$\square$ Yes $\square$ No |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Course Subject and Title （courses in bold／shading are critical） | Hrs． | Upper Division | Transfer Course／Grade | $\begin{aligned} & \text { Minimum Grade if } \\ & \text { Required } \end{aligned}$ | Additional Critical Requirement Notes |
| TERM ONE： 015 CREDIT HOURS |  |  |  |  |  |
| Complete 1 course from： <br> POS 110：Government and Politics（SB）OR <br> POS 150：Comparative Government（SB，G）or POS 160：Global <br> Politics（SB，G） | 3 | $\square$ |  | Grade of C | －An SAT，ACT，Accuplacer，or TOEFL score determines placement into first－year composition courses <br> －ASU Math Placement Exam score determines |
| WAC 101：Introduction to Academic Writing or 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 | placement in Mathematics course <br> －Complete all critical courses by the end of semester 4 <br> －Consult with academic advisor for Learning |
| MAT 142：College Mathematics or higher（MA） | 3 | $\square$ |  | Grade of C | Community，Academic Success Clusters and First |
| Second Language \＃ | 4 | $\square$ |  |  | Year Seminar options <br> －Complete First Year Composition requirement by |
| General Elective | 2 | $\square$ |  |  | the end of semester 3 <br> －Complete Math course requirement by end of semester 4 <br> －Consult with an advisor to determine proficiency and grade required． |
| TERM TWO： 1630 CREDIT HOURS |  |  |  |  |  |
| Complete 1 additional course from： <br> POS 110：Government and Politics（SB）OR <br> POS 150：Comparative Government（SB，G）or POS 160：Global <br> Politics（SB，G） | 3 | $\square$ |  | Grade of C | －Complete all critical courses by the end of semester 4 <br> －Complete First Year Composition requirement by the end of semester 3 |
| WAC 101：Introduction to Academic Writing or 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 | －Complete Math course requirement by end of semester 4 |
| Second Language OR <br> If language requirement completed，take Elective | 4 | $\square$ |  |  |  |
| Natural Science Quantitative（SQ） | 4 | $\square$ |  |  |  |
| General Elective（recommend First Year Seminar 191／194 course） | 1 | $\square$ |  |  |  |
| TERM THREE： 3145 CREDIT HOURS |  |  |  |  |  |
| POS 210：Political Ideologies（SB） | 3 | $\square$ |  | Grade of C | －Complete all critical courses by the end of semester |
| POS elective | 3 | $\square$ |  | Grade of C | －Complete First Year Composition requirement by |
| Computer／Statistics／Quantitative applications（CS） | 3 | $\square$ |  |  | the end of semester 3 |
| Humanities，Fine Arts \＆Design（HU）and Historical Awareness（H） | 3 | $\square$ |  |  | －Complete Math course requirement by end of |
| Second Language OR <br> If language requirement completed，take Elective | 4 | $\square$ |  |  | semester 4 <br> －Choose related field course from courses with following prefixes：AES，AFH，AFR，AFS，AIS， APA，ASB，ASM，CCS，COM，CSH，CSS，，ECN， FAS，GCU，GPH，GLB，HST，HIS，JUS，MIS，PGS， PHI，PSY，REL，SGS，，SOC，TCL，WSH，WST |
| TERM FOUR： $46 \mathbf{6 0}$ CREDIT HOURS |  |  |  |  |  |
| POS 301：Empirical Political Inquiry（SB） | 3 | 区 |  | Grade of C | －Complete all critical courses by the end of semester |
| POS elective （recommend POS 230：Current Issues National Politics［L or SB］or POS 260：Current Issues in International Politics［G and L or SB］） | 3 | $\square$ |  | Grade of C | 4 <br> －Complete Math course requirement by end of semester 4 |
| POS Related Field | 3 | $\square$ |  | Grade of C | －Choose related field course from courses with following prefixes：AES，AFH，AFR，AFS，AIS， |
| Humanities，Fine Arts \＆Design（HU） | 3 | $\square$ |  |  | APA，ASB，ASM，CCS，COM，CSH，CSS，，ECN， |
| Second Language OR <br> If language requirement completed，take Elective | 3 | $\square$ |  |  | FAS，GCU，GPH，GLB，HST，HIS，JUS，MIS，PGS， PHI，PSY，REL，SGS，，SOC，TCL，WSH，WST |
| TERM FIVE： 6175 CREDIT HOURS |  |  |  |  |  |
| Upper division POS elective | 3 | 区 |  | Grade of C | Second language requirement must be completed |
| Upper division Related Field course | 3 | 囚 |  | Grade of C | with a＂C＂minimum <br> －Choose related field course from courses with |
| Upper division Related Field course | 3 | 区 |  | Grade of C | following prefixes：AES，AFH，AFR，AFS，AIS， |
| Literacy \＆Critical Inquiry（L）OR If L completed take，General Elective | 3 | $\square$ |  |  | APA，ASB，ASM，CCS，COM，CSH，CSS，，ECN， FAS，GCU，GPH，GLB，HST，HIS，JUS，MIS，PGS， |
| Natural Science Quantitative（SQ）or General（SG） | 4 | $\square$ |  |  | PHI，PSY，REL，SGS，，SOC，TCL，WSH，WST |
| TERM SIX： $76 \mathbf{9 0}$ CREDIT HOURS |  |  |  |  |  |
| Upper division POS Elective（recommend POS 435：Women \＆ Politics［SB，C］or POS 439：Minority Group Politics in America［SB， C］） | 3 | 区 |  | Grade of C | －Choose related field course from courses with following prefixes：AES，AFH，AFR，AFS，AIS， APA，ASB，ASM，CCS，COM，CSH，CSS，，ECN， |
| POS 484：Internship OR <br> Upper division POS elective | 3 | ® |  | Grade of C | FAS，GCU，GPH，GLB，HST，HIS，JUS，MIS，PGS， PHI，PSY，REL，SGS，，SOC，TCL，WSH，WST |
| Upper division Related Field course | 3 | ® |  | Grade of C |  |
| Upper division General Elective | 3 | 区 |  |  |  |
| General Elective | 3 | $\square$ |  |  |  |


| Course Subject and Title （courses in bold／shading are critical） | Hrs． | $\begin{aligned} & \hline \text { Upper } \\ & \text { Division } \end{aligned}$ | Transfer Course／Grade | $\begin{aligned} & \text { Minimum Grade if } \\ & \text { Required } \end{aligned}$ | Additional Critical Requirement Notes |
| :---: | :---: | :---: | :---: | :---: | :---: |
| TERM SEVEN： 91105 CREDIT HOURS |  |  |  |  |  |
| Upper division POS Elective（POS 498 ［L］recommended） | 3 | 囚 |  | Grade of C |  |
| POS 484：Internship OR Upper division POS elective | 3 | 区 |  | Grade of C |  |
| Cultural Diversity in the US（C）OR If C requirement completed，take Elective | 3 | $\square$ |  |  |  |
| Upper division General Elective | 3 | 区 |  |  |  |
| Upper division General Elective | 3 | 区 |  |  |  |
| TERM EIGHT： $106 \mathbf{1 2 0}$ CREDIT HOURS |  |  |  |  |  |
| Upper division Literacy and Critical Inquiry（L）OR If Upper division $L$ requirement completed，take upper division General Elective | 3 | 区 |  |  |  |
| Upper division General Elective | 3 | 囚 |  |  |  |
| Upper division General Elective | 3 | 区 |  |  |  |
| General Elective | 4 | $\square$ |  |  |  |

## 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：

－There is room in the roadmap for a concurrent degree，minor or certificate

| $\begin{aligned} & \begin{array}{l} \text { Course Subject and Title } \\ \text { (courses in bold/shading are critical) } \end{array} \end{aligned}$ | Hrs． | Upper Division | Transfer Course／Grade | Minimum Grade if Required | Additional Critical Requirement Notes |
| :---: | :---: | :---: | :---: | :---: | :---: |
| TERM SEVEN： 91105 CREDIT HOURS |  |  |  |  |  |
| Upper division POS Elective（498［L］recommended） | 3 | 区 |  | Grade of C |  |
| Cultural Diversity in the US（C）OR If C requirement completed，take Elective | 3 | $\square$ |  |  |  |
| Upper division General Elective | 3 | 区 |  |  |  |
| Upper division General Elective | 3 | 区 |  |  |  |
| General Elective | 3 | $\square$ |  |  |  |
| TERM EIGHT： $106 \mathbf{1 2 0}$ CREDIT HOURS |  |  |  |  |  |
| Upper division POS Elective： | 3 | 区 |  | Grade of C |  |
| Upper division Literacy and Critical Inquiry（L）OR If Upper division $L$ requirement completed，take upper division General Elective | 3 | 区 |  |  |  |
| Upper division General Elective | 3 | 区 |  |  |  |
| General Elective | 3 | $\square$ |  |  |  |
| General Elective | 3 | $\square$ |  |  |  |

## 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：
－There is room in the roadmap for a concurrent degree，minor or certificate

Major Map：Psychology－Bachelor of Arts（B．A．）
College of Liberal Arts and Sciences，Tempe Campus
Catalog Year：2008－2009

|  |  | Upper <br> Division | Completed ATP：$\square$ Yes $\square$ No |  | Additional Critical Requirement Notes |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Course Subject and Title （courses in bold／shading are critical） | Hrs． |  | Transfer Course／Grade | $\begin{aligned} & \text { Minimum Grade if } \\ & \text { Required } \end{aligned}$ |  |
| TERM ONE： 015 CREDIT HOURS |  |  |  |  |  |
| ENG 101 and 102：First－Year Composition OR ENG 107 and 108：English for Foreign Students OR ENG 105：Advanced First－Year Composition | 3 | $\square$ |  | Grade of 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> －Consult academic advisor for Learning Community，Academic Success Clusters，and First Year Seminar options <br> －Complete First Year Composition requirement by end of semester 3 |
| PGS 101：Introduction to Psychology（SB） | 3 | $\square$ |  | Grade of C |  |
| Course with MAT prefix based on Math Placement Exam score | 3 | $\square$ |  | Grade of C |  |
| Second Language | 4 | $\square$ |  |  |  |
| General elective | 3 | $\square$ |  |  |  |
| TERM TWO： 1630 CREDIT HOURS |  |  |  |  |  |
| ENG 101 and 102：First－Year Composition OR ENG 107 and 108：English for Foreign Students OR ENG 105：Advanced First－Year Composition | 3 | $\square$ |  | Grade of C | －Complete First Year Composition by end of semester 3 <br> －See note 1 below in additional notes for Foundations of Behavior courses |
| MAT 119：Finite Math（MA） | 3 | $\square$ |  | Grade of C |  |
| Second Language | 4 | $\square$ |  | Grade of C |  |
| Complete one course from ： <br> －Humanities，Fine Arts \＆Design（HU） <br> －Cultural Diversity in the U．S．（C），Global Awareness（G）OR Historical Awareness（H） <br> －Foundations of Behavior course | 3 | $\square$ |  | Grade of C in Foundations of Behavior course |  |
| General elective | 3 | $\square$ |  |  |  |
| TERM THREE： 3145 CREDIT HOURS |  |  |  |  |  |
| PSY 230：Introduction to Statistics（CS） | 3 | $\square$ |  | Grade of C | －First Year Composition completed by end of semester 3 |
| First Year Composition or if completed，PGS Elective | 3 | $\square$ |  | Grade of C |  |
| Second Language or，if completed General Elective | 4 | $\square$ |  | Grade of C in Second Language |  |
| Natural Science－Quantitative（SQ） | 4 | $\square$ |  |  |  |
| TERM FOUR： 4660 CREDIT HOURS |  |  |  |  |  |
| PSY 290：Research Methods（L） | 4 | $\square$ |  | Grade of C | －See note 1 below in additional notes for Foundations of Behavior courses |
| Complete one course from ： <br> －Humanities，Fine Arts \＆Design（HU） <br> －Cultural Diversity in the U．S．（C），Global Awareness（G）OR Historical Awareness（H） <br> －Psychology Foundations of Behavior course | 3 | $\square$ |  | Grade of C in Foundations of Behavior course |  |
| Second Language or，if completed，General Elective | 4 | $\square$ |  | Grade of C in Second Language |  |
| General elective | 3 | $\square$ |  |  |  |
| TERM FIVE： 6175 CREDIT HOURS |  |  |  |  |  |
| Complete one course from ： <br> －Humanities，Fine Arts \＆Design（HU） <br> －Cultural Diversity in the U．S．（C），Global Awareness（G）OR Historical Awareness（H） <br> －Foundations of Behavior course | 3 | $\square$ |  | Grade of C in Foundations of Behavior course | －Second language requirement completed <br> －See note 1 below in additional notes for Foundations of Behavior courses <br> －See note 2 below for Breadth within Psychology courses <br> －See note 3 for upper division PGS or PSY courses |
| Upper division Breadth within Psychology course | 3 | 区 |  | Grade of C |  |
| Upper division Breadth within Psychology course | 3 | 区 |  | Grade of C |  |
| PGS or PSY elective（not from：PGS 194，PGS 270，PGS 484，or PSY 484） | 3 | $\square$ |  | Grade of C |  |
| Natural Science General（SG）or Quantitative（SQ） | 4 | $\square$ |  |  |  |
| TERM SIX： $76 \mathbf{9 0}$ CREDIT HOURS |  |  |  |  |  |
| Complete one course from ： <br> －Humanities，Fine Arts \＆Design（HU） <br> －Cultural Diversity in the U．S．（C），Global Awareness（G）OR Historical Awareness（H） <br> －Psychology Foundations of Behavior course Or if HU，awareness areas and foundations of behavior requirements completed，take elective | 3 | $\square$ |  | Grade of C in Foundations of Behavior course | －See note 1 below in additional notes for Foundations of Behavior courses <br> －See note 2 below for Breadth within Psychology courses ns of Behavior courses <br> －See note 2 below for Breadth within Psychology courses <br> －See note 3 for upper division PGS or PSY courses |
| Upper division Breadth within Psychology course | 3 | 区 |  | Grade of C |  |
| Upper division Breadth within Psychology course | 3 | 区 |  | Grade of C |  |
| Upper division Depth within Psychology course | 3 | 区 |  | Grade of C |  |
| Upper division course with PGS or PSY prefix | 3 | 区 |  |  |  |

Major Map：Psychology－Bachelor of Arts（B．A．）
College of Liberal Arts and Sciences，Tempe Campus
Catalog Year：2008－2009

| Course Subject and Title （courses in bold／shading are critical） | Hrs． | $\begin{aligned} & \hline \text { Upper } \\ & \text { Division } \end{aligned}$ | Transfer Course／Grade | Minimum Grade if Required | Additional Critical Requirement Notes |
| :---: | :---: | :---: | :---: | :---: | :---: |
| TERM SEVEN： 91105 CREDIT HOURS |  |  |  |  |  |
| Complete one course from ： <br> －Humanities，Fine Arts \＆Design（HU） <br> －Cultural Diversity in the U．S．（C），Global Awareness（G）OR Historical Awareness（H） <br> －Psychology Foundations of Behavior course Or if HU，awareness areas and Foundations of Behavior requirements completed，take elective | 3 | $\square$ |  | Grade of C in Foundations of Behavior course | －See note 1 below in additional notes for Foundations of Behavior courses <br> －See note 4 below in additional notes for Depth within Psychology courses <br> －Contact advisor when registered for 2nd Depth within Psychology course to request a Breadth／Depth Congruency Check （psych．advisor＠asu．edu） <br> －Contact advisor for suggested PSY PGS courses to fulfill Upper Division Literacy and Critical Inquiry requirement（psych．advisor＠asu．edu） PGS 484，or PSY 484） |
| Upper division Depth within Psychology course（400 level） | 3 | 区 |  | Grade of C |  |
| Upper Division PGS／PSY elective（not from：PGS 484，or PSY 484） | 3 | 区 |  | Grade of C |  |
| Upper division Literacy \＆Critical Inquiry（L） | 3 | 区 |  |  |  |
| Upper division general elective | 3 | 区 |  |  |  |
| TERM EIGHT： 106120 CREDIT HOURS |  |  |  |  |  |
| Upper Division PGS／PSY elective（not from：PGS 484，or PSY 484） or if requirement completed，take General elective | 3 | ® |  | Grade of C in PGS／PSY course |  |
| Upper division General Elective | 3 | 区 |  |  |  |
| Upper division General Elective | 3 | 区 |  |  |  |
| Upper division General Elective | 3 | 区 |  |  |  |
| Upper division General Elective | 3 | 区 |  |  |  |

## Graduation Requirements Summary：

| Total Hours（120 <br> minimum） | Total Hrs at ASU（30 <br> hours minimum） | Hrs Resident Credit required <br> for Academic Recognition <br> （56） | Major GPA（2．000 <br> Minimum） | 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：

1．Foundations of Behavior（9 hours required）related courses from any of the following prefixes：ASB，ASM，BIO，GCU，HPS，PHI，or SOC．NOTE：Students must complete a minimum of 6 hours of HU courses，three awareness courses $(\mathrm{C}, \mathrm{G}$, and H$)$ and 9 hours of Foundations of Behavior courses；however，with careful selection，courses may be used to fulfill an HU，one or more Awareness Area（s），and／or Foundations of Behavior．
2．Breadth within Psychology（Take 1 course each from 4 of the following 5 clusters（ 4 courses）：
a．Biological：PSY 325，
b．Personality／Mental Health：PGS 315 or PGS 466，
c．Cognitive／Learning：PSY 320 or PSY 323 or PSY 324，
d．Developmental ：PGS 341，
e．Social：PGS 306 or PGS 350
3．Upper Division PGS／PSY：Cannot use PGS 484，PSY 484，or PGS 270 A max．of 6 hours of research may be used to satisfy the PGS／PSY Electives（e．g．PGS 399， PSY 399，PSY 492，PSY 493，PSY 499，PGS 499）
4．Depth within Psychology（Take 2 additional courses from one of the clusters from which you have already taken a class in Breadth within Psychology．At least 1 of these courses must be at the 400 level）：
a．Biological：PSY 424＊，PSY 425＊，PSY 426，PSY 470
b．Personality／Mental Health：PGS 315，PGS 365，PGS 443＊，PGS 444＊，PGS 462，PGS 464，PGS 465＊，PGS 466，PGS 468，PGS 471，PGS 472
c．Cognitive／Learning：PSY 320，PSY 323，PSY 324，PSY 420＊，PSY 434＊，PSY 437＊
d．Developmental：PGS 344，PGS 427＊，PGS 441＊，PGS 445，PGS 446＊
e．Social：PGS 306，PGS 350 or $351^{*}$ ，PGS 430，PGS 450，PGS 452＊，PGS 453，PGS 458，PGS 461
i．＊Satisfies upper division＂L＂requirement
5．Minimum of 37 hours of Psychology（PGS／PSY）coursework must be taken．

|  |  |  | Completed ATP：$\square$ Yes $\quad \square$ No |  | Completed AGEC：$\square$ Yes $\square$ No |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 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： 015 CREDIT HOURS |  |  |  |  |  |
| ENG 101 and 102：First－Year Composition OR ENG 107 and 108：English for Foreign Students OR ENG 105：Advanced First－Year Composition | 3 | $\square$ |  | Grade of 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> －Consult academic advisor for Learning Community，Academic Success Cluster and First Year Seminar options <br> －Complete all critical courses by end of semester 4 |
| Course with MAT prefix based on Math Placement Exam score | 3 | $\square$ |  | Grade of C |  |
| PGS 101：Introduction to Psychology（SB） | 3 | $\square$ |  | Grade of C |  |
| Complete one course from the following requirements： University General Studies Requirements（HU and／or C，G，H） and／or Foundations of Behavior | 3 | $\square$ |  | Foundations of Behavior－Grade of C |  |
| General Elective | 3 | $\square$ |  |  |  |
| TERM TWO： 1630 CREDIT HOURS |  |  |  |  |  |
| ENG 101 and 102：First－Year Composition OR ENG 107 and 108：English for Foreign Students OR ENG 105：Advanced First－Year Composition | 3 | $\square$ |  | Grade of C | －If ENG 102 or ENG 105 or ENG 108 is completed， PGS Elective（applicable to major） Contact advisor for course suggestions <br> －See Additional Notes below for appropriate Foundations of Behavior courses <br> －Complete all critical courses by end of semester 4 |
| MAT 251：Calculus for Life Sciences or MAT 270：Calculus with Analytic Geometry I | 3－4 | $\square$ |  | Grade of C |  |
| Complete an additional course from the following requirements： University General Studies Requirements（HU and／or C，G，H） and／or Foundations of Behavior | 3 | $\square$ |  | Foundations of Behavior－Grade of C |  |
| Natural Science Quantitative（SQ） | 4 | $\square$ |  | Foundations of Behavior－Grade of C |  |
| TERM THREE： 3145 CREDIT HOURS |  |  |  |  |  |
| PSY 230：Introduction to Statistics（CS） | 3 | $\square$ |  | Grade of C | －Complete all critical courses by end of semester 4 |
| ENG 102 or 108 or，if completed，PGS／PSY Elective | 3 | $\square$ |  | Grade of C |  |
| Complete an additional course from the following requirements： University General Studies Requirements（HU and／or C，G，H） and／or Foundations of Behavior | 3 | $\square$ |  | Foundations of <br> Behavior－Grade of C |  |
| Natural Science Quantitative（SQ）or General（SG） | 4 | $\square$ |  |  |  |
| General Elective | 3 | $\square$ |  |  |  |
| TERM FOUR： $46 \mathbf{6 0}$ CREDIT HOURS |  |  |  |  |  |
| PSY 290：Research Methods（L） | 4 | $\square$ |  | Grade of C | －Complete all critical courses by end of semester 4 |
| CLAS Science and Society | 3 | $\square$ |  | Grade of C |  |
| Complete an additional course from the following requirements： University General Studies Requirements（HU and／or C，G，H） and／or Foundations of Behavior | 3 | $\square$ |  | Foundations of Behavior－Grade of C |  |
| Complete an additional course from the following requirements： University General Studies Requirements（HU and／or C，G，H） and／or Foundations of Behavior | 3 | $\square$ |  | Foundations of Behavior－Grade of C |  |
| General Elective | 3 | $\square$ |  |  |  |
| TERM FIVE： 6175 CREDIT HOURS |  |  |  |  |  |
| Breadth within Psychology | 3 | 区 |  | Grade of C | －See Additional Notes below for appropriate Breadth courses |
| Breadth within Psychology | 3 | 区 |  | Grade of C |  |
| PGS／PSY 399／499：Supervised Research | 3 | 区 |  | Grade of C |  |
| CLAS Science and Society－Upper Division | 3 | 囚 |  | Grade of C |  |
| Complete an additional course from the following requirements： University General Studies Requirements（HU and／or C，G，H） and／or Foundations of Behavior If requirement is completed－Upper Division General Elective | 3 | 区 |  | Foundations of Behavior－Grade of C |  |
| TERM SIX： $76 \mathbf{9 0}$ CREDIT HOURS |  |  |  |  |  |
| Breadth within Psychology | 3 | 区 |  | Grade of C |  |
| Breadth within Psychology | 3 | 区 |  | Grade of C |  |
| PSY 330 Statistical Methods | 3 | 区 |  | Grade of C |  |
| Depth within Psychology | 3 | 区 |  | Grade of C |  |
| PGS／PSY Elective or if completed，Upper Division Elective | 3 | 区 |  | Grade of C |  |
| TERM SEVEN： 91105 CREDIT HOURS |  |  |  |  |  |
| Depth within Psychology－ 400 level | 3 | 囚 |  | Grade of C | －See Additional Notes below for appropriate Depth courses |
| Upper division Literacy and Critical Inquiry（L）or，if completed， Upper Division General Elective | 3 | 区 |  |  |  |
| Complete an additional course from the following requirements： University General Studies Requirements（HU and／or C，G，H） and／or Foundations of Behavior or，if completed，Upper Division General Elective | 3 | 囚 |  | Foundations of Behavior－Grade of C |  |
| General Elective | 3 | $\square$ |  |  |  |
| General Elective | 3 | $\square$ |  |  |  |


| $\begin{aligned} & \begin{array}{l} \text { Course Subject and Title } \\ \text { (courses in bold/shading are critical) } \end{array} \end{aligned}$ | Hrs. | Upper Division | Transfer Course/Grade | $\begin{aligned} & \text { Minimum Grade if } \\ & \text { Required } \end{aligned}$ | Additional Critical Tracking Notes |
| :---: | :---: | :---: | :---: | :---: | :---: |
| TERM EIGHT: 106120 CREDIT HOURS |  |  |  |  |  |
| Upper division General Elective | 3 | 区 |  |  |  |
| Upper division General Elective | 3 | 区 |  |  |  |
| General Elective | 3 | $\square$ |  |  |  |
| General Elective | 3 | $\square$ |  |  |  |
| General Elective | 3 | $\square$ |  |  |  |

## Graduation Requirements Summary:

| Total Hours (120 <br> minimum) | Total Hrs at ASU (30 <br> hours minimum) | Hrs Resident Credit required <br> for Academic Recognition <br> $(56)$ | Major GPA (2.000 <br> Minimum) | Total UD Hrs (45 <br> minimum) | Total Comm. College <br> Hrs. (64 maximum) |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |

## General University Requirements: Legend

- First Year Composition (ENG 101 \& 102 or ENG 107 \& ENG 108 or ENG 105)
- General Studies Core Requirements:
- Literacy and Critical Inquiry (L) (6 credit hours, at least 3 hours must be upper division) - PSY 290 and 1 upper Division (L) Mathematical Studies (MA) (3-4 credit hours) MAT 251 or MAT 270 Computer/Statistics/Quantitative applications (CS) ( 3 credit hours)- PSY 230
- Humanities, Fine Arts, and Design (HU) (6-9 credit hours. Combined HU/SB credits must equal 15 credit hours with at least 3 of these as upper division)
- Social and Behavioral Sciences (SB) (6-9 credit hours. Combined HU/SB credits must equal 15 credit hours with at least 3 of these as upper division) This requirement is generally met with PGS courses
- Natural Science - Quantitative (SQ) (4-8 credit hours. Combined SQ/SG credit must equal 8 credit hours)
- Natural Science - General (SG) (0-4 credit hours. Combined SQ/SG credit must equal 8 credit hours) . This requirement may not be fulfilled by PSY 290
- General Studies Awareness Requirements (These requirements may be met in conjunction with other degree requirements)
- Cultural Diversity in the US (C) (3 credit hours)
- Global Awareness (G) (3 credit hours)

Historical Awareness (H) (3 credit hours)

## Additional Notes:

- Foundations of Behavior (9 hours required) related courses from any of the following prefixes: ASB, ASM, BIO, GCU, HPS, PHI, or SOC.

NOTE: One course may fulfill an HU, one or more Awareness Area(s), and/or Foundations of Behavior

- Breadth within Psychology (Take 1 course each from 4 of the following 5 clusters ( 4 courses):
- Biological: PSY 325,
- Personality/Mental Health: PGS 315 or PGS 466, Cognitive/Learning: PSY 320 or PSY 323 or PSY 324,
- Developmental : PGS 341,
- Social: PGS 306 or PGS 350
- Depth within Psychology (Take 2 additional courses from one of the clusters from which you have already taken a class in Breadth within Psychology. At least 1 of these courses must be at the 400 level):
- Biological: PSY 424*, PSY 425*, PSY 426, PSY 470
- Personality/Mental Health: PGS 315, PGS 365, PGS 443*, PGS 444*, PGS 462, PGS 464, PGS 465*, PGS 466, PGS 468, PGS 471, PGS 472
- Cognitive/Learning: PSY 320, PSY 323, PSY 324, PSY 420*, PSY 434*, PSY 437*
- Developmental: PGS 344, PGS 427*, PGS 441*, PGS 445, PGS 446*
- Social: PGS 306, PGS 350 or $351^{*}$, PGS 430, PGS 450, PGS 452*, PGS 453, PGS 458, PGS 461
- Upper Division Psychology Residency Requirement: 12 credit hours of PGS/PSY courses must be completed at the Tempe or Polytechnic campuses.
- Upper Division PGS/PSY: Cannot use PGS 484, PSY 484, or PGS 270 A max. of 6 hours of research may be used to satisfy the PGS/PSY Electives (e.g. PGS 399, PSY 399, PSY 492, PSY 493, PSY 499, PGS 499)There is room in this map to add a concurrent degree, minor, or certificate
- Minimum of 37 hours of Psychology (PGS/PSY) coursework must be taken.

Major Map : Religious Studies - Bachelor of Arts (B.A.)
College of Liberal Arts and Sciences, Tempe Campus
Catalog Year: 2008-2009


Graduation Requirements Summary:

| Total Hours <br> $(120$ minimum $)$ | Total Hrs at ASU <br> $(30$ minimum $)$ | Hrs Resident Credit for Academic <br> Recognition ( 56 minimum) | Major GPA <br> $(2.00$ Min. $)$ | Total UD Hrs <br> $(45$ 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 (120 <br> minimum) | Total Hrs at ASU (30 <br> minimum) | Hrs Resident Credit for Academic <br> Recognition ( 56 minimum) | Major GPA <br> $(2.00 \mathrm{Min})$. | Total UD Hrs <br> $(45$ 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:

|  |  |  | Completed ATP：$\square$ Yes $\square$ No |  | Completed AGEC：$\square$ Yes $\square$ No |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Course Subject and Title （courses in bold／shading are critical，concentration courses are underlined） | Hrs． | Upper Division | Transfer Course／Grade | Minimum Grade if Required | Additional Critical Requirement Notes |
| TERM ONE： 015 CREDIT HOURS |  |  |  |  |  |
| WAC 101：Introduction to Academic Writing or 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 | －ASU 101 is for native ASU students only．Not required of transfer students． <br> －An SAT，ACT，Accuplacer，or TOEFL score determines placement into first－year composition |
| SOC 101：Introductory Sociology（SB） | 3 | $\square$ |  | Grade of C | courses |
| Elective（Math prerequisite if needed） | 3 | $\square$ |  |  | ASU Math Placement Exam score determines |
| Second Language | 4 | $\square$ |  |  | Consult academic advisor for Learning |
| Elective（LIA 294 recommended） | 1 | $\square$ |  |  | Community，Academic Success Clusters，and First Year Seminar Options． |
| TERM TWO： 1630 CREDIT HOURS |  |  |  |  |  |
| WAC 101：Introduction to Academic Writing or 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 |  |
| Related Field course with Social \＆Behavioral Science designation（SB） | 3 | $\square$ |  | Grade of C |  |
| Humanities，Fine Arts \＆Design（HU）and Cultural Diversity in the US （C），Global Awareness（G）or Historical Awareness（H） | 3 | $\square$ |  |  |  |
| Second Language | 4 | $\square$ |  |  |  |
| Natural Science Quantitative（SQ） | 4 | $\square$ |  |  |  |
| TERM THREE： 3145 CREDIT HOURS |  |  |  |  |  |
| SOC Sociology Elective | 3 | $\square$ |  | Grade of C | －First year composition requirement must be completed |
| MAT 142：College Mathematics／or higher（MA） | 3 | $\square$ |  |  |  |
| Humanities，Fine Arts \＆Design（HU）and Cultural Diversity in the US （C），Global Awareness（G）or Historical Awareness（H） | 3 | $\square$ |  |  |  |
| Natural Science Quantitative（SQ）or General（SG） | 4 | $\square$ |  |  |  |
| TERM FOUR： 4660 CREDIT HOURS |  |  |  |  |  |
| SOC Sociology Elective | 3 | $\square$ |  | Grade of C | －MA（MAT 142 or above）must be completed by the end of the third semester． |
| SOC 390：Social Statistics I（CS） | 3 | 区 |  | Grade of C |  |
| Related Field course with Social \＆Behavioral Science designation（SB） | 3 | $\square$ |  | Grade of C |  |
| Second Language（ $4^{\text {th }}$ semester CLAS Proficiency）OR if language proficiency completed，Elective | 4 | $\square$ |  | Grade of C in language proficiency |  |
| Literacy \＆Critical Inquiry（L） | 3 | $\square$ |  |  |  |
| TERM FIVE： 6175 CREDIT HOURS |  |  |  |  |  |
| Related Field course with Social \＆Behavioral Science designation（SB） | 3 | $\square$ |  | Grade of C |  |
| Related Field course with Social \＆Behavioral Science designation（SB） | 3 | 区 |  | Grade of C |  |
| SOC Sociology Elective | 3 | 区 |  | Grade of C |  |
| Second Language（G if modern language）OR Elective if language proficiency completed | 4 | $\square$ |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| TERM SIX： 7690 CREDIT HOURS |  |  |  |  |  |
| SOC 391：Research Methods | 3 | 区 |  | Grade of C |  |
| Upper division SOC Sociology Elective | 3 | 区 |  | Grade of C |  |
| LIA 394：Careers for CLAS | 3 | 区 |  |  |  |
| Upper division elective | 3 | 区 |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| TERM SEVEN： 91105 CREDIT HOURS |  |  |  |  |  |
| SOC 483：History of Social Thought OR SOC 486：Contemporary Theory | 3 | 区 |  | Grade of C |  |
| Upper division SOC Sociology Elective | 3 | 区 |  | Grade of C |  |
| Upper division Literacy \＆Critical Inquiry（L） | 3 | 区 |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| Elective | 2 | $\square$ |  |  |  |
| TERM EIGHT： 106120 CREDIT HOURS |  |  |  |  |  |
| SOC Sociology Elective | 3 | 区 |  | Grade of C |  |
| Related Field course with Social \＆Behavioral Science designation（SB） | 3 | 区 |  | Grade of C |  |
| Upper division elective | 3 | 区 |  |  |  |
| Upper division elective | 3 | 区 |  |  |  |
| Upper division elective | 3 | 区 |  |  |  |

Major Map : Sociology - Bachelor of Arts (B.A.)
College of Liberal Arts and Sciences, Tempe Campus
Catalog Year: 2008-2009

## 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:

Major Map: Spanish - Bachelor of Arts (B.A.)
College of Liberal Arts and Sciences, Tempe Campus
Catalog Year: 2008-2009


| $\begin{aligned} & \begin{array}{l} \text { Course Subject and Title } \\ \text { (courses in bold/shading are critical) } \end{array} \end{aligned}$ | Hrs． | Upper Division | Transfer Course／Grade | Minimum Grade if Required | Additional Critical Tracking Notes |
| :---: | :---: | :---: | :---: | :---: | :---: |
| TERM EIGHT： 106120 CREDIT HOURS |  |  |  |  |  |
| SLC 498：Pro－Seminar | 3 | 囚 |  | Grade of C | －Minimum grade of＂C＂in all SPA，SLC and Spanish Related Fields courses． <br> －Enroll in＂IPO＂Study Abroad Program credits or listed courses <br> －See additional notes below for track courses |
| SPA Track Course（list on page 2 and in DARS） | 3 | 区 |  | Grade of C |  |
| SPA Track Course（list on page 2 and in DARS） | 3 | 区 |  | Grade of C |  |
| SPA Track Course（list on page 2 and in DARS） | 3 | 区 |  | Grade of C |  |
| Humanities or Social Behavioral Sciences（if necessary）or Elective | 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：

## TRACK COURSES

Literature \＆Culture Track Courses：
SPA 400－level Literature \＆Culture Elective（complete two）
SPA 426：Spanish Literature，
SPA 427：Spanish American Literature，
SPA 428：Spanish American Literature or
SPA 464：Mexican American Literature（complete three）
SPA 429：Mexican Literature
SPA 485：Mexican－American Short Story
SPA 486：Mexican American Novel
SPA 487：Mexican0American Drama
One additional course from：
SPA 471：Civilization of the Spanish Southwest，
SPA 472：Spanish American Civilization or
SPA 473：Spanish Civilization
SPA 474：Mexican Culture
SPA 400－level elective or POR 4＊＊（complete two）

## Linguistic Track Courses：

SPA 400：Introduction to Spanish Linguistics，
SPA 413：Advanced Spanish Grammar，
SPA 417：Spanish Phonetics and Phonology，SPA 420：Applied Spanish Linguistics，
SPA 425：Spanish Literature，
SPA 426：Spanish Literature，
SPA 427：Spanish American Literature，
SPA 428：Spanish American Literature or
SPA 464：Mexican American Literature（complete one）
SPA 494：Language Variation，
SPA 494：Spanish Syntax
Upper division SPA／FLA Linguistics／Translation Course（complete two）

Major Map: Speech and Hearing Science -<br>Bachelor of Science (B.S.)<br>College of Liberal Arts and Sciences, Tempe Campus<br>Catalog Year: 2008-2009



Major Map: Speech and Hearing Science -
Bachelor of Science (B.S.)
College of Liberal Arts and Sciences, Tempe Campus
Catalog Year: 2008-2009

## 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:

Major Map: Transborder Chicana/o \& Latina/o Studies (Media, Literature and Arts) -<br>Bachelor of Arts (B.A.)

College of Liberal Arts \& Sciences, Tempe Campus
Catalog Year: 2008-2009


## Graduation Requirements Summary:

| Total Hours <br> $(120$ minimum $)$ | Total Hrs at ASU <br> $(30$ minimum $)$ | Hrs Resident Credit for Academic <br> Recognition $(56$ minimum $)$ | Major GPA <br> $(2.00$ Min. $)$ | Total UD Hrs <br> $(45$ minimum $)$ | Total Comm. College <br> Hrs. ( 64 maximum $)$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |

## 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) |
| $\circ$ | 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:

- Courses that fulfill concentration requirements:


## Media, Literature and Arts

TCL 305 Transborder Practicum \& Field Research (required)
TCL 310 Transborder Chicano/a \& Latino/a Folklore of
Southwest North America
TCL 331 Mexican American History to 1900
TCL 350 Transborder Mexican \& Chicano/a Artistic Production
TCL 351 Transborder Chicano/a \& Latino/a Art
TCL 352 Chicana/o Film
TCL 363 Transborder Mexican \& Chicano/a Literature of Southwest North America
TCL 370 Signs of Aliens: Semiotics of Film \& Popular Culture TCL 464 Latina/o Literature
TCL 465 Chicana/o \& Latina/o History on Film
TCL 466 Constructing the Border on Film
TCL 470 Race, Sex, \& Identity Online
TCL 471 Latinos in Hollywood
TCL 485 Chicana \& Latina Writers
TCL 485 Chicana \& Latina Writers
TCL 488 Border Global Narratives

## Transborder Community Development \& Health

TCL 305 Transborder Practicum \& Field Research (required) TCL 321 Transborder Community Development \& Health
(required)
TCL 315 Chicana/o \& Latina/o Family Structures
TCL 323 Latino Health Issues
TCL 327 Health \& Migration
TCL 331 Mexican American History to 1900
TCL 410 Race, Medicine \& the Body
TCL 422 U.S.-Mexico Border Health
TCL 424Theory \& Practice of Community Development \& Health
TCL 484 Internship

- There is room in this roadmap to add a concurrent degree, a minor or a certificate.

US \& Mexican Regional Immigration Policy \& Economy

TCL 305 Transborder Practicum \& Field Research (required)
TCL 314 Transborder Regional Immigration and
Economy (required)
TCL 315 Chicana/o and Latina/o Family Structures
TCL 331 TCL 331 Mexican American History to 1900
TCL 335 Historical Studies in Race, Crime, \& the Law
TCL 340 Chicana/o \& Latina/o Politics \& Policy
TCL 341 Policy Issues in Chicana/o \& Latina/o Urban Settings
TCL 342 Social Demographics of Latino Populations
TCL 443 Political Ecology of the Border
TCL 444 The Ethnography of Mexican Border Rural Settings
TCL 484 Internship

Major Map：Transborder Chicana／o \＆Latina／o Studies （Transborder Community Development \＆Health）－ Bachelor of Arts（B．A．）
College of Liberal Arts \＆Sciences，Tempe Campus
Catalog Year：2008－2009

|  |  |  | Completed ATP：$\square$ Yes $\square$ No |  | Completed AGEC：$\square$ Yes $\square$ No |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Course Subject and Title （courses in bold／shading are critical） | Hrs． | Upper Division | Transfer Course／Grade | Minimum Grade if Required | Additional Critical Requirements Notes |
| TERM ONE： 015 CREDIT HOURS |  |  |  |  |  |
| ENG 101 and 102：First－Year Composition OR ENG 107 and 108：English for Foreign Students OR ENG 105：Advanced First－Year Composition | 3 | $\square$ |  | Grade of 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> －＊Must demonstrate proficiency in Spanish by either successfully completing SPA 313 \＆ 314 or SPA 315 \＆ 316 or a TCLS comprehensive written， reading and oral examination．Requirement must be completed by end of $4^{\text {th }}$ semester <br> － 2.0 minimum cumulative ASU GPA required <br> －Consult an academic advisor for Learning Community，Academic Success Clusters and First Year Seminar options |
| Second language（must be Spanish（SPA）course＊ | 4 | $\square$ |  | Grade of C SPA 202 |  |
| Humanities，Fine Arts，and Design（HU） | 3 | $\square$ |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| Elective | 1 | $\square$ |  |  |  |
| TERM TWO： 1630 CREDIT HOURS |  |  |  |  |  |
| ENG 101 and 102：First－Year Composition OR ENG 107 and 108：English for Foreign Students OR ENG 105：Advanced First－Year Composition | 3 | $\square$ |  | Grade of C | －First－year composition requirement must be completed by end of term 3 <br> － 2.0 minimum cumulative ASU GPA required |
| Second language（must be Spanish（SPA）course＊ | 4 | $\square$ |  | Grade of C SPA 202 |  |
| Humanities，Fine Arts，and Design（HU） | 3 | $\square$ |  |  |  |
| Social and Behavioral Sciences（SB） | 3 | $\square$ |  |  |  |
| Elective or course for a minor | 3 | $\square$ |  |  |  |
| TERM THREE： 3145 CREDIT HOURS |  |  |  |  |  |
| TCL 201：Transborder Society \＆Culture I：Interdisc Approaches | 3 | 区 |  | Grade of C | －First－Year Composition Completed <br> － 2.0 minimum cumulative ASU GPA required |
| Second language（must be Spanish（SPA）course＊if needed，or Elective | 4 | $\square$ |  | Grade of C SPA 202 |  |
| MAT 142：College Mathematics（MA） | 3 | $\square$ |  |  |  |
| Social \＆Behavioral Sciences（SB）AND，if not already completed， Global Awareness（G） | 3 | $\square$ |  |  |  |
| Natural Science－Quantitative（SQ） | 4 | $\square$ |  |  |  |
| TERM FOUR： $46 \mathbf{6 0}$ CREDIT HOURS |  |  |  |  |  |
| TCL 202：Transborder Society \＆Culture II：Contemporary Issues | 3 | $\square$ |  | Grade of C | －All critical courses must be completed by end of term 4 <br> － 2.0 minimum cumulative ASU GPA required <br> －Spanish language proficiency completed |
| Second language（must be Spanish（SPA）course＊if needed，or Elective | 4 | $\square$ |  | Grade of C SPA 202 |  |
| Computer／Statistics／Quantitative applications（CS） | 3 | $\square$ |  |  |  |
| Natural Science－Quantitative（SQ）or General（SG） | 4 | $\square$ |  |  |  |
| Literacy \＆Critical Inquiry（L） | 3 | $\square$ |  |  |  |
| TERM FIVE： 6175 CREDIT HOURS |  |  |  |  |  |
| TCL 303：Transborder Theory | 3 | 区 |  | Grade of C |  |
| TCL 332：Mexican American History Since 1900 （SB，H，C） | 3 | 区 |  | Grade of C |  |
| Concentration course | 3 | 区 |  | Grade of C |  |
| Upper division Literacy\＆Critical Inquiry（L） | 3 | 区 |  |  |  |
| Upper division SPA course if needed or Elective | 3 | 区 |  |  |  |
| TERM SIX： 7690 CREDIT HOURS |  |  |  |  |  |
| TCL 304：Transborder Research Methods | 3 | 区 |  | Grade of C |  |
| Concentration course | 3 | 区 |  | Grade of C |  |
| Concentration course | 3 | 区 |  | Grade of C |  |
| Concentration course | 3 | 区 |  | Grade of C |  |
| Upper division TCL or related field course | 3 | 区 |  | Grade of C |  |
| TERM SEVEN： 91105 CREDIT HOURS |  |  |  |  |  |
| TCL 305：Transborder Practicum \＆Field Research | 3 | 区 |  | Grade of C |  |
| Upper division TCL or related field course | 3 | 区 |  | Grade of C |  |
| Upper division TCL or related field course | 3 | 区 |  | Grade of C |  |
| Concentration course | 3 | 区 |  | Grade of C |  |
| Upper division Elective or course for a minor | 3 | 区 |  |  |  |
| TERM EIGHT： $106 \mathbf{1 2 0}$ CREDIT HOURS |  |  |  |  |  |
| TCL 498：Pro Seminar Capstone | 3 | 区 |  | Grade of C |  |
| Concentration Course | 3 | 区 |  | Grade of C |  |
| Upper division Elective or course for a minor | 3 | 区 |  |  |  |
| Upper division Elective or course for a minor | 3 | 区 |  |  |  |

## Graduation Requirements Summary:

| Total Hours <br> $(120$ minimum $)$ | Total Hrs at ASU <br> $(30$ minimum $)$ | Hrs Resident Credit for Academic <br> Recognition $(56$ minimum $)$ | Major GPA <br> $(2.00$ Min. $)$ | Total UD Hrs <br> $(45$ minimum $)$ | Total Comm. College <br> Hrs. ( 64 maximum $)$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |

## 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) |
| $\circ$ | 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:

- Courses that fulfill concentration requirements:


## Media, Literature and Arts

TCL 305 Transborder Practicum \& Field Research (required) TCL 310 Transborder Chicano/a \& Latino/a Folklore of
Southwest North America
TCL 331 Mexican American History to 1900
TCL 350 Transborder Mexican \& Chicano/a Artistic Production
TCL 351 Transborder Chicano/a \& Latino/a Art
TCL 352 Chicana/o Film
TCL 363 Transborder Mexican \& Chicano/a Literature of Southwest North America
TCL 370 Signs of Aliens: Semiotics of Film \& Popular Culture TCL 464 Latina/o Literature
TCL 465 Chicana/o \& Latina/o History on Film
TCL 466 Constructing the Border on Film
TCL 470 Race, Sex, \& Identity Online
TCL 471 Latinos in Hollywood
TCL 485 Chicana \& Latina Writers
TCL 485 Chicana \& Latina Writers
TCL 488 Border Global Narratives

## Transborder Community Development \& Health

TCL 305 Transborder Practicum \& Field Research (required) TCL 321 Transborder Community Development \& Health
(required)
TCL 315 Chicana/o \& Latina/o Family Structures
TCL 323 Latino Health Issues
TCL 327 Health \& Migration
TCL 331 Mexican American History to 1900
TCL 410 Race, Medicine \& the Body
TCL 422 U.S.-Mexico Border Health
TCL 424Theory \& Practice of Community Development \& Health
TCL 484 Internship

- There is room in this roadmap to add a concurrent degree, a minor or a certificate.

US \& Mexican Regional Immigration Policy \& Economy

TCL 305 Transborder Practicum \& Field Research (required)
TCL 314 Transborder Regional Immigration and
Economy (required)
TCL 315 Chicana/o and Latina/o Family Structures
TCL 331 TCL 331 Mexican American History to 1900
TCL 335 Historical Studies in Race, Crime, \& the Law
TCL 340 Chicana/o \& Latina/o Politics \& Policy
TCL 341 Policy Issues in Chicana/o \& Latina/o Urban Settings
TCL 342 Social Demographics of Latino Populations
TCL 443 Political Ecology of the Border
TCL 444 The Ethnography of Mexican Border Rural Settings
TCL 484 Internship

Major Map：Transborder Chicana／o \＆Latina／o Studies （U．S．\＆Mexican Regional Immigration Policy \＆Economy） －Bachelor of Arts（B．A．）
College of Liberal Arts \＆Sciences，Tempe Campus
Catalog Year：2008－2009

|  |  |  | Completed ATP：$\square$ Yes $\square$ No |  | Completed AGEC：$\square$ Yes $\square$ No |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Course Subject and Title （courses in bold／shading are critical） | Hrs． | Upper Division | Transfer Course／Grade | Minimum Grade if Required | Additional Critical Requirements Notes |
| TERM ONE： 015 CREDIT HOURS |  |  |  |  |  |
| ENG 101 and 102：First－Year Composition OR ENG 107 and 108：English for Foreign Students OR ENG 105：Advanced First－Year Composition | 3 | $\square$ |  | Grade of 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> －＊Must demonstrate proficiency in Spanish by either successfully completing SPA $313 \& 314$ or SPA 315 \＆ 316 or a TCLS comprehensive written， reading and oral examination．Requirement must be completed by end of $4^{\text {th }}$ semester <br> － 2.0 minimum cumulative ASU GPA required <br> －Consult an academic advisor for Learning Community，Academic Success Clusters and First Year Seminar options |
| Second language（must be Spanish（SPA）course＊ | 4 | $\square$ |  | Grade of C SPA 202 |  |
| Humanities，Fine Arts，and Design（HU） | 3 | $\square$ |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| Elective | 1 | $\square$ |  |  |  |
| TERM TWO： 16 30 CREDIT HOURS |  |  |  |  |  |
| ENG 101 and 102：First－Year Composition OR ENG 107 and 108：English for Foreign Students OR ENG 105：Advanced First－Year Composition | 3 | $\square$ |  | Grade of C | －First－year composition requirement must be completed by end of term 3 <br> － 2.0 minimum cumulative ASU GPA required |
| Second language（must be Spanish（SPA）course＊ | 4 | $\square$ |  | Grade of C SPA 202 |  |
| Humanities，Fine Arts，and Design（HU） | 3 | $\square$ |  |  |  |
| Social and Behavioral Sciences（SB） | 3 | $\square$ |  |  |  |
| Elective or course for a minor | 3 | $\square$ |  |  |  |
| TERM THREE： 3145 CREDIT HOURS |  |  |  |  |  |
| TCL 201：Transborder Society \＆Culture I：Interdisc Approaches | 3 | 区 |  | Grade of C | －First－Year Composition Completed <br> － 2.0 minimum cumulative ASU GPA required |
| Second language（must be Spanish（SPA）course＊if needed，or Elective | 4 | $\square$ |  | Grade of C SPA 202 |  |
| MAT 142：College Mathematics（MA） | 3 | $\square$ |  |  |  |
| Social \＆Behavioral Sciences（SB）AND，if not already completed， Global Awareness（G） | 3 | $\square$ |  |  |  |
| Natural Science－Quantitative（SQ） | 4 | $\square$ |  |  |  |
| TERM FOUR： 4660 CREDIT HOURS |  |  |  |  |  |
| TCL 202：Transborder Society \＆Culture II：Contemporary Issues | 3 | $\square$ |  | Grade of C | －All critical courses must be completed by end of term 4 <br> － 2.0 minimum cumulative ASU GPA required <br> －Spanish language proficiency completed |
| Second language（must be Spanish（SPA）course＊if needed，or Elective | 4 | $\square$ |  | Grade of C SPA 202 |  |
| Computer／Statistics／Quantitative applications（CS） | 3 | $\square$ |  |  |  |
| Natural Science－Quantitative（SQ）or General（SG） | 4 | $\square$ |  |  |  |
| Literacy \＆Critical Inquiry（L） | 3 | $\square$ |  |  |  |
| TERM FIVE： 6175 CREDIT HOURS |  |  |  |  |  |
| TCL 303：Transborder Theory | 3 | 区 |  | Grade of C |  |
| TCL 332：Mexican American History Since 1900 （SB，H，C） | 3 | 区 |  | Grade of C |  |
| Concentration course | 3 | 囚 |  | Grade of C |  |
| Upper division Literacy\＆Critical Inquiry（L） | 3 | 区 |  |  |  |
| Upper division SPA course if needed or Elective | 3 | 囚 |  |  |  |
| TERM SIX： $76 \mathbf{9 0}$ CREDIT HOURS |  |  |  |  |  |
| TCL 304：Transborder Research Methods | 3 | 区 |  | Grade of C |  |
| Concentration course | 3 | 区 |  | Grade of C |  |
| Concentration course | 3 | 区 |  | Grade of C |  |
| Concentration course | 3 | 区 |  | Grade of C |  |
| Upper division TCL or related field course | 3 | 区 |  | Grade of C |  |
| TERM SEVEN： 91105 CREDIT HOURS |  |  |  |  |  |
| TCL 305：Transborder Practicum \＆Field Research | 3 | 区 |  | Grade of C |  |
| Upper division TCL or related field course | 3 | 区 |  | Grade of C |  |
| Upper division TCL or related field course | 3 | 区 |  | Grade of C |  |
| Concentration course | 3 | 区 |  | Grade of C |  |
| Upper division Elective or course for a minor | 3 | 区 |  |  |  |
| TERM EIGHT： $106 \mathbf{1 2 0}$ CREDIT HOURS |  |  |  |  |  |
| TCL 498：Pro Seminar Capstone | 3 | 区 |  | Grade of C |  |
| Concentration Course | 3 | 区 |  | Grade of C |  |
| Upper division Elective or course for a minor | 3 | 区 |  |  |  |
| Upper division Elective or course for a minor | 3 | 区 |  |  |  |

## Graduation Requirements Summary:

| Total Hours <br> $(120$ minimum $)$ | Total Hrs at ASU <br> $(30$ minimum $)$ | Hrs Resident Credit for Academic <br> Recognition ( 56 minimum $)$ | Major GPA <br> $(2.00$ Min. $)$ | Total UD Hrs <br> $(45$ 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:

- Courses that fulfill concentration requirements:

Media, Literature and Arts

TCL 305 Transborder Practicum \& Field Research (required)
TCL 310 Transborder Chicano/a \& Latino/a Folklore of
Southwest North America
TCL 331 Mexican American History to 1900
TCL 350 Transborder Mexican \& Chicano/a Artistic Production
TCL 351 Transborder Chicano/a \& Latino/a Art
TCL 352 Chicana/o Film
TCL 363 Transborder Mexican \& Chicano/a Literature of
Southwest North America
TCL 370 Signs of Aliens: Semiotics of Film \& Popular Culture
TCL 464 Latina/o Literature
TCL 465 Chicana/o \& Latina History on Fil
TCL 465 Chicana/o \& Latina/o History on
TCL 466 Constructing the Border on Film
TCL 466 Constructing the Border on Film
TCL 470 Race, Sex, \& Identity Online
TCL 470 Race, Sex, \& Identity O
TCL 471 Latinos in Hollywood
TCL 485 Chicana \& Latina Writers
TCL 488 Border Global Narratives

## Transborder Community Development \& Health

TCL 305 Transborder Practicum \& Field Research (required)
TCL 321 Transborder Community Development \& Health
(required)
TCL 315 Chicana/o \& Latina/o Family Structures
TCL 323 Latino Health Issues
TCL 327 Health \& Migration
TCL 331 Mexican American History to 1900
TCL 410 Race, Medicine \& the Body
TCL 422 U.S.-Mexico Border Health
TCL 424Theory \& Practice of Community Development \&
Health
TCL 484 Internship

TCL 305 Transborder Practicum \& Field Research (required)
TCL 314 Transborder Regional Immigration and Economy (required)
TCL 315 Chicana/o and Latina/o Family Structures
TCL 331 TCL 331 Mexican American History to 1900
TCL 335 Historical Studies in Race, Crime, \& the Law
TCL 340 Chicana/o \& Latina/o Politics \& Policy
TCL 341 Policy Issues in Chicana/o \& Latina/o Urban Settings
TCL 342 Social Demographics of Latino Populations
TCL 443 Political Ecology of the Border
TCL 444 The Ethnography of Mexican Border Rural Settings
TCL 484 Internship

- There is room in this roadmap to add a concurrent degree, a minor or a certificate.


# Major Map : Women and Gender Studies - 

Bachelor of Arts (B.A.)
College of Liberal Arts and Sciences, Tempe Campus
Catalog Year: 2008-2009


## Graduation Requirements Summary:

| Total Hours <br> $(120$ minimum $)$ | Total Hrs at ASU <br> $(30$ minimum $)$ | Hrs Resident Credit for Academic <br> Recognition $(56$ minimum $)$ | Major GPA <br> $(2.00$ Min. $)$ | Total UD Hrs <br> $(45$ minimum $)$ | Total Comm. College <br> Hrs. ( 64 maximum) |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |

## 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) |
| $\circ$ | 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:

There is room in this roadmap to add a concurrent degree, a minor or a certificate.

Major Map：Agribusiness（Agribusiness Finance）－
Bachelor of Science（B．S．）
Morrison School of Management \＆Agribusiness，Polytechnic Campus
Catalog Year：2008－2009

|  |  |  | Completed ATP：$\square$ Yes $\square$ No |  | Completed AGEC：$\square$ Yes $\square$ No |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 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： 015 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> －Maintain academic good standing |
| 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 |  |
| Complete one course from： <br> －AGB 100：Introduction to Agribusiness <br> －MAT 210：Brief Calculus（MA） <br> －CIS 105：Computer Applications and Information Technology （CS） <br> －ECN 211：Macroeconomic Principles（SB）OR ECN 212： Microeconomic Principles（SB） | 3 | $\square$ |  |  |  |
| Humanities，Fine Arts \＆Design（HU）AND Cultural Diversity in the US（C），Global Awareness（G）or Historical Awareness（H） | 3 | $\square$ |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| TERM TWO： 1630 CREDIT HOURS |  |  |  |  |  |
| 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 | －Maintain academic good standing |
| Complete one additional course from： <br> －AGB 100：Introduction to Agribusiness <br> －MAT 210：Brief Calculus（MA） <br> －CIS 105：Computer Applications and Information Technology （CS） <br> －ECN 211：Macroeconomic Principles（SB）OR ECN 212： Microeconomic Principles（SB） | 3 | $\square$ |  |  |  |
| Humanities，Fine Arts \＆Design（HU）AND Cultural Diversity in the US（C），Global Awareness（G）or Historical Awareness（H） | 3 | $\square$ |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| TERM THREE： 3145 CREDIT HOURS |  |  |  |  |  |
| Complete one additional course from： <br> －AGB 100：Introduction to Agribusiness <br> －MAT 210：Brief Calculus（MA） <br> －CIS 105：Computer Applications and Information Technology （CS） <br> －ECN 211：Macroeconomic Principles（SB）OR ECN 212： Microeconomic Principles（SB） | 3 | $\square$ |  |  | －First year composition requirement completed <br> －Maintain academic good standing |
| ACC 231：Uses of Accounting Information I | 3 | $\square$ |  |  |  |
| BIO 100：The Living World（SQ） | 4 | $\square$ |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| TERM FOUR： 4660 CREDIT HOURS |  |  |  |  |  |
| Complete one additional course from： <br> －AGB 100：Introduction to Agribusiness <br> －MAT 210：Brief Calculus（MA） <br> －CIS 105：Computer Applications and Information Technology （CS） <br> －ECN 211：Macroeconomic Principles（SB）OR ECN 212： Microeconomic Principles（SB） | 3 | $\square$ |  |  | －All critical courses completed <br> －Maintain academic good standing |
| ACC 241：Uses of Accounting Information II | 3 | $\square$ |  |  |  |
| CHM 101：Introductory Chemistry（SQ） | 4 | $\square$ |  |  |  |
| AGB 365：Agribusiness Technologies II | 3 | 区 |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| TERM FIVE： 6175 CREDIT HOURS |  |  |  |  |  |
| AGB 360：Agribusiness Statistics（CS） | 3 | 区 |  |  |  |
| Complete remaining course from： <br> ECN 211：Macroeconomic Principles（SB）OR <br> ECN 212：Microeconomic Principles（SB） | 3 | $\square$ |  |  |  |
| ENG 301：Writing for Professions（L） | 3 | 囚 |  |  |  |
| MGT 300：Organizational \＆Management Leadership | 3 | 囚 |  |  |  |
| MKT 300：Marketing and Business Performance | 3 | 区 |  |  |  |


| Course Subject and Title （courses in bold／shading are critical） | Hrs． | $\begin{aligned} & \hline \text { Upper } \\ & \text { Division } \end{aligned}$ | Transfer Course／Grade | Minimum Grade if Required | Additional Critical Requirement Notes |
| :---: | :---: | :---: | :---: | :---: | :---: |
| TERM SIX： $76 \mathbf{9 0}$ CREDIT HOURS |  |  |  |  |  |
| AGB 321：Agribusiness Marketing II | 3 | 区 |  |  |  |
| AGB 364：Agribusiness Technologies I | 3 | ® |  |  |  |
| AGB 410：Agribusiness Management II | 3 | 区 |  |  |  |
| FIN 300：Fundamentals of Finance | 3 | 区 |  |  |  |
| AGB 300 or 400 Level Elective | 3 | 囚 |  |  |  |
| TERM SEVEN： 91105 CREDIT HOURS |  |  |  |  |  |
| AGB 333：Agribusiness Finance II | 3 | 区 |  |  |  |
| AGB 435：Agricultural Commodities | 3 | 区 |  |  |  |
| AGB 300 or 400 Level Elective | 3 | 囚 |  |  |  |
| Upper division Humanities，Fine Arts \＆Design（HU）or Social \＆ Behavioral Sciences（SB）AND remaining C，G or H awareness area | 3 | 囚 |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| TERM EIGHT： 106120 CREDIT HOURS |  |  |  |  |  |
| AGB 414：Agribusiness Analysis（L） | 3 | 区 |  |  |  |
| AGB 431：Intermediate Agribusiness Financial Management | 3 | 囚 |  |  |  |
| AGB 434：Agricultural Risk Management and Insurance | 3 | 囚 |  |  |  |
| AGB 300 or 400 Level Elective | 3 | 区 |  |  |  |

## Graduation Requirements Summary：

| Total Hours（120 <br> minimum） | Total Hrs at ASU（30 <br> minimum） | Hrs Resident Credit for Academic <br> 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：

| Course Subject and Title （courses in bold／shading are critical） | Hrs． | $\begin{aligned} & \hline \text { Upper } \\ & \text { Division } \\ & \hline \end{aligned}$ | Transfer Course／Grade | $\begin{aligned} & \text { Minimum Grade if } \\ & \text { Required } \end{aligned}$ | Additional Critical Requirement Notes |
| :---: | :---: | :---: | :---: | :---: | :---: |
| TERM SIX： $76 \mathbf{9 0}$ CREDIT HOURS |  |  |  |  |  |
| AGB 321：Agribusiness Marketing II | 3 | 区 |  |  |  |
| AGB 364：Agribusiness Technologies I | 3 | 区 |  |  |  |
| AGB 410：Agribusiness Management II | 3 | 区 |  |  |  |
| FIN 300：Fundamentals of Finance | 3 | 区 |  |  |  |
| AGB 300 or 400 Level Elective | 3 | 区 |  |  |  |
| TERM SEVEN： 91105 CREDIT HOURS |  |  |  |  |  |
| AGB 333：Agribusiness Finance II | 3 | 区 |  |  |  |
| AGB 340：Food Processing | 3 | 区 |  |  |  |
| AGB 300 or 400 Level Elective | 3 | 区 |  |  |  |
| Upper division Humanities，Fine Arts \＆Design（HU）or Social \＆ Behavioral Sciences（SB）AND remaining C，G or H awareness area | 3 | 区 |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| TERM EIGHT： 106120 CREDIT HOURS |  |  |  |  |  |
| AGB 414：Agribusiness Analysis（L） | 3 | 区 |  |  |  |
| AGB 440：Food Safety | 3 | 区 |  |  |  |
| AGB 442：Food and Industrial Microbiology | 3 | 区 |  |  |  |
| AGB 300 or 400 Level Elective | 3 | 区 |  |  |  |

## Graduation Requirements Summary：

| Total Hours（120 <br> minimum） | Total Hrs at ASU（30 <br> minimum） | Hrs Resident Credit for Academic <br> 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：

Major Map：Agribusiness（Food／Agribusiness \＆Consumer
Product Marketing）－Bachelor of Science（B．S．）
Morrison School of Management \＆Agribusiness，Polytechnic Campus
Catalog Year：2008－2009

|  |  |  | Completed ATP：$\square$ Yes $\square$ No |  | Completed AGEC：$\square$ Yes $\square$ No |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 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： 015 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> －Maintain academic good standing |
| 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 |  |
| Complete one course from： <br> －AGB 100：Introduction to Agribusiness <br> －MAT 210：Brief Calculus（MA） <br> －CIS 105：Computer Applications and Information Technology （CS） <br> －ECN 211：Macroeconomic Principles（SB）OR ECN 212： Microeconomic Principles（SB） |  |  |  |  |  |
| Humanities，Fine Arts \＆Design（HU）AND Cultural Diversity in the US（C），Global Awareness（G）or Historical Awareness（H） | 3 | $\square$ |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| TERM TWO： 1630 CREDIT HOURS |  |  |  |  |  |
| 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 | －Maintain academic good standing |
| Complete one additional course from： <br> －AGB 100：Introduction to Agribusiness <br> －MAT 210：Brief Calculus（MA） <br> －CIS 105：Computer Applications and Information Technology （CS） <br> －ECN 211：Macroeconomic Principles（SB）OR ECN 212： Microeconomic Principles（SB） |  |  |  |  |  |
| Humanities，Fine Arts \＆Design（HU）AND Cultural Diversity in the US（C），Global Awareness（G）or Historical Awareness（H） | 3 | $\square$ |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| TERM THREE： 3145 CREDIT HOURS |  |  |  |  |  |
| Complete one additional course from： <br> －AGB 100：Introduction to Agribusiness <br> －MAT 210：Brief Calculus（MA） <br> －CIS 105：Computer Applications and Information Technology （CS） <br> －ECN 211：Macroeconomic Principles（SB）OR ECN 212： Microeconomic Principles（SB） | 3 | $\square$ |  |  | －First year composition completed <br> －Maintain academic good standing |
| ACC 231：Uses of Accounting Information I | 3 | $\square$ |  |  |  |
| BIO 100：The Living World（SQ） | 4 | $\square$ |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| TERM FOUR： $46 \mathbf{6 0}$ CREDIT HOURS |  |  |  |  |  |
| Complete one additional course from： <br> －AGB 100：Introduction to Agribusiness <br> －MAT 210：Brief Calculus（MA） <br> －CIS 105：Computer Applications and Information Technology （CS） <br> －ECN 211：Macroeconomic Principles（SB）OR ECN 212： Microeconomic Principles（SB） | 3 | $\square$ |  |  | －All critical courses completed <br> －Maintain academic good standing |
| ACC 241：Uses of Accounting Information II | 3 | $\square$ |  |  |  |
| AGB 365：Agribusiness Technologies II | 3 | 区 |  |  |  |
| CHM 101：Introductory Chemistry（SQ） | 4 | $\square$ |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| TERM FIVE： 6175 CREDIT HOURS |  |  |  |  |  |
| AGB 360：Agribusiness Statistics（CS） | 3 | 区 |  |  |  |
| Complete remaining course from： <br> ECN 211：Macroeconomic Principles（SB）OR <br> ECN 212：Microeconomic Principles（SB） | 3 | $\square$ |  |  |  |
| ENG 301：Writing for Professions（L） | 3 | 区 |  |  |  |
| MGT 300：Organizational \＆Management Leadership | 3 | 区 |  |  |  |
| MKT 300：Marketing and Business Performance | 3 | 区 |  |  |  |


| Course Subject and Title （courses in bold／shading are critical） | Hrs． | Upper Division | Transfer Course／Grade | $\begin{aligned} & \text { Minimum Grade if } \\ & \text { Required } \end{aligned}$ | Additional Critical Requirement Notes |
| :---: | :---: | :---: | :---: | :---: | :---: |
| TERM SIX： $76 \mathbf{9 0}$ CREDIT HOURS |  |  |  |  |  |
| AGB 321：Agribusiness Marketing II | 3 | 区 |  |  |  |
| AGB 364：Agribusiness Technologies I | 3 | 区 |  |  |  |
| AGB 410：Agribusiness Management II | 3 | 区 |  |  |  |
| FIN 300：Fundamentals of Finance | 3 | 区 |  |  |  |
| AGB 300 or 400 Level Elective | 3 | 区 |  |  |  |
| TERM SEVEN： 91105 CREDIT HOURS |  |  |  |  |  |
| AGB 333：Agribusiness Finance II | 3 | 区 |  |  |  |
| AGB 422：Consumer Behavior | 3 | 区 |  |  |  |
| AGB 300 or 400 Level Elective | 3 | 区 |  |  |  |
| Upper division Humanities，Fine Arts \＆Design（HU）or Social \＆ Behavioral Sciences（SB）AND remaining C，G or H awareness area | 3 | 区 |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| TERM EIGHT： $106 \mathbf{1 2 0}$ CREDIT HOURS |  |  |  |  |  |
| AGB 414：Agribusiness Analysis（L） | 3 | 区 |  |  |  |
| AGB 429：Marketing Research | 3 | 区 |  |  |  |
| AGB 435：Agricultural Commodities | 3 | 区 |  |  |  |
| Elective | 3 | 区 |  |  |  |

## Graduation Requirements Summary：

| Total Hours（120 <br> minimum） | Total Hrs at ASU（30 <br> minimum） | Hrs Resident Credit for Academic <br> 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：

| Course Subject and Title （courses in bold／shading are critical） | Hrs． | Upper <br> Division | Transfer Course／Grade | Minimum Grade if Required | Additional Critical Requirement Notes |
| :---: | :---: | :---: | :---: | :---: | :---: |
| TERM SIX： $76 \mathbf{9 0}$ CREDIT HOURS |  |  |  |  |  |
| AGB 321：Agribusiness Marketing II | 3 | 区 |  |  |  |
| AGB 364：Agribusiness Technologies I | 3 | 区 |  |  |  |
| AGB 410：Agribusiness Management II | 3 | 区 |  |  |  |
| FIN 300：Fundamentals of Finance | 3 | 区 |  |  |  |
| AGB 300 or 400 Level Elective | 3 | 区 |  |  |  |
| TERM SEVEN： 91105 CREDIT HOURS |  |  |  |  |  |
| AGB 333：Agribusiness Finance II | 3 | 区 |  |  |  |
| AGB 300 OR 400 Level Elective | 3 | 区 |  |  |  |
| AGB 300 OR 400 Level Elective | 3 | 区 |  |  |  |
| UD Humanities（HU）or Social Behavioral（SB）AND remaining C，G or H awareness area | 3 | 区 |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| TERM EIGHT： $106 \mathbf{1 2 0}$ CREDIT HOURS |  |  |  |  |  |
| AGB 414：Agribusiness Analysis（L） | 3 | 区 |  |  |  |
| AGB 435：Agricultural Commodities | 3 | 区 |  |  |  |
| AGB 300 OR 400 Level Elective | 3 | 区 |  |  |  |
| AGB 300 OR 400 Level Elective | 3 | 区 |  |  |  |

## Graduation Requirements Summary：

| Total Hours（120 <br> minimum） | Total Hrs at ASU（30 <br> minimum） | Hrs Resident Credit for Academic <br> 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：

Major Map：Agribusiness（Golf Facilities Management）－ Bachelor of Science（B．S．）<br>Morrison School of Management \＆Agribusiness，Polytechnic Campus Catalog Year：2008－2009

|  |  |  | Completed ATP：$\square$ Yes $\quad \square$ No |  | Completed AGEC：$\square$ Yes $\square$ No |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 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： 015 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> －Maintain academic good standing |
| 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 |  |
| Complete one course from： <br> AGB 100：Introduction to Agribusiness <br> CIS 105：Computer Applications and Information Technology（CS） <br> ECN 211：Macroeconomic Principles（SB） <br> MAT 142：College Mathematics（MA） | 3 | $\square$ |  |  |  |
| Humanities，Fine Arts \＆Design（HU）AND Cultural Diversity（C）， Historical Awareness（H）or Global Awareness（G） | 3 | $\square$ |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| TERM TWO： 1630 CREDIT HOURS |  |  |  |  |  |
| 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 | －Maintain academic good standing |
| Complete one additional course from： <br> AGB 100：Introduction to Agribusiness <br> CIS 105：Computer Applications and Information Technology（CS） <br> ECN 211：Macroeconomic Principles（SB） <br> MAT 142：College Mathematics（MA） | 3 | $\square$ |  |  |  |
| Humanities，Fine Arts \＆Design（HU） | 3 | $\square$ |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| TERM THREE： 3145 CREDIT HOURS |  |  |  |  |  |
| Complete one additional course from： <br> AGB 100：Introduction to Agribusiness <br> CIS 105：Computer Applications and Information Technology（CS） <br> ECN 211：Macroeconomic Principles（SB） <br> MAT 142：College Mathematics（MA） | 3 | $\square$ |  |  | －First－Year Composition must be completed by end of semester 3 <br> －Maintain academic good standing |
| ACC 231：Uses of Accounting Information I | 3 | $\square$ |  |  |  |
| BIO 100 ：The Living World（SQ） | 4 | $\square$ |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| TERM FOUR： $46 \mathbf{6 0}$ CREDIT HOURS |  |  |  |  |  |
| Complete remaining courses from： <br> AGB 100：Introduction to Agribusiness <br> CIS 105：Computer Applications and Information Technology（CS） <br> ECN 211：Macroeconomic Principles（SB） <br> MAT 142：College Mathematics（MA） | 3 | $\square$ |  |  | －Complete all critical courses by end of semester three <br> －Maintain academic good standing |
| CHM 101：Introductory Chemistry（SQ） | 4 | $\square$ |  |  |  |
| ENG 301：Writing for Professions（L） | 3 | 区 |  |  |  |
| Golf Facilities Elective | 3 | $\square$ |  |  |  |
| Social \＆Behavioral Science（SB）AND Cultural Diversity（C）， <br> Historical Awareness（H）or Global Awareness（G） | 3 | $\square$ |  |  |  |
| TERM FIVE： 6175 CREDIT HOURS |  |  |  |  |  |
| AGB 360：Agribusiness Statistics（CS） | 3 | 区 |  |  |  |
| MGT 300：Organizational \＆Management Leadership | 3 | 区 |  |  |  |
| MKT 300：Marketing and Business Performance | 3 | 囚 |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| TERM SIX： $76 \mathbf{9 0}$ CREDIT HOURS |  |  |  |  |  |
| AGB 364：Agribusiness Technologies I | 3 | 区 |  |  |  |
| AGB 410：Agribusiness Management II | 3 | 区 |  |  |  |
| FIN 300：Fundamentals of Finance | 3 | 区 |  |  |  |
| Upper division Golf Facilities Elective | 3 | 区 |  |  |  |
| Upper division Golf Facilities Elective | 3 | 区 |  |  |  |

Major Map：Agribusiness（Golf Facilities Management）－ Bachelor of Science（B．S．）
Morrison School of Management \＆Agribusiness，Polytechnic Campus Catalog Year：2008－2009

| 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： 91105 CREDIT HOURS |  |  |  |  |  |
| AGB 333：Agribusiness Finance II | 3 | 区 |  |  |  |
| PGM 484：Internship | 3 | 区 |  |  |  |
| Golf Facilities Elective | 3 | $\square$ |  |  |  |
| Upper Division Humanities（HU）or Social Behavioral（SB） w／remaining Cultural Diversity（C），Global Awareness（G）or Historical Awareness（H）Elective | 3 | 区 |  |  |  |
| TERM EIGHT： 106120 CREDIT HOURS |  |  |  |  |  |
| AGB 414：Agribusiness Analysis（L） | 3 | 区 |  |  |  |
| PGM 484：Internship | 3 | 区 |  |  |  |
| Upper division Golf Facilities Elective | 3 | 区 |  |  |  |
| Upper division Golf Facilities Elective | 3 | 区 |  |  |  |
| Upper division Elective | 3 | 区 |  |  |  |

## Graduation Requirements Summary：

| Total Hours（120 <br> minimum） | Total Hrs at ASU（30 <br> minimum） | Hrs Resident Credit for Academic <br> 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：

Major Map：Agribusiness（International Agribusiness）－
Bachelor of Science（B．S．）
Morrison School of Management \＆Agribusiness，Polytechnic Campus
Catalog Year：2008－2009

|  |  |  | Completed ATP：$\square$ Yes $\square$ No |  | Completed AGEC：$\square$ Yes $\square$ No |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 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： 015 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> －Maintain academic good standing |
| 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 |  |
| Complete one course from： <br> －AGB 100：Introduction to Agribusiness <br> －MAT 210：Brief Calculus（MA） <br> －CIS 105：Computer Applications and Information Technology （CS） <br> －ECN 211：Macroeconomic Principles（SB）OR ECN 212： Microeconomic Principles（SB） | 3 | $\square$ |  |  |  |
| Humanities，Fine Arts \＆Design（HU）AND Cultural Diversity in the US（C），Historical Awareness（H）or Global Awareness（G） | 3 | $\square$ |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| TERM TWO： 1630 CREDIT HOURS |  |  |  |  |  |
| 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 | －Maintain academic good standing |
| Complete one additional course from： <br> －AGB 100：Introduction to Agribusiness <br> －MAT 210：Brief Calculus（MA） <br> －CIS 105：Computer Applications and Information Technology （CS） <br> －ECN 211：Macroeconomic Principles（SB）OR ECN 212： Microeconomic Principles（SB） | 3 | $\square$ |  |  |  |
| Humanities，Fine Arts \＆Design（HU）AND Cultural Diversity in the US（C），Historical Awareness（H）or Global Awareness（G） | 3 | $\square$ |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| TERM THREE： 3145 CREDIT HOURS |  |  |  |  |  |
| Complete one additional course from： <br> －AGB 100：Introduction to Agribusiness <br> －MAT 210：Brief Calculus（MA） <br> －CIS 105：Computer Applications and Information Technology （CS） <br> －ECN 211：Macroeconomic Principles（SB）OR ECN 212： Microeconomic Principles（SB） | 3 | $\square$ |  |  | －First year composition completed <br> －Maintain academic good standing |
| ACC 231：Uses of Accounting Information I | 3 | $\square$ |  |  |  |
| BIO 100 （SQ）：The Living World | 4 | $\square$ |  |  |  |
| Elective： | 3 | $\square$ |  |  |  |
| Elective： | 3 | $\square$ |  |  |  |
| TERM FOUR： 4660 CREDIT HOURS |  |  |  |  |  |
| Complete one additional course from： <br> －AGB 100：Introduction to Agribusiness <br> －MAT 210：Brief Calculus（MA） <br> －CIS 105：Computer Applications and Information Technology （CS） <br> －ECN 211：Macroeconomic Principles（SB）OR ECN 212： Microeconomic Principles（SB） | 3 | $\square$ |  |  | －All critical courses completed <br> －Maintain academic good standing |
| ACC 241：Uses of Accounting Information II | 3 | $\square$ |  |  |  |
| CHM 101：Introductory Chemistry（SQ） | 4 | $\square$ |  |  |  |
| AGB 365：Agribusiness Technologies II | 3 | 区 |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| TERM FIVE： 6175 CREDIT HOURS |  |  |  |  |  |
| AGB 360：Agribusiness Statistics（CS） | 3 | 区 |  |  |  |
| Complete remaining course from： <br> ECN 211：Macroeconomic Principles（SB）OR <br> ECN 212：Microeconomic Principles（SB） | 3 | $\square$ |  |  |  |
| ENG 301：Writing for Professions（L） | 3 | 区 |  |  |  |
| MGT 300：Organizational \＆Management Leadership | 3 | ® |  |  |  |
| MKT 300：Marketing and Business Performance | 3 | 区 |  |  |  |


| 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 SIX： $76 \mathbf{9 0}$ CREDIT HOURS |  |  |  |  |  |
| AGB 321：Agribusiness Marketing | 3 | 区 |  |  |  |
| FIN 300：Fundamentals of Finance | 3 | 区 |  |  |  |
| AGB 410：Agribusiness Management II | 3 | 区 |  |  |  |
| AGB 364：Agribusiness Technologies II | 3 | 区 |  |  |  |
| AGB 300 OR 400 Level Elective | 3 | 区 |  |  |  |
| TERM SEVEN： 91105 CREDIT HOURS |  |  |  |  |  |
| AGB 333：Agribusiness Finance II | 3 | 区 |  |  |  |
| AGB 450：International Agricultural Development | 3 | 区 |  |  |  |
| AGB 300 or 400 level elective | 3 | 区 |  |  |  |
| Upper division Humanities，Fine Arts \＆Design（HU）or Social \＆ Behavioral Sciences（SB）AND remaining C，G or H awareness area | 3 | 区 |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| TERM EIGHT： 106120 CREDIT HOURS |  |  |  |  |  |
| AGB 414：Agribusiness Analysis（L） | 3 | 区 |  |  |  |
| AGB 452：International Agricultural Policy | 3 | 区 |  |  |  |
| AGB 454：International Trade | 3 | 区 |  |  |  |
| AGB 300 OR 400 Level Elective： | 3 | 区 |  |  |  |

## Graduation Requirements Summary：

| Total Hours（120 <br> minimum） | Total Hrs at ASU（30 <br> minimum） | Hrs Resident Credit for Academic <br> 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：

Major Map：Agribusiness（Management of Agribusiness）－
Bachelor of Science（B．S．）
Morrison School of Management \＆Agribusiness，Polytechnic Campus
Catalog Year：2008－2009

|  |  |  | Completed ATP：$\square$ Yes $\square$ No |  | Completed AGEC：$\square$ Yes $\square$ No |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 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： 015 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> －Maintain academic good standing |
| 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 |  |
| Complete one course from： <br> －AGB 100：Introduction to Agribusiness <br> －MAT 210：Brief Calculus（MA） <br> －CIS 105：Computer Applications and Information Technology （CS） <br> －ECN 211：Macroeconomic Principles（SB）OR ECN 212： Microeconomic Principles（SB） |  |  |  |  |  |
| Humanities，Fine Arts \＆Design（HU）AND Cultural Diversity in the US（C），Global Awareness（G）or Historical Awareness（H） | 3 | $\square$ |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| Elective： | 3 | $\square$ |  |  |  |
| TERM TWO： 1630 CREDIT HOURS |  |  |  |  |  |
| 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 | －Maintain academic good standing |
| Complete one additional course from： <br> －AGB 100：Introduction to Agribusiness <br> －MAT 210：Brief Calculus（MA） <br> －CIS 105：Computer Applications and Information Technology （CS） <br> －ECN 211：Macroeconomic Principles（SB）OR ECN 212： Microeconomic Principles（SB） |  |  |  |  |  |
| Humanities，Fine Arts \＆Design（HU）AND Cultural Diversity in the US（C），Global Awareness（G）or Historical Awareness（H） | 3 | $\square$ |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| TERM THREE： 3145 CREDIT HOURS |  |  |  |  |  |
| ACC 231：Uses of Accounting Information I | 3 | $\square$ |  |  | －First year composition requirement completed <br> －Maintain academic good standing |
| Complete one additional course from： <br> －AGB 100：Introduction to Agribusiness <br> －MAT 210：Brief Calculus（MA） <br> －CIS 105：Computer Applications and Information Technology （CS） <br> －ECN 211：Macroeconomic Principles（SB）OR ECN 212： Microeconomic Principles（SB） | 3 | $\square$ |  |  |  |
| BIO 100 （SQ）：The Living World | 4 | $\square$ |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| TERM FOUR： 4660 CREDIT HOURS |  |  |  |  |  |
| Complete one additional course from： <br> －AGB 100：Introduction to Agribusiness <br> －MAT 210：Brief Calculus（MA） <br> －CIS 105：Computer Applications and Information Technology （CS） <br> －ECN 211：Macroeconomic Principles（SB）OR ECN 212： Microeconomic Principles（SB） | 3 | $\square$ |  |  | －All critical courses completed <br> －Maintain academic good standing |
| ACC 241：Uses of Accounting Information II | 3 | $\square$ |  |  |  |
| CHM 101：Introductory Chemistry（SQ） | 4 | $\square$ |  |  |  |
| AGB 365：Agribusiness Technologies II | 3 | 区 |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| TERM FIVE： 6175 CREDIT HOURS |  |  |  |  |  |
| AGB 360：Agribusiness Statistics（CS） | 3 | 区 |  |  |  |
| Complete remaining course from： ECN 211：Macroeconomic Principles（SB）OR ECN 212：Microeconomic Principles（SB） | 3 | $\square$ |  |  |  |
| ENG 301：Writing for Professions（L） | 3 | 区 |  |  |  |
| MGT 300：Organizational \＆Management Leadership | 3 | 区 |  |  |  |
| MKT 300：Marketing and Business Performance | 3 | 区 |  |  |  |


| $\begin{aligned} & \begin{array}{l} \text { Course Subject and Title } \\ \text { (courses in bold/shading are critical) } \end{array} \end{aligned}$ | Hrs． | Upper Division | Transfer Course／Grade | Minimum Grade if Required | Additional Critical Requirement Notes |
| :---: | :---: | :---: | :---: | :---: | :---: |
| TERM SIX： $76 \mathbf{9 0}$ CREDIT HOURS |  |  |  |  |  |
| AGB 321：Agribusiness Marketing II | 3 | 区 |  |  |  |
| AGB 364：Agribusiness Technologies I | 3 | 区 |  |  |  |
| AGB 410：Agribusiness Management II | 3 | 区 |  |  |  |
| FIN 300：Fundamentals of Finance | 3 | 区 |  |  |  |
| AGB 300 or 400 Level Elective | 3 | 区 |  |  |  |
| TERM SEVEN： 91105 CREDIT HOURS |  |  |  |  |  |
| AGB 333：Agribusiness Finance II | 3 | 囚 |  |  |  |
| AGB 451：Management Science | 3 | 区 |  |  |  |
| AGB 300 OR 400 Level Elective | 3 | 区 |  |  |  |
| Upper division Humanities，Fine Arts \＆Design（HU）or Social \＆ Behavioral Sciences（SB）AND remaining C，G or H awareness area | 3 | 区 |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| TERM EIGHT： 106120 CREDIT HOURS |  |  |  |  |  |
| AGB 414：Agribusiness Analysis（L） | 3 | 区 |  |  |  |
| AGB 411：Agricultural Cooperatives | 3 | 区 |  |  |  |
| AGB 481：Applied Microeconomics | 3 | 区 |  |  |  |
| AGB 300 OR 400 Level Elective | 3 | $\boxtimes$ |  |  |  |

## Graduation Requirements Summary：

| Total Hours（120 <br> minimum） | Total Hrs at ASU（30 <br> minimum） | Hrs Resident Credit for Academic <br> 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：

Major Map: Agribusiness (Pre-Veterinary Medicine) -
Bachelor of Science (B.S.)
Morrison School of Management \& Agribusiness, Polytechnic Campus
Catalog Year: 2008-2009


| Course Subject and Title （courses in bold／shading are critical） | Hrs． | $\begin{aligned} & \hline \text { Upper } \\ & \text { Division } \end{aligned}$ | Transfer Course／Grade | Minimum Grade if Required | Additional Critical Requirement Notes |
| :---: | :---: | :---: | :---: | :---: | :---: |
| TERM SEVEN： 91105 CREDIT HOURS |  |  |  |  |  |
| AGB 364：Agribusiness Technologies I | 3 | 区 |  |  |  |
| BCH 361：Principles of Biochemistry | 3 | 区 |  |  |  |
| MGT 300：Organizational \＆Management Leadership | 3 | 区 |  |  |  |
| AGB 300 OR 400 Level Elective | 3 | 区 |  |  |  |
| Upper division elective | 3 | 区 |  |  |  |
| Upper division elective | 2 | 区 |  |  |  |
| TERM EIGHT： $106 \mathbf{1 2 0}$ CREDIT HOURS |  |  |  |  |  |
| FIN 300：Fundamentals of Finance | 3 | 区 |  |  |  |
| AGB 414：Agribusiness Analysis（L） | 3 | 区 |  |  |  |
| AGB 300 OR 400 Level Elective | 3 | 区 |  |  |  |
| Upper division Humanities，Fine Arts \＆Design（HU）OR Social \＆ Behavioral Sciences AND remaining C， G or H awareness area | 3 | 区 |  |  |  |
| Upper division elective | 3 | 区 |  |  |  |

## Graduation Requirements Summary

| Total Hours（120 <br> minimum） | Total Hrs at ASU（30 <br> minimum） | Hrs Resident Credit for Academic <br> 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：

Major Map：Agribusiness（Professional Golf
Management）－Bachelor of Science（B．S．）
Morrison School of Management \＆Agribusiness，Polytechnic Campus
Catalog Year：2008－2009

|  |  |  | Completed ATP：$\square$ Yes $\quad \square$ No |  | Completed AGEC：$\square$ Yes $\square$ No |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Course Subject and Title （courses in bold／shading are critical） | Hrs． | Upper Division | Transfer Course／Grade | $\begin{aligned} & \text { Minimum Grade if } \\ & \text { Required } \end{aligned}$ | Additional Critical Requirement Notes |
| TERM ONE： 015 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> －Maintain academic good standing |
| 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 |  |
| PGM 100：PGA／PGM Introduction | 3 | $\square$ |  |  |  |
| AGB 100：Introduction to Agribusiness | 2 | $\square$ |  |  |  |
| PGM 110：Player Development I | 1 | $\square$ |  |  |  |
| Humanities，Fine Arts \＆Design（HU）AND Cultural Diversity in the US（C），Global Awareness（G）or Historical Awareness（H） | 3 | $\square$ |  |  |  |
| TERM TWO： 1630 CREDIT HOURS |  |  |  |  |  |
| 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 | －Maintain academic good standing |
| Complete one additional course from： <br> －MAT 210：Brief Calculus（MA） <br> －CIS 105：Computer Applications and Information Technology （CS） <br> －ECN 211：Macroeconomic Principles（SB）OR ECN 212： <br> Microeconomic Principles（SB） |  |  |  |  |  |
| PGM 111：Player Development II | 1 | $\square$ |  |  |  |
| 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 Diversity in the US （C），Global Awareness（G）or Historical Awareness（H） | 3 | $\square$ |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| SUMMER TERM |  |  |  |  |  |
| PGM 484：Internship | 3 | $\square$ |  |  |  |
| TERM THREE： 3145 CREDIT HOURS |  |  |  |  |  |
| Complete one additional course from： <br> －MAT 210：Brief Calculus（MA） <br> －CIS 105：Computer Applications and Information Technology （CS） <br> －ECN 211：Macroeconomic Principles（SB）OR ECN 212： Microeconomic Principles（SB） | 3 | $\square$ |  |  | －First year composition completed <br> －MILESTONE：Successful completion of Player Ability Test（PAT） <br> －Maintain academic good standing |
| PGM 130：PGA／PGM Level I | 2 | $\square$ |  |  |  |
| ACC 231：Uses of Accounting Information I | 3 | $\square$ |  |  |  |
| BIO 100：The Living World（SQ） | 4 | $\square$ |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| TERM FOUR： $46 \mathbf{6 0}$ CREDIT HOURS |  |  |  |  |  |
| Complete one additional course from： <br> －MAT 210：Brief Calculus（MA） <br> －CIS 105：Computer Applications and Information Technology （CS） <br> －ECN 211：Macroeconomic Principles（SB）OR ECN 212： Microeconomic Principles（SB） | 3 | $\square$ |  |  | －MILESTONE：Pass PGM／PGA Level 1 Education <br> －Maintain academic good standing |
| ACC 241：Uses of Accounting Information II | 3 | $\square$ |  |  |  |
| ENG 301：Writing for Professions（L） | 3 | 区 |  |  |  |
| PGM Related Elective（200 level） | 2 | $\square$ |  |  |  |
| Natural Science Quantitative（SQ）or General（SG） | 4 | $\square$ |  |  |  |
| SUMMER TERM |  |  |  |  |  |
| PGM 484：Internship | 3 | $\square$ |  |  |  |
| TERM FIVE： 6175 CREDIT HOURS |  |  |  |  |  |
| AGB 360：Agribusiness Statistics（CS） | 3 | 区 |  |  |  |
| MGT 300：Organizational \＆Management Leadership | 3 | 区 |  |  |  |
| MKT 300：Marketing and Business Performance | 3 | 区 |  |  |  |
| PGM 200：PGA／PGM Level II | 2 | $\square$ |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| TERM SIX： 7690 CREDIT HOURS |  |  |  |  |  |
| FIN 300：Fundamentals of Finance | 3 | 区 |  |  | －MILESTONE：Pass PGM／PGA Level 2 Education |
| AGB 364：Agribusiness Technologies I | 3 | 区 |  |  |  |
| AGB 410：Agribusiness Management II | 3 | 区 |  |  |  |
| PGM Related Elective：（400 Level） | 3 | 区 |  |  |  |
| SUMMER TERM |  |  |  |  |  |
| PGM 484：Internship | 3 | $\square$ |  |  |  |


| Course Subject and Title （courses in bold／shading are critical） | Hrs． | $\begin{aligned} & \hline \text { Upper } \\ & \text { Division } \\ & \hline \end{aligned}$ | Transfer Course／Grade | $\begin{aligned} & \text { Minimum Grade if } \\ & \text { Required } \end{aligned}$ | Additional Critical Requirement Notes |
| :---: | :---: | :---: | :---: | :---: | :---: |
| TERM SEVEN： 91105 CREDIT HOURS |  |  |  |  |  |
| AGB 333：Agribusiness Finance II | 3 | 区 |  |  |  |
| PGM 300：PGA／PGM Level III | 1 | 囚 |  |  |  |
| PGM Related Elective | 1 | $\square$ |  |  |  |
| Upper division Humanities，Fine Arts \＆Design（HU）or Social \＆Behavioral Science（SB） | 3 | 区 |  |  |  |
| Elective | 3 | 区 |  |  |  |
| TERM EIGHT： 106120 CREDIT HOURS |  |  |  |  |  |
| AGB 414：Agribusiness Analysis（L） | 3 | 区 |  |  | －MILESTONE：Pass PGM／PGA Level 3 Education |
| PGM 484：Internship | 3 | 区 |  |  |  |
| PGM Elective（400 Level） | 3 | 区 |  |  |  |
| Elective | 3 | 区 |  |  |  |
| SUMMER TERM |  |  |  |  |  |
| PGM 484：Internship | 3 | $\square$ |  |  |  |

## Graduation Requirements Summary：

| Total Hours（120 <br> minimum） | Total Hrs at ASU（30 <br> minimum） | Hrs Resident Credit for Academic <br> 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：

## Major Map: Business Administration - <br> Bachelor of Science (B.S.)

Morrison School of Management \& Agribusiness, Polytechnic Campus Catalog Year: 2008-2009

|  |  |  | Completed ATP: $\square$ Yes $\square$ No |  | Completed AGEC: $\square$ Yes $\square$ No |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Course Subject and Title (courses in bold/shading are critical) | Hrs. | Upper <br> Division | Transfer Course/Grade | Minimum Grade if Required | Additional Critical Requirement Notes |
| TERM ONE: 015 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> - Maintain academic good standing |
| ENG 101 and 102: First-Year Composition OR ENG 107 and 108: English for Foreign Students OR ENG 105: Advanced First-Year Composition | 3 | $\square$ |  | Grade of C |  |
| Complete one course from <br> - MAT 210: Brief Calculus (MA) <br> - CIS 105: Computer Applications and Information Technology (CS) <br> - One course with PGS or SOC prefix (SB) | 3 | $\square$ |  | Grade of C |  |
| Humanities, Fine Arts \& Design (HU) AND Cultural Diversity in the US (C), Global Awareness (G) or Historical Awareness (H) | 3 | $\square$ |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| TERM TWO: 1630 CREDIT HOURS |  |  |  |  |  |
| ENG 101 and 102: First-Year Composition OR ENG 107 and 108: English for Foreign Students OR ENG 105: Advanced First-Year Composition | 3 | $\square$ |  | Grade of C | - Maintain academic good standing |
| Complete one additional course from: <br> - MAT 210: Brief Calculus (MA) <br> - CIS 105: Computer Applications and Information Technology (CS) <br> - One course with PGS or SOC prefix (SB) <br> - One COM course from: <br> -COM 100: Introduction to Human Communication (SB) <br> -COM 225: Public Speaking (L) <br> - COM 230: Small Group Communication (SB) <br> -COM 259: Communication in Business \& the Professions | 3 | $\square$ |  | Grade of C |  |
| MAT 211: Mathematics for Business Analysis | 3 | $\square$ |  | Grade of C |  |
| Elective | 3 | $\square$ |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| TERM THREE: 3145 CREDIT HOURS |  |  |  |  |  |
| Complete one additional course from: <br> - MAT 210: Brief Calculus (MA) <br> - CIS 105: Computer Applications and Information Technology (CS) <br> - One course with PGS or SOC prefix (SB) <br> - One COM course from: <br> -COM 100: Introduction to Human Communication (SB) <br> -COM 225: Public Speaking (L) <br> - COM 230: Small Group Communication (SB) <br> - COM 259: Communication in Business \& the Professions | 3 | $\square$ |  | Grade of C | - First year composition completed <br> - Maintain academic good standing |
| ACC 231: Uses of Accounting Information I | 3 | $\square$ |  | Grade of C |  |
| Complete 1 course from: <br> ECN 211: Macroeconomic Principles (SB) <br> ECN 212: Microeconomic Principles (SB) | 3 | $\square$ |  | Grade of C |  |
| AGB 360: Agribusiness Statistics OR ECN 221: Business Statistics | 3 | $\square$ |  | Grade of C |  |
| Natural Science Quantitative (SQ) | 4 | $\square$ |  |  |  |
| TERM FOUR: 4660 CREDIT HOURS |  |  |  |  |  |
| Complete one additional course from: <br> - MAT 210: Brief Calculus (MA) <br> - CIS 105: Computer Applications and Information Technology <br> - One course with PGS or SOC prefix (SB) <br> - One COM course from: <br> - COM 100: Introduction to Human Communication (SB) <br> -COM 225: Public Speaking (L) <br> - COM 230: Small Group Communication (SB) <br> -COM 259: Communication in Business \& the Professions | 3 | $\square$ |  | Grade of C | - All critical courses completed <br> - Maintain academic good standing |
| ACC 241: Uses of Accounting Information II | 3 | $\square$ |  | Grade of C |  |
| Complete remaining course from: <br> ECN 211: Macroeconomic Principles (SB) <br> ECN 212: Microeconomic Principles (SB) | 3 | $\square$ |  | Grade of C |  |
| Natural Science Quantitative (SQ) or General (SG) | 4 | $\square$ |  |  |  |
| Literacy and Critical Inquiry (L) | 3 | $\square$ |  |  |  |

Major Map：Business Administration（Financial Services）－
Bachelor of Science（B．S．）
Morrison School of Management \＆Agribusiness，Polytechnic Campus
Catalog Year：2008－2009

|  |  |  | Completed ATP：$\square$ Yes $\quad \square$ No |  | Completed AGEC：$\square$ Yes $\square$ No |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Course Subject and Title （courses in bold／shading are critical） | Hrs． | Upper Division Division | Transfer Course／Grade | Minimum Grade if Required | Additional Critical Requirement Notes |
| TERM ONE： 015 CREDIT HOURS |  |  |  |  |  |
| Complete one course from： <br> MAT 210：Brief Calculus（MA） <br> CIS 105：Computer Applications \＆Info Technology（CS） | 3 | $\square$ |  | Grade of C | －ASU 101 is for ASU freshman students only and is 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> －Maintain academic good standing |
| Complete one course from： Course with PGS prefix（SB） Course with SOC prefix（SB） | 3 | $\square$ |  | Grade of C |  |
| ASU 101：The ASU Experience | 1 | $\square$ |  |  |  |
| ENG 101 and 102：First－Year Composition OR ENG 107 and 108：English for Foreign Students OR ENG 105：Advanced First－Year Composition | 3 | $\square$ |  | Grade of C |  |
| Humanities，Fine Arts and Design（HU）AND Cultural Diversity in the US（C），Global Awareness（G）or Historical Awareness（H） | 3 | $\square$ |  |  |  |
| Elective | 2 | $\square$ |  |  |  |
| TERM TWO： 1630 CREDIT HOURS |  |  |  |  |  |
| Complete remaining course from： <br> MAT 210：Brief Calculus（MA） <br> CIS 105：Computer Applications \＆Info Technology（CS） | 3 | $\square$ |  | Grade of C | －Maintain academic good standing |
| Complete remaining course from： <br> Course with PGS prefix（SB） <br> Course with SOC prefix（SB） | 3 | $\square$ |  | Grade of C |  |
| Complete one course from： <br> COM 100：Introduction to Human Communication（SB） <br> COM 110：Elements Interpersonal Communication（SB） <br> COM 222：Argumentation（L） <br> COM 225：Public Speaking（L） <br> COM 230：Small Group Communication（SB） <br> COM 259：Communication in Business \＆the Professions <br> COM 263：Elements Intercultural Comm．（SB，C，G） |  | $\square$ |  | Grade of C |  |
| ENG 101 and 102：First－Year Composition OR ENG 107 and 108：English for Foreign Students OR ENG 105：Advanced First－Year Composition | 3 | $\square$ |  | Grade of C |  |
| Elective | 3 | $\square$ |  |  |  |
| TERM THREE： 3145 CREDIT HOURS |  |  |  |  |  |
| AGB 360：Agribusiness Statistics（CS）OR <br> ECN 221：Business Statistics（CS） | 3 | $\square$ |  | Grade of C | －First－year composition completed <br> －Maintain academic good standing |
| MAT 211 Mathematics for Business Analysis | 3 | $\square$ |  | Grade of C |  |
| ACC 231：Uses of Accounting Information I | 3 | $\square$ |  | Grade of C |  |
| Complete one course from： <br> ECN 211：Macroeconomic Principles（SB） <br> ECN 212：Microeconomic Principles（SB） | 3 | $\square$ |  | Grade of C |  |
| Natural Science Quantitative（SQ） | 4 | $\square$ |  |  |  |
| TERM FOUR： $46 \mathbf{6 0}$ CREDIT HOURS |  |  |  |  |  |
| Complete remaining course from： <br> ECN 211：Macroeconomic Principles（SB） <br> ECN 212：Microeconomic Principles（SB） | 3 | $\square$ |  | Grade of C | －All critical courses completed <br> －Maintain academic good standing |
| ACC 241：Uses of Accounting Information II | 3 | $\square$ |  | Grade of C |  |
| Natural Science Quantitative（SQ）or General（SG） | 4 | $\square$ |  |  |  |
| Literacy and Critical Inquiry（L） | 3 | $\square$ |  |  |  |
| Cultural Diversity in the US（C），Global Awareness（G）or Historical Awareness（H）or if completed，take Elective | 3 | $\square$ |  |  |  |
| TERM FIVE： 6175 CREDIT HOURS |  |  |  |  |  |
| BUA 300：Career Management | 1 | 区 |  | Grade of C |  |
| TWC 347：Written Communication for Managers（L） | 3 | 区 |  | Grade of C |  |
| SCM 300：Global Supply Operations | 3 | 区 |  | Grade of C |  |
| MKT 300：Marketing and Business Performance | 3 | 区 |  | Grade of C |  |
| FIN 300：Fundamentals of Finance | 3 | 区 |  | Grade of C |  |
| TERM SIX： 7690 CREDIT HOURS |  |  |  |  |  |
| MGT 300：Organization and Management Leadership | 3 | 区 |  | Grade of C |  |
| AGB 333：Agribusiness Finance II | 3 | 区 |  | Grade of C |  |
| AGB 435：Agricultural Commodities OR REA 300：Real Estate Analysis | 3 | 区 |  | Grade of C |  |
| LES 305：Legal，Ethical，and Regulatory Issues in Business | 3 | 区 |  | Grade of C |  |
| Upper Division Humanities，Fine Arts and Design（HU）AND any remaining Cultural Diversity in the US（C），Global Awareness（G）or Historical Awareness（H） | 3 | 区 |  |  |  |

Morrison School of Management \＆Agribusiness，Polytechnic Campus Catalog Year：2008－2009

| 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： 91105 CREDIT HOURS |  |  |  |  |  |
| AGB 431：Intermediate Agribusiness Financial Management | 3 | 区 |  | Grade of C |  |
| AGB 434：Agricultural Risk Management and Insurance | 3 | 囚 |  | Grade of C |  |
| Upper－division international business or agribusiness course | 3 | 区 |  | Grade of C |  |
| Upper－division elective | 3 | 区 |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| TERM EIGHT： 106120 CREDIT HOURS |  |  |  |  |  |
| MKT 410：Sales and Sales Management | 3 | 区 |  | Grade of C |  |
| BUA 440：Strategic Management | 3 | 区 |  | Grade of C |  |
| Upper－division elective | 3 | 区 |  |  |  |
| Upper－division elective | 3 | 区 |  |  |  |
| Elective | 3 | $\square$ |  |  |  |

Graduation Requirements Summary：

| Total Hours <br> $(120)$ | Total Hrs at ASU <br> $(30)$ | Hrs Resident Credit for <br> Academic Recognition <br> $(56)$ | BUS GPA（2．000 <br> Min．） | Major GPA（2．000 Min．） | Total UD Hrs（51） | Total Comm．College <br> Hrs．（64 Max） |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  | Total Comm．Coll． <br> Bus．Hrs．（32 Max） |  |  |  |
|  |  |  |  |  |  |  |

## 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：

Major Map: Business Administration (Retail Management) -
Bachelor of Science (B.S.)
Morrison School of Management \& Agribusiness, Polytechnic Campus
Catalog Year: 2008-2009


| 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： 91105 CREDIT HOURS |  |  |  |  |  |
| Complete remaining two remaining courses from： <br> FIN 300：Fundamentals of Finance <br> LES 305：Legal，Ethical，and Regulatory Issues in Business <br> MGT 300：Organization \＆Management Leadership Upper－division international business or agribusiness course | 3 3 | 区 $\boxed{\square}$ |  | Grade of C <br> Grade of C |  |
| MGT 484：Internship | 3 | 区 |  | Grade of C |  |
| Upper－division elective | 3 | 区 |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| TERM EIGHT： $106 \mathbf{1 2 0}$ CREDIT HOURS |  |  |  |  |  |
| Complete remaining course from： <br> AGB 422：Consumer Behavior <br> MKT 410：Sales and Sales Management <br> MKT 424：Retail Management | 3 | 区 |  | Grade of C |  |
| BUA 440：Strategic Management | 3 | 区 |  | Grade of C |  |
| Upper－division elective | 3 | 区 |  |  |  |
| Upper－division elective | 3 | 区 |  |  |  |
| Elective | 3 | $\square$ |  |  |  |

## Graduation Requirements Summary：

| Total Hours <br> $(120)$ | Total Hrs at ASU <br> $(30)$ | Hrs Resident Credit for <br> Academic Recognition <br> $(56)$ | BUS GPA（2．000 <br> Min．） | Major GPA（2．000 Min．） | Total UD Hrs（51） | Total Comm．College <br> Hrs．（64 Max） |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  | Total Comm．Coll． <br> Bus．Hrs．（32 Max） |  |  |  |
|  |  |  |  |  |  |  |

## 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：

Major Map：Business Administration－
Bachelor of Science（B．S．）
Morrison School of Management \＆Agribusiness，Polytechnic Campus Catalog Year：2008－2009

\begin{tabular}{|c|c|c|c|c|c|}
\hline Course Subject and Title
（courses in bold／shading are critical） \& Hrs． \& Upper Division \& Transfer Course／Grade \& Minimum Grade if Required \& Additional Critical Requirement Notes \\
\hline \multicolumn{6}{|l|}{TERM FIVE： 6175 CREDIT HOURS} \\
\hline BUA 300：Career Management \& 1 \& 囚 \& \& Grade of C \& \\
\hline BUA related \& 3 \& 区 \& \& \& \\
\hline TWC 447：Business Reports（L） \& 3 \& 区 \& \& Grade of C \& \\
\hline SCM 300：Global Supply Operations \& 3 \& 区 \& \& Grade of C \& \\
\hline \begin{tabular}{l}
Complete 2 courses from： \\
FIN 300：Fundamentals of Finance \\
LES 305：Legal，Ethical，and Regulatory Issues in Business \\
MGT 300：Org \＆Mgt Leadership \\
MKT 300：Marketing and Business Performance \\
International business or agribusiness course \\
BUA Related
\end{tabular} \& 3 \& \begin{tabular}{l}
区 \\
区
\end{tabular} \& \& \begin{tabular}{l}
Grade of C \\
Grade of C
\end{tabular} \& \\
\hline \multicolumn{6}{|l|}{TERM SIX： \(76 \mathbf{9 0}\) CREDIT HOURS} \\
\hline \begin{tabular}{l}
Complete 3 additional courses from： \\
FIN 300：Fundamentals of Finance \\
LES 305：Legal，Ethical，and Regulatory Issues in Business \\
MGT 300：Org \＆Mgt Leadership \\
MKT 300：Marketing and Business Performance \\
International business or agribusiness course \\
BUA Related
\end{tabular} \&  \& \begin{tabular}{l}
区 \\
区 \\
区
\end{tabular} \& \& \begin{tabular}{l}
Grade of C \\
Grade of C \\
Grade of C
\end{tabular} \& \\
\hline \begin{tabular}{l}
Upper division Humanities，Fine Arts \＆Design（HU）OR Social \＆Behavioral Sciences（SB）AND \\
Cultural Diversity in the US（C），Global Awareness（G）or Historical Awareness（H）
\end{tabular} \& 3 \& 区 \& \& \& \\
\hline Humanities，Fine Arts \＆Design（H）AND Remaining Cultural Diversity in the US（C），Global Awareness（G）or Historical Awareness（H） \& 3 \& \(\square\) \& \& \& \\
\hline \multicolumn{6}{|l|}{TERM SEVEN： 91105 CREDIT HOURS} \\
\hline Complete 3 additional courses from： FIN 300：Fundamentals of Finance LES 305：Legal，Ethical，and Regulatory Issues in Business MGT 300：Org \＆Mgt Leadership MKT 300：Marketing and Business Performance International business or agribusiness course BUA Related \& \begin{tabular}{l}
3 \\
3
\end{tabular} \& \begin{tabular}{l}
区 \\
区 \\
区
\end{tabular} \& \& \begin{tabular}{l}
Grade of C \\
Grade of C \\
Grade of C
\end{tabular} \& \\
\hline Upper division elective \& 3 \& 区 \& \& \& \\
\hline Upper division elective \& 3 \& 区 \& \& \& \\
\hline \multicolumn{6}{|l|}{TERM EIGHT： \(106 \mathbf{1 2 0}\) CREDIT HOURS} \\
\hline \begin{tabular}{l}
Complete 2 additional courses from： \\
FIN 300：Fundamentals of Finance \\
LES 305：Legal，Ethical，and Regulatory Issues in Business \\
MGT 300：Org \＆Mgt Leadership \\
MKT 300：Marketing and Business Performance International business or agribusiness course BUA Related
\end{tabular} \& 3

3 \& \begin{tabular}{l}
区 <br>
区

 \& \& 

Grade of C <br>
Grade of C
\end{tabular} \& <br>

\hline BUA 440：Strategic Management OR
BUA 441：Entrepreneurship and Feasibility \& 3 \& 区 \& \& Grade of C \& <br>
\hline Upper division Elective \& 3 \& 区 \& \& \& <br>
\hline Upper division Elective \& 2 \& 区 \& \& \& <br>
\hline
\end{tabular}

## Graduation Requirements Summary：

| Total Hours <br> $(120)$ | Total Hrs at ASU <br> $(30)$ | Hrs Resident Credit for <br> Academic Recognition <br> $(56)$ | BUS GPA（2．000 <br> Min．） | Major GPA（2．000 Min．） | Total UD Hrs（51） | Total Comm．College <br> Hrs．（64 Max） |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  | Total Comm．Coll． <br> Bus．Hrs．（32 Max） |  |  |  |

## 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：

Major Map: Real Estate - Bachelor of Science (B.S.)
Morrison School of Management \& Agribusiness, Polytechnic Campus
Catalog Year: 2008-2009


Major Map：Real Estate－Bachelor of Science（B．S．）
Morrison School of Management \＆Agribusiness，Polytechnic Campus Catalog Year：2008－2009

| 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 FIVE： 6175 CREDIT HOURS |  |  |  |  |  |
| BUA 300：Career Management | 1 | 区 |  | Grade of C |  |
| TWC 447：Business Reports（L） | 3 | 区 |  | Grade of C |  |
| SCM 300：Global Supply Operations | 3 | 区 |  | Grade of C |  |
| Complete 3 courses from： |  |  |  |  |  |
| FIN 300：Fundamentals of Finance | 3 | 区 |  | Grade of C |  |
| LES 305：Legal，Ethical，and Regulatory Issues in Business MGT 300：Org \＆Mgt Leadership |  |  |  |  |  |
| MKT 300：Marketing and Business Performance |  |  |  |  |  |
| International business or agribusiness course REA 300：Real Estate Analysis | 3 | 区 |  | Grade of C |  |
| REA 331：Real Estate Finance |  |  |  |  |  |
| REA 401：Real Estate Appraisal |  |  |  |  |  |
| REA 441：Real Estate Land Development |  |  |  |  |  |
| REA 456：Real Estate Investments |  |  |  |  |  |
| LES 411：Real Estate Law | 3 | 区 |  | Grade of C |  |
| TERM SIX： $76 \mathbf{9 0}$ CREDIT HOURS |  |  |  |  |  |
| Complete 3 courses from： |  |  |  |  |  |
| FIN 300：Fundamentals of Finance | 3 | 区 |  | Grade of C |  |
| LES 305：Legal，Ethical，and Regulatory Issues in Business |  |  |  |  |  |
| MGT 300：Org \＆Mgt Leadership |  |  |  |  |  |
| MKT 300：Marketing and Business Performance |  |  |  |  |  |
| International business or agribusiness course |  |  |  |  |  |
| REA 300：Real Estate Analysis | 3 | 区 |  | Grade of C |  |
| REA 331：Real Estate Finance |  |  |  |  |  |
| REA 401：Real Estate Appraisal |  |  |  |  |  |
| REA 441：Real Estate Land Development REA 456：Real Estate Investments |  |  |  |  |  |
| LES 411：Real Estate Law | 3 | 区 |  | Grade of C |  |
| Upper division Humanities，Fine Arts \＆Design（HU）OR |  |  |  |  |  |
| Social \＆Behavioral Sciences（SB）AND |  |  |  |  |  |
| Cultural Diversity in the US（C），Global Awareness（G）or Historical Awareness（H） | 3 | 囚 |  |  |  |
| Humanities，Fine Arts \＆Design（HU）AND remaining Cultural |  |  |  |  |  |
| Diversity in the US（C），Global Awareness（G）or Historical Awareness (H) | 3 | $\square$ |  |  |  |
| TERM SEVEN： 91105 CREDIT HOURS |  |  |  |  |  |
| Complete 3 courses from： |  |  |  |  |  |
| FIN 300：Fundamentals of Finance | 3 | $\boxtimes$ |  | Grade of C |  |
| LES 305：Legal，Ethical，and Regulatory Issues in Business |  |  |  |  |  |
| MGT 300：Org \＆Mgt Leadership |  |  |  |  |  |
| MKT 300：Marketing and Business Performance |  |  |  |  |  |
| International business or agribusiness course |  |  |  |  |  |
| REA 300：Real Estate Analysis | 3 | 区 |  | Grade of C |  |
| REA 331：Real Estate Finance |  |  |  |  |  |
| REA 401：Real Estate Appraisal |  |  |  |  |  |
| REA 441：Real Estate Land Development |  |  |  |  |  |
| REA 456：Real Estate Investments |  |  |  |  |  |
| LES 411：Real Estate Law | 3 | 区 |  | Grade of C |  |
| Upper division elective | 3 | 区 |  |  |  |
| Upper division elective | 3 | 区 |  |  |  |
| TERM EIGHT： $106 \mathbf{1 2 0}$ CREDIT HOURS |  |  |  |  |  |
| Complete 2 courses from： |  |  |  |  |  |
| FIN 300：Fundamentals of Finance |  |  |  |  |  |
| LES 305：Legal，Ethical，and Regulatory Issues in Business |  |  |  |  |  |
| MGT 300：Org \＆Mgt Leadership |  |  |  |  |  |
| MKT 300：Marketing and Business Performance |  |  |  |  |  |
| International business or agribusiness course | 3 | 区 |  | Grade of C |  |
| REA 300：Real Estate Analysis |  |  |  |  |  |
| REA 331：Real Estate Finance |  |  |  |  |  |
| REA 401：Real Estate Appraisal |  |  |  |  |  |
| REA 441：Real Estate Land Development |  |  |  |  |  |
| REA 456：Real Estate Investments LES 411：Real Estate Law | 3 | 囚 |  | Grade of C |  |
| BUA 440：Strategic Management OR BUA 441：Entrepreneurship and Feasibility | 3 | 区 |  | Grade of C |  |
| Upper division Elective | 3 | 区 |  |  |  |
| Upper division Elective | 2 | 区 |  |  |  |

Major Map: Real Estate - Bachelor of Science (B.S.)
Morrison School of Management \& Agribusiness, Polytechnic Campus
Catalog Year: 2008-2009

## Graduation Requirements Summary

| Total Hours <br> $(120)$ | Total Hrs at <br> ASU (30) | Hrs Resident <br> Credit for <br> Academic <br> Recognition <br> $(56)$ | Transfer UD <br> Bus. Hrs <br> $(9)$ | BUS GPA <br> $(2.000$ Min. $)$ | Major GPA <br> $(2.000$ Min. $)$ | Total UD Hrs <br> $(51)$ | Total Comm. <br> College Hrs. <br> $(64$ Max) | Total Comm. <br> Coll. Bus. Hrs. <br> $(32$ Max) |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |  |  |  |

## 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:

| Course Subject and Title <br> (courses in bold/shading are critical) | Hrs. | Upper <br> Division | Transfer <br> Course/Grade | Minimum Grade if <br> Required | Additional Critical Tracking Notes |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |

## Graduation Requirements Summary:

| Total Hours (120) | Total Hrs at ASU <br> (minimum 30) | Resident Credit for Academic <br> Recognition (minimum 56) | Major GPA <br> (2.00 Min.) | Total UD Hrs <br> (minimum 45) | Total Comm. College <br> Hrs. (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:

New College of Interdisciplinary Arts \& Sciences Requirements:

- 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.
- A minimum of 12 upper-division semester hours in the major must be taken in campus resident credit. No credit is granted toward fulfilling major or minor requirements in any upper-division course in the subject of the major 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 and mathematics by passing an examination or by completing the courses specified below with a grade of "C" 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:

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 General Studies requirements or four (4) sequential semesters of one foreign language or two (2) semesters of a current computer language. Adjustment to upper division hours is required if lower division courses are used.
5. completion of two sequential semesters of coursework in a current computer language

Major Map: Applied Computing - Bachelor of Science (B.S.)

New College of Interdisciplinary Arts and Sciences, West Campus Catalog Year: 2008-2009


## 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) |
| $\circ$ | Natural Science-General (SG) |
| eral | Studies Awareness Requirements |
| $\circ$ | Cultural Diversity in the US (C) |
| $\circ$ | Global Awareness (G) |
| $\circ$ | Historical Awareness (H) |

- First Year Composition


## Additional Notes:

# Major Map: Applied Mathematics - 

Bachelor of Science (B.S.)
New College of Interdisciplinary Arts and Sciences, West Campus Catalog Year: 2008-2009


## Graduation Requirements Summary:

| Total Hours <br> (minimum 120) | Total UD Hrs <br> (minimum 50) | Cumulative GPA <br> (2.00 minimum) | Major GPA (2.00 <br> minimum) | Total Hrs at ASU <br> (minimum 30) | Hrs Resident Credit for <br> Academic Recognition <br> (minimum 56) |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |

## 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:

New College of Interdisciplinary Arts \& Sciences Requirements:

- 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.
- A minimum of 12 upper-division semester hours in the major must be taken in campus resident credit. No credit is granted toward fulfilling major or minor requirements in any upper-division course in the subject of the major 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 and mathematics by passing an examination or by completing the courses specified below with a grade of "C" 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:

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 General Studies requirements or four (4) sequential semesters of one foreign language or two (2) semesters of a current computer language. Adjustment to upper division hours is required if lower division courses are used.
5. completion of two sequential semesters of coursework in a current computer language

Bachelor of Applied Science
Advising Appointments: (602) 543-4444
Catalog Year: 2008-2009


[^10]Major Map : Communication Studies Bachelor of Arts (B.A.)
New College of Interdisciplinary Arts \& Sciences, West Campus Catalog Year: 2008-2009


Major Map : Communication Studies -
Bachelor of Arts (B.A.)
New College of Interdisciplinary Arts \& Sciences, West Campus
Catalog Year: 2008-2009

## Graduation Requirements Summary:

| Total Hours (120) | Total Hrs at ASU <br> (minimum 30) | Resident Credit for Academic <br> Recognition (minimum 56) | Major GPA <br> (2.00 Min.) | Total UD Hrs <br> (minimum 45) | Total Comm. College <br> Hrs. (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:

## Major Map ：Communication Studies－ Bachelor of Science（B．S．） <br> New College of Interdisciplinary Arts \＆Sciences，West Campus Catalog Year：2008－2009

|  |  |  | Completed ATP：$\square$ Yes $\quad \square$ No |  | Completed AGEC：$\square$ Yes $\square$ No |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Course Subject and Title （courses in bold／shading are critical） | Hrs． | Upper <br> Division | Transfer Course／Grade | Minimum Grade if Required | Additional Critical Tracking Notes |
| TERM ONE： 015 CREDIT HOURS |  |  |  |  |  |
| ASU 101：The ASU 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> －Complete Mathematics（MA）by end of semester 2 <br> －Complete First－Year Composition by end of semester 3 <br> －Complete critical courses by end of semester 4 |
| 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／or higher（MA） | 3 | $\square$ |  | Grade of C |  |
| Social／Behavioral Science（SB） | 3 | $\square$ |  | $\begin{aligned} & \hline \text { Grade of C in CMN } \\ & 100 \\ & \hline \end{aligned}$ |  |
| Natural Science（SQ／SG） | 4 | $\square$ |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| TERM TWO： 1630 CREDIT HOURS |  |  |  |  |  |
| 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 | －Minimum 2．0 GPA in all critical courses |
| CMN 225：Public Speaking（L） | 3 | $\square$ |  | Grade of C |  |
| Statistics course（list in DARS）（CS） | 3 | $\square$ |  | Grade of C |  |
| Humanities／Fine Arts（HU）with Awareness Area（C，G，or H） | 3 | $\square$ |  |  |  |
| Natural Science（SQ） | 4 | $\square$ |  |  |  |
| TERM THREE： 3145 CREDIT HOURS |  |  |  |  |  |
| CMN 308：Empirical Research Methods in Communication（L） | 3 | 区 |  | Grade of C | －Complete First－Year Composition requirement： ENG 101 \＆ 102 OR ENG 107 \＆ 108 or 105 <br> －Minimum 2.0 GPA in all critical courses |
| Humanities／Fine Arts（HU）with Awareness Area（C，G，or H） | 3 | $\square$ |  |  |  |
| Social／Behavioral Science（SB） | 3 | $\square$ |  |  |  |
| CMN 200 level course Elective | 3 | $\square$ |  | Grade of C |  |
| Elective | 3 | $\square$ |  |  |  |
| TERM FOUR： 4660 CREDIT HOURS |  |  |  |  |  |
| CMN 309：Rhetorical，Interpretive，and Critical Methods in Communication | 3 | 区 |  | Grade of C | －Minimum 2．0 GPA in all critical courses |
| CMN 200 level course Elective | 3 | $\square$ |  | Grade of C |  |
| CMN 200 level course Elective | 3 | $\square$ |  | Grade of C |  |
| Elective | 3 | $\square$ |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| TERM FIVE： 6175 CREDIT HOURS |  |  |  |  |  |
| Statistics course Upper Division（list in DARS） | 3 | 区 |  | Grade of C | －All critical courses completed <br> －Mathematics（MA）completed <br> －Minimum 2．0 GPA in all critical courses |
| CMN Competency Area 300 level Elective（list in DARS） | 3 | 区 |  | Grade of C |  |
| CMN Competency Area 300 level Elective（list in DARS） | 3 | 区 |  | Grade of C |  |
| CMN Elective Upper Division | 3 | 区 |  | Grade of C |  |
| CMN Elective Upper Division | 3 | $\square$ |  | Grade of C |  |
| TERM SIX： 7690 CREDIT HOURS |  |  |  |  |  |
| CMN Competency Area 300 level Elective（list in DARS） | 3 | 区 |  | Grade of C |  |
| CMN Competency Area 400 level Elective（list in DARS） | 3 | 区 |  | Grade of C |  |
| CMN Elective Upper Division | 3 | 区 |  | Grade of C |  |
| CMN Elective Upper Division | 3 | 区 |  | Grade of C |  |
| Upper Division Humanities／Fine Arts（HU）or Social／Behavioral Science（SB）with Awareness Area（C，G，or H） | 3 | 区 |  |  |  |
| TERM SEVEN： 91105 CREDIT HOURS |  |  |  |  |  |
| CMN Competency Area 400 level Elective（list in DARS） | 3 | 区 |  | Grade of C |  |
| Elective Upper Division | 3 | 区 |  |  |  |
| Elective Courses | 3 | $\square$ |  |  |  |
| Elective Courses | 3 | $\square$ |  |  |  |
| Elective Courses | 3 | $\square$ |  |  |  |
| TERM EIGHT： 106120 CREDIT HOURS |  |  |  |  |  |
| CMN Competency Area 300 level Elective（list in DARS） | 3 | 区 |  | Grade of C |  |
| Elective Upper Division | 3 | 区 |  |  |  |
| Elective Courses | 3 | $\square$ |  |  |  |
| Elective Courses | 3 | $\square$ |  |  |  |

Graduation Requirements Summary:

| Total Hours (120) | Total Hrs at ASU <br> (minimum 30) | Resident Credit for Academic <br> Recognition (minimum 56) | Major GPA <br> (2.00 Min.) | Total UD Hrs <br> (minimum 45) | Total Comm. College <br> Hrs. (maximum 64) |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |

General University Requirements: Legend

- General Studies Core Requirements:

$$
\begin{array}{ll}
\circ & \text { Literacy and Critical Inquiry (L) } \\
\circ & \text { Mathematical Studies (MA) } \\
\circ & \text { Computer/Statistics/Quantitative applications (CS) } \\
\circ & \text { Humanities, Fine Arts, and Design (HU) } \\
\circ & \text { Social and Behavioral Sciences (SB) } \\
\circ & \text { Natural Science-Quantitative (SQ) } \\
\circ & \text { Natural Science-General (SG) }
\end{array}
$$

- General Studies Awareness Requirements
- Cultural Diversity in the US (C)
- Global Awareness (G)
- Historical Awareness (H)
- First-Year Composition


## Additional Notes:

Major Map：English－Bachelor of Arts（B．A．）
New College of Interdisciplinary Arts and Sciences，West Campus Catalog Year：2008－2009

|  |  |  | Completed ATP：$\square$ Yes $\square$ No |  | Completed AGEC：$\square$ Yes $\square$ No |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Course Subject and Title （courses in bold／shading are critical） | Hrs． | Upper Division | TransferCourse／Grade |  | Additional Critical Tracking Notes |
| TERM ONE： 015 CREDIT HOURS |  |  |  |  |  |
| ASU 101：The ASU 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> －Complete Math（MA）requirement by end of semester 2 <br> －Complete First Year Composition by end of semester 3 <br> －Complete critical courses by end of semester 5 <br> －Maintain 2.00 minimum cumulative ASU GPA |
| 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） | 3 | $\square$ |  |  |  |
| MAT 142：College Mathematics or higher | 3 | $\square$ |  |  |  |
| Science（SQ） | 4 | $\square$ |  |  |  |
| TERM TWO： 1630 CREDIT HOURS |  |  |  |  |  |
| 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 | －Maintain 2.00 minimum cumulative ASU |
| Social／Behavioral Science（SB） | 3 | $\square$ |  |  |  |
| Computer Literacy（CS） | 3 | $\square$ |  |  |  |
| Science（SQ／SG） | 4 | $\square$ |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| TERM THREE： 3145 CREDIT HOURS |  |  |  |  |  |
| Complete one course from： <br> ENG 221：Survey of English Literature（HU） <br> ENG 222：Survey of English Literature（HU） | 3 | $\square$ |  | Grade of C | －Maintain 2.00 minimum cumulative ASU GPA <br> －Complete First Year Composition requirement：ENG 101 \＆ 102 OR ENG 107 \＆ 108 or 105 <br> －Mathematics（MA）requirement completed |
| Complete one course from： <br> ENG 241：Literatures of the United States to 1860 （HU） <br> ENG 242：Literatures of the United States， 1860 to Present（HU） | 3 | $\square$ |  |  |  |
| English Elective <br> （Recommend：ENG 210：Introduction to Creative Writing or ENG 213： <br> Introduction to the Study of Language） | 3 | $\square$ |  |  |  |
| Cultural Diversity（C） | 3 | $\square$ |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| TERM FOUR： $46 \mathbf{6 0}$ CREDIT HOURS |  |  |  |  |  |
| Complete remaining course from： <br> ENG 221：Survey of English Literature（HU） <br> ENG 222：Survey of English Literature（HU） | 3 | $\square$ |  | Grade of C | －Maintain 2.00 minimum cumulative ASU GPA |
| Complete remaining course from： <br> ENG 241：Literatures of the United States to 1860 （HU） <br> ENG 242：Literatures of the United States， 1860 to Present（HU） | 3 | $\square$ |  |  |  |
| Global Awareness（G） | 3 | $\square$ |  |  |  |
| English Elective （Recommend：ENG 210：Introduction to Creative Writing or ENG 213： Introduction to the Study of Language） | 3 | $\square$ |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| TERM FIVE： 6175 CREDIT HOURS |  |  |  |  |  |
| ENG 311：Persuasive Writing（L） | 3 | 区 |  |  | －Language and Cultures：see Additional Notes，page 2 |
| ENG 323：Rhetoric and Grammar（L） | 3 | 囚 |  |  |  |
| Languages \＆Cultures：Global Awareness（G）or Cultural Diversity（C） if needed ${ }^{1}$ | 3 | $\square$ |  |  |  |
| English Elective Upper Division | 3 | 区 |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| TERM SIX： $76 \mathbf{9 0}$ CREDIT HOURS |  |  |  |  |  |
| ENG 421：Shakespeare | 3 | 区 |  |  |  |
| Languages \＆Cultures：Global Awareness（G）or Cultural Diversity（C） if needed ${ }^{1}$ | 3 | $\square$ |  |  |  |
| Literature of Gender or Ethnicity Upper Division（list in DARS） | 3 | 区 |  |  |  |
| English Elective Upper Division | 3 | 区 |  |  |  |
| English Elective Upper Division | 3 | 区 |  |  |  |
| TERM SEVEN： 91105 CREDIT HOURS |  |  |  |  |  |
| ENG 400：History of Literary Criticism（L／HU，H） | 3 | 区 |  |  |  |
| English Elective Upper Division | 3 | 区 |  |  |  |
| Elective Upper Division | 3 | 区 |  |  |  |
| Elective Upper Division | 3 | 区 |  |  |  |
| Elective | 3 | $\square$ |  |  |  |


| Course Subject and Title <br> (courses in bold/shading are critical) | Hrs. | Upper <br> Division | Transfer <br> Course/Grade | Minimum Grade if <br> Required | Additional Critical Tracking Notes |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

${ }^{1}$ May be substituted with (4) semester hours of a foreign language or two (2) semesters of a current computer language. Adjustment to upper division hours is required if lower division course are used.

## Graduation Requirements Summary:

| Total Hours (120) | Total Hrs at ASU <br> $($ minimum 30) | Resident Credit for Academic <br> Recognition (minimum 56) | Major GPA <br> (2.00 Min.) | Total UD Hrs <br> (minimum 45) | Total Comm. College <br> Hrs. (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:

New College of Interdisciplinary Arts \& Sciences Requirements

- 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.
- A minimum of 12 upper-division semester hours in the major must be taken in campus resident credit. No credit is granted toward fulfilling major or minor requirements in any upper-division course in the subject of the major 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 and mathematics by passing an examination or by completing the courses specified below with a grade of "C" 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:

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 General Studies requirements or four (4) sequential semesters of one foreign language or two (2) semesters of a current computer language. Adjustment to upper division hours is required if lower division courses are used.
5. completion of two sequential semesters of coursework in a current computer language

New College of Interdisciplinary Arts and Sciences，West Campus Catalog Year：2008－2009

| Course Subject and Title （courses in bold／shading are critical） | Hrs． | Upper Division | $\begin{gathered} \text { Transfer } \\ \text { Course/Grade } \end{gathered}$ | Minimum Grade if Required | Additional Critical Tracking Notes |
| :---: | :---: | :---: | :---: | :---: | :---: |
| TERM SEVEN： 91105 CREDIT HOURS |  |  |  |  |  |
| One course from one of the four Course Clusters Upper Division （list in DARS） | 3 | 区 |  |  |  |
| One course from one of the four Course Clusters Upper Division （list in DARS） | 3 | 区 |  |  |  |
| One course from Career List（list in DARS） | 3 | $\square$ |  |  |  |
| Elective Upper Division | 3 | 区 |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| TERM EIGHT： 106120 CREDIT HOURS |  |  |  |  |  |
| One course from one of the four Course Clusters Upper Division（list in DARS） | 3 | 区 |  |  |  |
| One course from one of the four Course Clusters Upper Division（list in DARS） | 3 | 囚 |  |  |  |
| ETH 484：Internship | 3 | 区 |  |  |  |
| Elective Upper Division | 3 | 区 |  |  |  |

 courses are used．

## Graduation Requirements Summary：

| Total Hours（120） | Total Hrs at ASU <br> （minimum 30） | Resident Credit for Academic <br> Recognition（minimum 56） | Major GPA <br> $(2.00$ Min．） | Total UD Hrs <br> （minimum 45） | Total Comm．College <br> Hrs．（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：

New College of Interdisciplinary Arts \＆Sciences Requirements
－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．
－A minimum of 12 upper－division semester hours in the major must be taken in campus resident credit．No credit is granted toward fulfilling major or minor requirements in any upper－division course in the subject of the major 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 and mathematics by passing an examination or by completing the courses specified below with a grade of＂C＂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：
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 General Studies requirements or four（4）sequential semesters of one foreign language or two（2） semesters of a current computer language．Adjustment to upper division hours is required if lower division courses are used．
5．completion of two sequential semesters of coursework in a current computer language

Major Map ：History－Bachelor of Arts（B．A．）
New College of Interdisciplinary Arts and Sciences，West Campus Catalog Year：2008－2009

|  |  |  | Completed ATP：$\square$ Yes $\square$ No |  | Completed AGEC：$\square$ Yes $\square$ No |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 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： 015 CREDIT HOURS |  |  |  |  |  |
| Complete 1 course from： <br> －HIS 101：Western Civilization（SB，H）or HIS 102：Western Civilization（SB，G，H） <br> －HIS 103：The United States（SB，H）or HIS 104：The United States（SB，H） | 3 | $\square$ |  | 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 |
| ASU 101：The ASU Experience | 1 | $\square$ |  |  | U Math Placement Exam score determines |
| 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 | －Complete First Year Composition by end of semester 3 |
| MAT 142：College Mathematics or higher | 3 | $\square$ |  | Grade of C | 2.00 |
| Humanities／Fine Arts（HU） | 3 | $\square$ |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| TERM TWO： 1630 CREDIT HOURS |  |  |  |  |  |
| 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 | －Maintain minimum cumulative ASU GPA of $2.00$ |
| Complete 1 set from： <br> －HIS 101：Western Civilization（SB，H）AND HIS 102：Western Civilization（SB，G，H）OR <br> －HIS 103：The United States（SB，H）AND HIS 104：The United States（SB，H） | 3 | $\square$ |  | Grade of C |  |
| Humanities／Fine Arts（HU） | 3 | $\square$ |  |  |  |
| Science（SQ／SG） | 4 | $\square$ |  |  |  |
| Computer／Statistics／Quantitative applications（CS） | 3 | $\square$ |  |  |  |
| TERM THREE： 3145 CREDIT HOURS |  |  |  |  |  |
| HIS Elective | 3 | $\square$ |  | Grade of C | Maintain minimum cumulative ASU GPA of |
| Cultural Diversity（C） | 3 | $\square$ |  |  |  |
| Social／Behavioral Science（SB） | 3 | $\square$ |  |  |  |
| Literacy \＆Critical Inquiry（L） <br> （Recommend：PHI 103：Principles of Sound Reasoning） | 3 | $\square$ |  |  |  |
| Natural Science－Quantitative（SQ） | 4 | $\square$ |  |  |  |
| TERM FOUR： $46 \mathbf{6 0}$ CREDIT HOURS |  |  |  |  |  |
| HIS 300：Historical Methods（L／H） | 3 | 区 |  | Grade of C | Maintain minimum cumulative ASU GPA of |
| American or European HIS Upper Division Course | 3 | 囚 |  | Grade of C |  |
| Global Awareness（G） | 3 | $\square$ |  |  |  |
| Elective Upper Division | 3 | 区 |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| TERM FIVE： 6175 CREDIT HOURS |  |  |  |  |  |
| American or European HIS Upper Division Course | 3 | 区 |  |  |  |
| Humanities／Fine Arts（HU）or Social／Behavioral Science（SB） Upper Division | 3 | 区 |  |  |  |
| Languages \＆Cultures：Global Awareness（G）or Cultural Diversity（C） if needed ${ }^{1}$ | 3 | $\square$ |  |  |  |
| Supporting Course work Lower Division | 3 | $\square$ |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| TERM SIX： 7690 CREDIT HOURS |  |  |  |  |  |
| American or European HIS Upper Division Course： | 3 | 区 |  |  |  |
| American or European HIS Upper Division Course： | 3 | 区 |  |  |  |
| Languages \＆Cultures：Global Awareness（G）or Cultural Diversity（C） if needed ${ }^{1}$ | 3 | $\square$ |  |  |  |
| Supporting Course work Upper Division | 3 | 区 |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| TERM SEVEN： 91105 CREDIT HOURS |  |  |  |  |  |
| Supporting Course work Upper Division | 3 | 区 |  |  |  |
| Supporting Course work Upper Division | 3 | 区 |  |  |  |
| Global／Comparative HIS Upper Division course（list in DARS） | 3 | 区 |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| TERM EIGHT： 106120 CREDIT HOURS |  |  |  |  |  |
| Supporting Course work Upper Division | 3 | 区 |  |  |  |
| HIS 498：Pro－Seminar（L） | 3 | 区 |  |  |  |
| Elective Upper Division： | 3 | 区 |  |  |  |
| Elective Upper Division： | 3 | 区 |  |  |  |
| Elective | 3 | $\square$ |  |  |  |

 are used．
Page 1 of 2

Major Map : History - Bachelor of Arts (B.A.)<br>New College of Interdisciplinary Arts and Sciences, West Campus Catalog Year: 2008-2009

## Graduation Requirements Summary:

| Total Hours (120) | Total Hrs at ASU <br> $($ minimum 30) | Resident Credit for Academic <br> Recognition (minimum 56) | Major GPA <br> $(2.00 \mathrm{Min})$. | Total UD Hrs <br> (minimum 45) | Total Comm. College <br> Hrs. (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:

New College of Interdisciplinary Arts \& Sciences Requirements:

- 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.
- A minimum of 12 upper-division semester hours in the major must be taken in campus resident credit. No credit is granted toward fulfilling major or minor requirements in any upper-division course in the subject of the major 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 and mathematics by passing an examination or by completing the courses specified below with a grade of "C" 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:

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 General Studies requirements or four (4) sequential semesters of one foreign language or two (2) semesters of a current computer language. Adjustment to upper division hours is required if lower division courses are used.
5. completion of two sequential semesters of coursework in a current computer language

Major Map: Integrative Studies - Bachelor of Arts (B.A.) New College of Interdisciplinary Arts and Sciences, West Campus Catalog Year: 2008-2009

 courses are used.

## Graduation Requirements Summary:

| Total Hours (120) | Total Hrs at ASU <br> (minimum 30) | Resident Credit for Academic <br> Recognition (minimum 56) | Major GPA <br> $(2.00$ Min.) | Total UD Hrs <br> (minimum 45) | Total Comm. College <br> Hrs. (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) |
| $\circ$ | 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:

New College of Interdisciplinary Arts \& Sciences Requirements:

- 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.
- A minimum of 12 upper-division semester hours in the major must be taken in campus resident credit. No credit is granted toward fulfilling major or minor requirements in any upper-division course in the subject of the major 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 and mathematics by passing an examination or by completing the courses specified below with a grade of "C" 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:

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 General Studies requirements or four (4) sequential semesters of one foreign language or two (2) semesters of a current computer language. Adjustment to upper division hours is required if lower division courses are used.
5. completion of two sequential semesters of coursework in a current computer language

Major Map: Interdisciplinary Arts \& Performance -<br>Bachelor of Arts (B.A.)<br>New College of Interdisciplinary Arts and Sciences, West Campus Catalog Year: 2008-2009



Major Map：Interdisciplinary Arts \＆Performance－<br>Bachelor of Arts（B．A．）<br>New College of Interdisciplinary Arts and Sciences，West Campus Catalog Year：2008－2009

| 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： 91105 CREDIT HOURS |  |  |  |  |  |
| IAP 325：Sound Performance：Exploring Alternative Performance Groups | 3 | 囚 |  |  |  |
| IAP 302：Cross－Cultural Perspectives on the Arts（L／HU） IAP 464：Media and Diversity | 3 | 囚 |  |  |  |
| Language \＆Cultures ：Global Awareness（G）or Cultural Diversity（C）＊ | 3 | $\square$ |  |  |  |
| IAP Elective Upper Division | 3 | 区 |  |  |  |
| Elective Upper Division | 3 | 区 |  |  |  |
| TERM EIGHT： 106120 CREDIT HOURS |  |  |  |  |  |
| IAP 480：Senior Project | 3 | 区 |  |  |  |
| IAP Elective Upper Division | 3 | 区 |  |  |  |
| IAP Elective Upper Division | 3 | 区 |  |  |  |
| IAP Elective Upper Division | 3 | 囚 |  |  |  |

＊May be substituted with four（4）semester hours of a foreign language or（2）semesters of a current computer language．Adjustment to upper division hours is required if lower division courses are used

## Graduation Requirements Summary：

| Total Hours（120） | Total Hrs at ASU <br> $($ minimum 30） | Resident Credit for Academic <br> Recognition（minimum 56） | Major GPA <br> （2．00 Min．） | Total UD Hrs <br> （minimum 45） | Total Comm．College <br> Hrs．（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：

New College of Interdisciplinary Arts \＆Sciences Requirements：
－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．
－A minimum of 12 upper－division semester hours in the major must be taken in campus resident credit．No credit is granted toward fulfilling major or minor requirements in any upper－division course in the subject of the major 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 and mathematics by passing an examination or by completing the courses specified below with a grade of＂C＂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：
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 General Studies requirements or four（4）sequential semesters of one foreign language or two（2） semesters of a current computer language．Adjustment to upper division hours is required if lower division courses are used．
5．completion of two sequential semesters of coursework in a current computer language

Major Map: Life Sciences - Bachelor of Science (B.S.)
New College of Interdisciplinary Arts and Sciences, West Campus Catalog Year: 2008-2009


| Course Subject and Title （courses in bold／shading are critical） | Hrs． | $\begin{aligned} & \hline \text { Upper } \\ & \text { Division } \\ & \hline \end{aligned}$ | Transfer Course／Grade | Minimum Grade if Required | Additional Critical Requirement Notes |
| :---: | :---: | :---: | :---: | :---: | :---: |
| TERM SEVEN： 91105 CREDIT HOURS |  |  |  |  |  |
| LSC 415 ：Biometry or General Elective（CS）required if student completed MAT 210 OR <br> LSC 415 or any Computer／Statistics／Quantitative applications（CS） course if student completed MAT 270／271 | $\begin{gathered} 4 \text { or } \\ 3 \\ \hline \end{gathered}$ | 区 |  | Grade of C |  |
| Awareness Area（H，C，G）or General Elective | 3 | $\square$ |  |  |  |
| Distribution Course（see DARS） | 4 | 区 |  |  |  |
| Upper division Humanities，Fine Arts \＆Design（HU）or Social \＆ Behavioral Science（SB） | 3 | 囚 |  |  |  |
| Major Course Elective | 3 | 区 |  |  |  |
| TERM EIGHT： $106 \mathbf{1 2 0}$ CREDIT HOURS |  |  |  |  |  |
| Awareness Area（H，C，G）or Elective | 3 | $\square$ |  |  |  |
| Awareness Area（H，C，G） | 3 | $\square$ |  |  |  |
| Distribution Course（see DARS） | 4 | 区 |  |  |  |
| Major Elective Course | 3 | 区 |  |  |  |

## Graduation Requirements Summary：

| Total Hours <br> （minimum 120） | Total Hrs at ASU <br> （minimum 30） | Hrs Resident Credit for <br> Academic Recognition <br> （minimum 56） | Major GPA（2．000 <br> Min．） | Total UD Hrs <br> （minimum 50） | Total Comm．College <br> Hrs．（64 Max） |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |

## 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：

New College of Interdisciplinary Arts \＆Sciences Requirements：
－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．
－A minimum of 12 upper－division semester hours in the major must be taken in campus resident credit．No credit is granted toward fulfilling major or minor requirements in any upper－division course in the subject of the major 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 and mathematics by passing an examination or by completing the courses specified below with a grade of＂C＂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：
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 General Studies requirements or four（4）sequential semesters of one foreign language or two（2） semesters of a current computer language．Adjustment to upper division hours is required if lower division courses are used．
5．completion of two sequential semesters of coursework in a current computer language

# Major Map：Political Science－ 

Bachelor of Arts（B．A．）
New College of Interdisciplinary Arts and Sciences，West Campus
Catalog Year：2008－2009

|  |  |  | Completed ATP：$\square$ Yes $\square$ No |  | Completed AGEC：$\square$ Yes $\square$ No |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 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： 015 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> －Complete First Year Composition by end of semester 3 <br> －Complete critical courses by end of semester 5 <br> －Minimum 2．0 GPA in all critical courses |
| 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 |  |
| POL 101：Political Ideologies ${ }^{1}$（SB）or <br> POL 110：Government and Politics ${ }^{1}$（SB）or <br> POL 160：Global Politics（SB，G）${ }^{1}$ | 3 | $\square$ |  | Grade of C |  |
| Science（SQ／SG） | 4 | $\square$ |  |  |  |
| $\begin{aligned} & \hline \text { Related course work } \\ & \text { (CRJ, ASB, CMN, ECN, GCU, HIS, SBS, SOC, WST) } \\ & \hline \end{aligned}$ | 3 | $\square$ |  |  |  |
| Elective | 1 | $\square$ |  |  |  |
| TERM TWO： 1630 CREDIT HOURS |  |  |  |  |  |
| 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 | －Minimum 2．0 GPA in all critical courses |
| POL 101：Political Ideologies ${ }^{1}$（SB）or POL 110：Government and Politics ${ }^{1}$（SB）or POL 160：Global Politics（SB，G）${ }^{1}$ （course not taken in semester 1） | 3 | $\square$ |  | Grade of C |  |
| Humanities／Fine Arts（HU） | 3 | $\square$ |  |  |  |
| Related course work <br> （CRJ，ASB，CMN，ECN，GCU，HIS，SBS，SOC，WST） | 3 | $\square$ |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| TERM THREE： 3145 CREDIT HOURS |  |  |  |  |  |
| POL 101：Political Ideologies ${ }^{1}$（SB）or <br> POL 110：Government and Politics ${ }^{1}$（SB）or <br> POL 160：Global Politics（SB，G）${ }^{1}$ <br> （course not taken in semester 1 or semester 2） | 3 | $\square$ |  | Grade of C | －Complete First Year Composition requirement： ENG 101 \＆ 102 OR ENG 107 \＆ 108 or 105 <br> －Complete POL 101，110，and 160 <br> －Minimum 2．0 GPA in all critical courses |
| Science（SQ） | 4 | $\square$ |  |  |  |
| Computer Literacy（CS） | 3 | $\square$ |  |  |  |
| Cultural Diversity（C） | 3 | $\square$ |  |  |  |
| Elective | 2 | $\square$ |  |  |  |
| TERM FOUR： $46 \mathbf{6 0}$ CREDIT HOURS |  |  |  |  |  |
| MAT 142：College Mathematics or higher（MA） | 3 | $\square$ |  | Grade of C | －Minimum 2．0 GPA in all critical courses |
| Literacy \＆Critical Inquiry（L） | 3 | $\square$ |  |  |  |
| Humanities／Fine Arts（HU） | 3 | $\square$ |  |  |  |
| Related course work （CRJ，ASB，CMN，ECN，GCU，HIS，SBS，SOC，WST） | 3 | $\square$ |  |  |  |
| Elective： | 3 | $\square$ |  |  |  |
| TERM FIVE： 6175 CREDIT HOURS |  |  |  |  |  |
| SBS 302：Qualitative Methods OR SBS 303：Quantitative Methods | 3 | 区 |  | Grade of C | －Minimum 2．0 GPA in all critical courses <br> －All critical courses completed |
| POL Upper Division Elective | 3 | 区 |  | Grade of C |  |
| POL Upper Division Elective | 3 | 区 |  | Grade of C |  |
| Elective Upper Division | 3 | 区 |  | Grade of C |  |
| Elective | 3 | $\square$ |  |  |  |
| TERM SIX： $76 \mathbf{9 0}$ CREDIT HOURS |  |  |  |  |  |
| POL Upper Division Elective | 3 | 区 |  | Grade of C |  |
| POL Upper Division Elective | 3 | 区 |  | Grade of C |  |
| Literacy \＆Critical Inquiry Upper Division（L） | 3 | 区 |  | Grade of C |  |
| Related course work <br> （CRJ，ASB，CMN，ECN，GCU，HIS，SBS，SOC，WST） | 3 | $\square$ |  |  |  |
| Elective Upper Division： | 3 | 区 |  |  |  |
| TERM SEVEN： 91105 CREDIT HOURS |  |  |  |  |  |
| Languages \＆Cultures：Global Awareness（G）or Cultural Diversity （C）if needed ${ }^{2}$ | 3 | 区 |  | Grade of C | －Language and Cultures：see Additional Notes，page 2 |
| POL Upper Division Elective | 3 | 区 |  | Grade of C |  |
| Elective Upper Division | 3 | 区 |  |  |  |
| $\begin{aligned} & \text { Related course work } \\ & \text { (CRJ, ASB, CMN, ECN, GCU, HIS, SBS, SOC, WST) } \end{aligned}$ | 3 | $\square$ |  |  |  |
| Elective | 3 | $\square$ |  |  |  |


| Course Subject and Title <br> (courses in bold/shading are critical) | Hrs. | Upper <br> Division | Transfer <br> Course/Grade | Minimum Grade if <br> Required | Additional Critical Tracking Notes |  |
| :--- | :---: | :---: | :--- | :--- | :--- | :--- |

${ }^{1}$ Upper division equivalents are available: POL 101 or POL 340 , POL 110 or POL 330 , POL 160 or POL 360
 are used.

## Graduation Requirements Summary:

| Total Hours (120) | Total Hrs at ASU <br> $($ minimum 30) | Resident Credit for Academic <br> Recognition (minimum 56) | Major GPA <br> $(2.00$ Min.) | Total UD Hrs <br> (minimum 45) | Total Comm. College <br> Hrs. (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:

New College of Interdisciplinary Arts \& Sciences Requirements:

- 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.
- A minimum of 12 upper-division semester hours in the major must be taken in campus resident credit. No credit is granted toward fulfilling major or minor requirements in any upper-division course in the subject of the major 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 and mathematics by passing an examination or by completing the courses specified below with a grade of "C" 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:

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 General Studies requirements or four (4) sequential semesters of one foreign language or two (2) semesters of a current computer language. Adjustment to upper division hours is required if lower division courses are used.
5. completion of two sequential semesters of coursework in a current computer language

Major Map: Political Science -<br>Bachelor of Science (B.S.)<br>New College of Interdisciplinary Arts and Sciences, West Campus<br>Catalog Year: 2008-2009



Major Map：Political Science－
Bachelor of Science（B．S．）
New College of Interdisciplinary Arts and Sciences，West Campus Catalog Year：2008－2009

| Course Subject and Title （courses in bold／shading are critical） | Hrs． | Upper <br> Division | Transfer Course／Grade | Minimum Grade if Required | Additional Critical Tracking Notes |
| :---: | :---: | :---: | :---: | :---: | :---: |
| TERM EIGHT： $106 \mathbf{1 2 0}$ CREDIT HOURS |  |  |  |  |  |
| POL Upper Division Elective | 3 | 区 |  | Grade of C |  |
| POL Upper Division Elective | 3 | 区 |  | Grade of C |  |
| Elective Upper Division | 3 | 区 |  |  |  |
| Elective Upper Division | 3 | 区 |  |  |  |
| Elective | 3 | $\square$ |  |  |  |

${ }^{1}$ Upper division equivalents are available：POL 101 or POL 340 ，POL 110 or POL 330 ，POL 160 or POL 360
 are used

## Graduation Requirements Summary：

| Total Hours（120） | Total Hrs at ASU <br> $($ minimum 30） | Resident Credit for Academic <br> Recognition（minimum 56） | Major GPA <br> $(2.00$ Min．） | Total UD Hrs <br> （minimum 45） | Total Comm．College <br> Hrs．（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：

New College of Interdisciplinary Arts \＆Sciences Requirements：
－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．
－A minimum of 12 upper－division semester hours in the major must be taken in campus resident credit．No credit is granted toward fulfilling major or minor requirements in any upper－division course in the subject of the major 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 and mathematics by passing an examination or by completing the courses specified below with a grade of＂C＂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：
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 General Studies requirements or four（4）sequential semesters of one foreign language or two（2） semesters of a current computer language．Adjustment to upper division hours is required if lower division courses are used．
5．completion of two sequential semesters of coursework in a current computer language

Major Map：Psychology－Bachelor of Arts（B．A．） New College of Interdisciplinary Arts \＆Sciences，West Campus Catalog Year：2008－2009

|  |  |  | Completed ATP：$\square$ Yes $\square$ No |  | Completed AGEC：$\square$ Yes $\square$ No |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 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： 015 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> －Complete Math（MA）requirement by end of semester 2 <br> －Complete First Year Composition by end of semester 3 <br> －Complete critical courses by end of semester 5 <br> －Minimum 2．0 GPA in critical courses |
| 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 |  |
| PGS 101：Introduction to Psychology（SB） | 3 | $\square$ |  | Grade of C |  |
| EDT 180：Computer Literacy（CS）OR CSE 185：Intro to Web Development（CS） | 3 | $\square$ |  |  |  |
| Global Awareness（G） | 3 | $\square$ |  |  |  |
| General Elective： | 3 | $\square$ |  |  |  |
| TERM TWO： 1630 CREDIT HOURS |  |  |  |  |  |
| MAT 119：Finite Mathematics（MA） | 3 | $\square$ |  | Grade of C | －Complete Math（MA）requirement by end of semester 2 <br> －Complete First Year Composition by end of semester 3 <br> －Complete critical courses by end of semester 5 <br> －Minimum 2．0 GPA in critical courses |
| 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 |  |
| Cultural Diversity in the US（C）： | 3 | $\square$ |  |  |  |
| Social and Behavioral Science（SB）： | 3 | $\square$ |  |  |  |
| Natural Science－Quantitative（SQ）： | 4 | $\square$ |  |  |  |
| TERM THREE： 3145 CREDIT HOURS |  |  |  |  |  |
| PSY 230 （CS）：Introduction to Statistics | 3 | $\square$ |  | Grade of C | －Complete First Year Composition by end of semester 3 <br> －Complete critical courses by end of semester 5 <br> －Minimum 2．0 GPA in critical courses |
| Historical Awareness（H）： | 3 | $\square$ |  |  |  |
| Humanities，Fine Arts，\＆Design（HU）： | 3 | $\square$ |  |  |  |
| Literacy and Critical Inquiry（L）： | 3 | $\square$ |  |  |  |
| Related Field Elective： | 3 | $\square$ |  |  |  |
| TERM FOUR： $46 \mathbf{6 0}$ CREDIT HOURS |  |  |  |  |  |
| PSY 290：Research Methods | 4 | $\square$ |  | Grade of C | －Complete critical courses by end of semester 5 <br> －Minimum 2．0 GPA in critical courses |
| Humanities，Fine Arts，and Design（HU）： | 3 | $\square$ |  |  |  |
| Natural Science Quantitative（SQ）or General（SG） | 4 | $\square$ |  |  |  |
| General Elective： | 3 | $\square$ |  |  |  |
| Related Field Elective： | 3 | $\square$ |  |  |  |
| TERM FIVE： 6175 CREDIT HOURS |  |  |  |  |  |
| Social Development core（select 1） <br> PGS 315：Personality Theory／Research（SB） <br> PGS 341：Developmental Psychology（SB） <br> PGS 350：Social Psychology（SB） | 3 | 区 |  | Grade of C | －Complete critical courses by end of semester 5 <br> －Minimum 2．0 GPA in critical courses |
| Neuroscience core（select 1） PSY 323：Sensation and Perception PSY 324：Memory and Cognition（SB） PSY 325：Physiological Psychology | 3 | 区 |  | Grade of C |  |
| General Elective： | 3 | $\square$ |  |  |  |
| Upper division General Elective： | 3 | 区 |  |  |  |
| Upper division Related Field Elective： | 3 | 区 |  |  |  |
| TERM SIX： $76 \mathbf{9 0}$ CREDIT HOURS |  |  |  |  |  |
| Neuroscience core（select one not taken above） PSY 323，PSY 324，PSY 325，PSY 330，PSY 369 or PSY 470 | 3 | 区 |  | Grade of C |  |
| PGS／PSY course（Cluster list in DARS）： | 3 | 区 |  | Grade of C |  |
| Literacy and Critical Inquiry（L）： | 3 | 区 |  |  |  |
| Related Field Elective： | 3 | $\square$ |  |  |  |
| Upper division General Elective | 3 | 区 |  |  |  |
| TERM SEVEN： 91105 CREDIT HOURS |  |  |  |  |  |
| PGS／PSY course（Cluster list in DARS）： | 3 | 区 |  | Grade of C | －Language and Cultures：see Additional Notes， below |
| PGS／PSY course（Cluster list in DARS）： | 3 | 区 |  | Grade of C |  |
| Language \＆Cultures Global Awareness（G）OR Cultural Diversity（C）： | 3 | 区 |  | Grade of C |  |
| General Elective | 3 | $\square$ |  |  |  |
| Upper division General Elective | 3 | 区 |  |  |  |
| TERM EIGHT： $106 \mathbf{1 2 0}$ CREDIT HOURS |  |  |  |  |  |
| PGS／PSY course（Cluster list in DARS）： | 3 | 区 |  | Grade of C |  |
| Language \＆Cultures Global Awareness（G）OR Cultural Diversity（C）： | 3 | 区 |  | Grade of C |  |
| Upper division General Elective | 3 | 区 |  |  |  |
| Upper division General Elective | 2 | 区 |  |  |  |

## 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:

Psychology Requirement:

- The Psychology major requires two lab science courses. Students can not satisfy the University General Studies Requirement of Natural Science-General (SG) with PSY 290.

New College of Interdisciplinary Arts \& Sciences Requirements

- 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.
- A minimum of 12 upper-division semester hours in the major must be taken in campus resident credit. No credit is granted toward fulfilling major or minor requirements in any upper-division course in the subject of the major 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 and mathematics by passing an examination or by completing the courses specified below with a grade of "C" 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:

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 General Studies requirements or four (4) sequential semesters of one foreign language or two (2) semesters of a current computer language. Adjustment to upper division hours is required if lower division courses are used.
5. completion of two sequential semesters of coursework in a current computer language

Major Map: Psychology - Bachelor of Science (B.S.) New College of Interdisciplinary Arts \& Sciences, West Campus Catalog Year: 2008-2009


## 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:

Psychology Requirement:

- The Psychology major requires two lab science courses; 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.

New College of Interdisciplinary Arts \& Sciences Requirements:

- 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.
- A minimum of 12 upper-division semester hours in the major must be taken in campus resident credit. No credit is granted toward fulfilling major or minor requirements in any upper-division course in the subject of the major 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 and mathematics by passing an examination or by completing the courses specified below with a grade of "C" 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:

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 General Studies requirements or four (4) sequential semesters of one foreign language or two (2) semesters of a current computer language. Adjustment to upper division hours is required if lower division courses are used.
5. completion of two sequential semesters of coursework in a current computer language

## Major Map：Religion \＆Applied Ethics Studies－ <br> Bachelor of Arts（B．A．） <br> New College of Interdisciplinary Arts and Sciences，West Campus Catalog Year：2008－2009

|  |  |  | Completed ATP：$\square$ Yes $\square$ No |  | Completed AGEC：$\square$ Yes $\square$ No |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Course Subject and Title （courses in bold／shading are critical） | Hrs． | Upper <br> Division | Transfer Course／Grade | Minimum Grade if Required | Additional Critical Requirement Notes |
| TERM ONE： 015 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> －Complete Math（MA）requirement by end of semester 3 <br> －Complete First Year Composition by end of semester 3 <br> －Minimum 2．0 GPA in all critical courses |
| 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 |  |
| Computer／Statistics／Quantitative applications（CS） | 3 | $\square$ |  |  |  |
| Cultural Diversity in the US（C） | 3 | $\square$ |  |  |  |
| General elective | 3 | $\square$ |  |  |  |
| General elective | 3 | $\square$ |  |  |  |
| TERM TWO： 1630 CREDIT HOURS |  |  |  |  |  |
| 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 | －Minimum 2．0 GPA in all critical courses |
| Complete one course from： <br> PHI 101：Introduction to Philosophy（HU）or <br> REL 100：Religions of the World（HU \＆G）or <br> Literacy \＆Critical Inquiry（L）（if ENG 101 or equivalent completed） | 3 | $\square$ |  | Grade of C |  |
| Natural Science－Quantitative（SQ） | 4 | $\square$ |  |  |  |
| General elective | 3 | $\square$ |  |  |  |
| General elective | 3 | $\square$ |  |  |  |
| TERM THREE： 3145 CREDIT HOURS |  |  |  |  |  |
| Complete one additional course from： <br> PHI 101：Introduction to Philosophy（HU）or <br> REL 100：Religions of the World（HU \＆G）or <br> Literacy \＆Critical Inquiry（L）（if ENG 101 or equivalent completed） | 3 | $\square$ |  | Grade of C | －First Year Composition Completed <br> －Math requirement（MA）completed <br> －Minimum 2.0 GPA in all critical courses |
| MAT 142：College Mathematics（MA） | 3 | $\square$ |  | Grade of C |  |
| Social／Behavioral Science（SB） | 3 | $\square$ |  |  |  |
| General elective | 3 | $\square$ |  |  |  |
| General elective | 3 | $\square$ |  |  |  |
| TERM FOUR： $46 \mathbf{6 0}$ CREDIT HOURS |  |  |  |  |  |
| Complete remaining course from： <br> PHI 101：Introduction to Philosophy（HU）or REL 100：Religions of the World（HU \＆G）or Literacy \＆Critical Inquiry（L） | 3 | $\square$ |  | Grade of C | －Minimum 2．0 GPA in all critical courses |
| Social \＆Behavioral Science（SB） | 3 | $\square$ |  |  |  |
| Natural Science Quantitative（SQ）or General（SG） | 4 | $\square$ |  |  |  |
| General elective | 3 | $\square$ |  |  |  |
| General elective | 3 | $\square$ |  |  |  |
| TERM FIVE： 6175 CREDIT HOURS |  |  |  |  |  |
| PHI 318：Philosophy of Religion（HU） | 3 | 区 |  |  | －Language and Cultures：see Additional Notes，page 2 |
| REL 310：Western Religious Traditions（HU，H） | 3 | 区 |  |  |  |
| Languages \＆Cultures：Global Awareness（G）or Cultural Diversity（C） if needed | 3 | $\square$ |  |  |  |
| Religion \＆Applied Ethics Studies course | 3 | $\square$ |  |  |  |
| Upper division general elective | 3 | 区 |  |  |  |
| TERM SIX： $76 \mathbf{9 0}$ CREDIT HOURS |  |  |  |  |  |
| REL 300：Research，Writing，and Thinking in Religion and Applied Ethics（L） | 3 | 区 |  |  | －Language and Cultures：see Additional Notes，page 2 |
| Religion \＆Applied Ethics Studies course | 3 | $\square$ |  |  |  |
| Upper division Applied Ethics course（list in DARS） | 3 | 区 |  |  |  |
| Languages \＆Cultures：Global Awareness（G）or Cultural Diversity（C） if needed | 3 | 囚 |  |  |  |
| Upper division general elective | 3 | 区 |  |  |  |
| TERM SEVEN： 91105 CREDIT HOURS |  |  |  |  |  |
| REL 345：Asian Religious Traditions | 3 | 区 |  |  |  |
| REL 484：Internship | 3 | 区 |  |  |  |
| Upper division REL course | 3 | 区 |  |  |  |
| Religion \＆Applied Ethics Studies course | 3 | $\square$ |  |  |  |
| Upper division Applied Ethics course（list in DARS） | 3 | 区 |  |  |  |

Major Map：Religion \＆Applied Ethics Studies－
Bachelor of Arts（B．A．）
New College of Interdisciplinary Arts and Sciences，West Campus Catalog Year：2008－2009

| 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 EIGHT： 106120 CREDIT HOURS |  |  |  |  |  |
| REL 490：Senior Thesis | 3 | 区 |  |  |  |
| Upper division Applied Ethics course（list in DARS） | 3 | 区 |  |  |  |
| Upper division REL course | 3 | 囚 |  |  |  |
| Upper division REL course | 3 | 囚 |  |  |  |

## Graduation Requirements Summary：

| Total Hours（120） | Total Hrs at ASU <br> $($ minimum 30） | Resident Credit for Academic <br> Recognition（minimum 56） | Major GPA <br> $(2.00$ Min．） | Total UD Hrs <br> （minimum 45） | Total Comm．College <br> Hrs．（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：

New College of Interdisciplinary Arts \＆Sciences Requirements：
－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．
－A minimum of 12 upper－division semester hours in the major must be taken in campus resident credit．No credit is granted toward fulfilling major or minor requirements in any upper－division course in the subject of the major 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 and mathematics by passing an examination or by completing the courses specified below with a grade of＂C＂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：
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 General Studies requirements or four（4）sequential semesters of one foreign language or two（2） semesters of a current computer language．Adjustment to upper division hours is required if lower division courses are used．
5．completion of two sequential semesters of coursework in a current computer language

Major Map: Social \& Behavioral Sciences<br>(Behavioral Sciences) - Bachelor of Arts (B.A.)<br>New College of Interdisciplinary Arts \& Sciences, West Campus<br>Catalog Year: 2008-2009



## Graduation Requirements Summary:

| Total Hours (120) | Total Hrs at ASU <br> (minimum 30) | Resident Credit for Academic <br> Recognition (minimum 56) | Major GPA <br> $(2.00$ Min.) | Total UD Hrs <br> (minimum 45) | Total Comm. College <br> Hrs. (maximum 64) |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |

## 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)
- Composition (Comp)


## Additional Notes:

## New College of Interdisciplinary Arts \& Sciences Requirements

- 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.
- A minimum of 12 upper-division semester hours in the major must be taken in campus resident credit. No credit is granted toward fulfilling major or minor requirements in any upper-division course in the subject of the major 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 and mathematics by passing an examination or by completing the courses specified below with a grade of "C" 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:

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 General Studies requirements or four (4) semester hours of a foreign language or two (2) semesters of a current computer language. Adjustment to upper division hours is required if lower division courses are used.
5. completion of two sequential semesters of coursework in a current computer language

Major Map：Social \＆Behavioral Sciences
（Behavioral Sciences）－Bachelor of Science（B．S．）
New College of Interdisciplinary Arts \＆Sciences，West Campus
Catalog Year：2008－2009

|  |  |  | Completed ATP：$\square$ Yes $\square$ No |  | Completed AGEC：$\square$ Yes $\square$ No |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 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： 015 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> －Complete Math（MA）requirement by end of semester 5 <br> －Complete First Year Composition by end of semester 3 <br> －Complete critical courses by end of semester 5 |
| ENG 101 or 107：First－Year Composition and ENG 102 or 108：English／Foreign Students or ENG 105：Advanced First－Year Composition | 3 | $\square$ |  | Grade of C |  |
| Social \＆Behavioral Science（SB）：（PGS 101：Introduction to Psychology recommended） | 3 | $\square$ |  |  |  |
| Humanities，Fine Arts，Design（HU）： | 3 | $\square$ |  |  |  |
| Natural Science Quantitative（SQ）or General（SG）： | 4 | $\square$ |  |  |  |
| Cultural Diversity in the US（C）： | 3 | $\square$ |  |  |  |
| TERM TWO： 1630 CREDIT HOURS |  |  |  |  |  |
| ENG 101 or 107：First－Year Composition and ENG 102 or 108：English／Foreign Students or ENG 105：Advanced First－Year Composition | 3 | $\square$ |  | Grade of C | －Complete Math（MA）requirement by end of semester 5 <br> －Complete First Year Composition by end of semester 3 <br> －Complete critical courses by end of semester 5 |
| Humanities，Fine Arts，and Design（HU）： | 3 | $\square$ |  |  |  |
| Natural Science Quantitative（SQ）： | 4 | $\square$ |  |  |  |
| Historical Awareness（H）： | 3 | $\square$ |  |  |  |
| General Elective： | 3 | $\square$ |  |  |  |
| TERM THREE： 3145 CREDIT HOURS |  |  |  |  |  |
| MAT 142：College Mathematics（MA） | 3 | $\square$ |  | Grade of C | －Complete First Year Composition by end of semester 3 <br> －Complete critical courses by end of semester 5 |
| Related Field Course work（ASB，FAS，GCU，PGS，POL，PSY，SBS，or SOC）： | 3 | $\square$ |  |  |  |
| Literacy and Critical Inquiry（L）： | 3 |  |  |  |  |
| General Elective： | 3 | $\square$ |  |  |  |
| General Elective： | 3 | $\square$ |  |  |  |
| TERM FOUR： 4660 CREDIT HOURS |  |  |  |  |  |
| SBS 300：Interdisciplinary Approaches to Social \＆Behavioral Sciences（SB） | 3 | 区 |  | Grade of C | －Complete critical courses by end of semester 5 |
| Related Field Course work（ASB，FAS，GCU，PGS，POL，PSY，SBS，or SOC）： | 3 | $\square$ |  | Grade of C |  |
| Global Awareness（G）： | 3 | $\square$ |  |  |  |
| General Elective： | 3 | $\square$ |  |  |  |
| General Elective： | 3 | $\square$ |  |  |  |
| TERM FIVE： 6175 CREDIT HOURS |  |  |  |  |  |
| SBS 302：Qualitative Methods | 3 | 区 |  | Grade of C | －Complete critical courses by end of semester 5 |
| SBS 304：Social Statistics（CS） | 3 | 区 |  | Grade of C |  |
| Biological Foundations Course（list in DARS）： | 3 | 区 |  |  |  |
| Individual \＆the Family course（list in DARS）： | 3 | 囚 |  |  |  |
| General Elective： | 3 | $\square$ |  |  |  |
| TERM SIX： 7690 CREDIT HOURS |  |  |  |  |  |
| SBS 404：Social Statistics II | 3 | 区 |  | Grade of C |  |
| Biological Foundations Course（list in DARS）： | 3 | 区 |  | Grade of C |  |
| Upper division Literacy and Critical Inquiry（L）： | 3 | 区 |  |  |  |
| Related Field Course work（ASB，FAS，GCU，PGS，POL，PSY，SBS，or SOC）： | 3 | $\square$ |  |  |  |
| General Elective： | 3 | $\square$ |  |  |  |
| TERM SEVEN： 91105 CREDIT HOURS |  |  |  |  |  |
| SBS 303：Quantitative Methods | 3 | 区 |  | Grade of C | －Language and Cultures：see Additional Notes，below |
| Biological Foundations Course（list in DARS）： | 3 | 区 |  | Grade of C |  |
| Individual \＆the Group Course（list in DARS）： | 3 | 区 |  | Grade of C |  |
| Language \＆Cultures Global Awareness（G）OR Cultural Diversity（C）： | 3 | 区 |  | Grade of C |  |
| General Elective： | 3 | $\square$ |  |  |  |
| TERM EIGHT： $106 \mathbf{1 2 0}$ CREDIT HOURS |  |  |  |  |  |
| Related Field Course work（ASB，FAS，GCU，PGS，POL，PSY，SBS，or SOC）： | 3 | 区 |  | Grade of C | －Language and Cultures：see Additional Notes，below |
| Language \＆Cultures Global Awareness（G）OR Cultural Diversity（C）： | 3 | 区 |  | Grade of C |  |
| Global Awareness（G）OR Cultural Diversity（C）from SBS Department： | 3 | 区 |  | Grade of C |  |
| General Elective： | 3 | $\square$ |  |  |  |

## Graduation Requirements Summary:

| Total Hours (120) | Total Hrs at ASU <br> (minimum 30) | Resident Credit for Academic <br> Recognition (minimum 56) | Major GPA <br> (2.00 Min.) | Total UD Hrs <br> (minimum 45) | Total Comm. College <br> Hrs. (maximum 64) |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |

## 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)
- Composition (Comp)


## Additional Notes:

New College of Interdisciplinary Arts \& Sciences Requirements

- 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.
- A minimum of 12 upper-division semester hours in the major must be taken in campus resident credit. No credit is granted toward fulfilling major or minor requirements in any upper-division course in the subject of the major 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 and mathematics by passing an examination or by completing the courses specified below with a grade of " C " 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:

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 General Studies requirements or four (4) semester hours of a foreign language or two (2) semesters of a current computer language. Adjustment to upper division hours is required if lower division courses are used.
5. completion of two sequential semesters of coursework in a current computer language

Major Map: Social \& Behavioral Sciences
(Social Sciences) - Bachelor of Arts (B.A.)
New College of Interdisciplinary Arts \& Sciences, West Campus
Catalog Year: 2008-2009


Major Map: Social \& Behavioral Sciences
(Social Sciences) - Bachelor of Arts (B.A.)
New College of Interdisciplinary Arts \& Sciences, West Campus
Catalog Year: 2008-2009

## Graduation Requirements Summary:

| Total Hours (120) | Total Hrs at ASU <br> (minimum 30) | Resident Credit for Academic <br> Recognition (minimum 56) | Major GPA <br> $(2.00$ Min.) | Total UD Hrs <br> (minimum 45) | Total Comm. College <br> Hrs. (maximum 64) |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |

## 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)
- Composition (Comp)


## Additional Notes:

## New College of Interdisciplinary Arts \& Sciences Requirements:

- 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.
- A minimum of 12 upper-division semester hours in the major must be taken in campus resident credit. No credit is granted toward fulfilling major or minor requirements in any upper-division course in the subject of the major 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 and mathematics by passing an examination or by completing the courses specified below with a grade of "C" 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:

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 General Studies requirements or four (4) semester hours of a foreign language or two (2) semesters of a current computer language. Adjustment to upper division hours is required if lower division courses are used.
5. completion of two sequential semesters of coursework in a current computer language

Major Map：Social \＆Behavioral Sciences，
（Social Sciences）－Bachelor of Science（B．S．）
New College of Interdisciplinary Arts \＆Sciences，West Campus
Catalog Year：2008－2009

|  |  |  | Completed ATP：$\square$ Yes $\quad \square$ No |  | Completed AGEC：$\square$ Yes $\square$ No |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 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： 015 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> －Complete Math（MA）requirement by end of semester 5 <br> －Complete First Year Composition by end of semester 3 <br> －Complete critical courses by end of semester 5 |
| ENG 101 or 107：First－Year Composition and ENG 102 or 108：English／Foreign Students or ENG 105：Advanced First－Year Composition | 3 | $\square$ |  | Grade of C |  |
| Social \＆Behavioral Science（SB）：（SOC 101：Introduction to Sociology recommended） | 3 | $\square$ |  |  |  |
| Humanities，Fine Arts，Design（HU）： | 3 | $\square$ |  |  |  |
| Historical Awareness（H）： | 3 | $\square$ |  |  |  |
|  | 3 | $\square$ |  |  |  |
| TERM TWO： 1630 CREDIT HOURS |  |  |  |  |  |
| ENG 101 or 107：First－Year Composition and ENG 102 or 108：English／Foreign Students or ENG 105：Advanced First－Year Composition | 3 | $\square$ |  | Grade of C | －Complete Math（MA）requirement by end of semester 5 <br> －Complete First Year Composition by end of semester 3 <br> －Complete critical courses by end of semester 5 |
| Humanities，Fine Arts，and Design（HU）： | 3 | $\square$ |  |  |  |
| Natural Science Quantitative（SQ）or General（SG）： | 4 | $\square$ |  |  |  |
| ```Related Field Course work (ASB, FAS, GCU, PGS, POL, PSY, SBS, or SOC):``` | 3 | $\square$ |  |  |  |
| General Elective： | 3 | $\square$ |  |  |  |
| TERM THREE： 3145 CREDIT HOURS |  |  |  |  |  |
| MAT 142：College Mathematics（MA） | 3 | $\square$ |  | Grade of C | －Complete First Year Composition by end of semester 3 <br> －Complete critical courses by end of semester 5 |
| ```Related Field Course work (ASB, FAS, GCU, PGS, POL, PSY, SBS, or SOC):``` | 3 | $\square$ |  |  |  |
| Global Awareness（G）： | 3 |  |  |  |  |
| Literacy and Critical Inquiry（L）： | 3 | $\square$ |  |  |  |
| General Elective： | 3 | $\square$ |  |  |  |
| TERM FOUR： $46 \mathbf{6 0}$ CREDIT HOURS |  |  |  |  |  |
| SBS 300：Interdisciplinary Approaches to Social \＆ Behavioral Sciences（SB） | 3 | 区 |  | Grade of C | －Complete critical courses by end of semester 5 |
| ```Related Field Course work (ASB, FAS, GCU, PGS, POL, PSY, SBS, or SOC):``` | 3 | $\square$ |  |  |  |
| Natural Science－Quantitative（SQ）： | 4 | $\square$ |  |  |  |
| General Elective： | 3 | $\square$ |  |  |  |
| General Elective： | 3 | $\square$ |  |  |  |
| TERM FIVE： 6175 CREDIT HOURS |  |  |  |  |  |
| SBS 302：Qualitative Methods | 3 | 区 |  | Grade of C | －Complete critical courses by end of semester 5 |
| SBS 304：Social Statistics（CS） | 3 | 区 |  | Grade of C |  |
| SBS 410：Topics in Identity／Difference | 3 | 区 |  |  |  |
| General Elective： | 3 | $\square$ |  |  |  |
| General Elective： | 3 | $\square$ |  |  |  |
| TERM SIX： 7690 CREDIT HOURS |  |  |  |  |  |
| SBS 301：Cultural Diversity（L／SB，C） | 3 | 区 |  | Grade of C |  |
| SBS 303：Quantitative Methods | 3 | 区 |  | Grade of C |  |
| SBS 404：Social Statistics II（CS） | 3 | 区 |  | Grade of C |  |
| Cluster Course（list in DARS）： | 3 | 区 |  |  |  |
| General Elective： | 3 | $\square$ |  |  |  |
| TERM SEVEN： 91105 CREDIT HOURS |  |  |  |  |  |
| SBS 430：Topics in Power／Knowledge（SB） | 3 | 区 |  | Grade of C | －Language and Cultures：see Additional Notes， below |
| Cluster Course（list in DARS）： | 3 | 区 |  | Grade of C |  |
| Language \＆Cultures Global Awareness（G）OR Cultural Diversity（C）： | 3 | 区 |  | Grade of C |  |
| Upper division general elective： | 3 | 区 |  |  |  |
| General Elective： | 3 | $\square$ |  |  |  |
| TERM EIGHT： $106 \mathbf{1 2 0}$ CREDIT HOURS |  |  |  |  |  |
| SBS 450：Topics in Local／Global（SB，G） | 3 | 区 |  | Grade of C | －Language and Cultures：see Additional Notes， below |
| Language \＆Cultures Global Awareness（G）OR Cultural Diversity（C）： | 3 | 区 |  | Grade of C |  |
| Cluster Course（list in DARS）： | 3 | 区 |  | Grade of C |  |
| General Elective： | 3 | $\square$ |  |  |  |

## Graduation Requirements Summary:

| Total Hours (120) | Total Hrs at ASU <br> (minimum 30) | Resident Credit for Academic <br> Recognition (minimum 56) | Major GPA <br> (2.00 Min.) | Total UD Hrs <br> (minimum 45) | Total Comm. College <br> Hrs. (maximum 64) |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |

## 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)
- Composition (Comp)


## Additional Notes:

New College of Interdisciplinary Arts \& Sciences Requirements:

- 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.
- A minimum of 12 upper-division semester hours in the major must be taken in campus resident credit. No credit is granted toward fulfilling major or minor requirements in any upper-division course in the subject of the major 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 and mathematics by passing an examination or by completing the courses specified below with a grade of "C" 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:

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 General Studies requirements or four (4) semester hours of a foreign language or two (2) semesters of a current computer language. Adjustment to upper division hours is required if lower division courses are used.
5. completion of two sequential semesters of coursework in a current computer language

| $\begin{aligned} & \begin{array}{l} \text { Course Subject and Title } \\ \text { (courses in bold/shading are critical) } \end{array} \end{aligned}$ | Hrs． | Upper Division | Transfer Course／Grade | Minimum Grade if Required | Additional Critical Tracking Notes |
| :---: | :---: | :---: | :---: | :---: | :---: |
| TERM EIGHT： $106 \mathbf{1 2 0}$ CREDIT HOURS |  |  |  |  |  |
| SOC Cluster ${ }^{2}$ Upper Division （list in DARS） | 3 | 区 |  | Grade of C |  |
| Related Field course work （ASB，CMN，CRJ，ECN，GCU，PGS，SBS，SOC，WST） | 3 | $\square$ |  |  |  |
| Elective Upper Division | 3 | 区 |  |  |  |
| Elective Upper Division | 3 | 区 |  |  |  |
| Elective | 3 | $\square$ |  |  |  |

${ }^{1}$ Upper division equivalent：SOC 301
${ }^{2}$ Students are required to take one course from three（3）of the four（4）clusters and three additional courses from any of the four clusters．Cluster groups are：Culture \＆Power；Social Conflict \＆Change；Family，Work \＆Community，and Social Inequality．
 are used．

## Graduation Requirements Summary：

| Total Hours（120） | Total Hrs at ASU <br> （minimum 30） | Resident Credit for Academic <br> Recognition（minimum 56） | Major GPA <br> $(2.00$ Min．） | Total UD Hrs <br> （minimum 45） | Total Comm．College <br> Hrs．（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：

New College of Interdisciplinary Arts \＆Sciences Requirements：
－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．
－A minimum of 12 upper－division semester hours in the major must be taken in campus resident credit．No credit is granted toward fulfilling major or minor requirements in any upper－division course in the subject of the major 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 and mathematics by passing an examination or by completing the courses specified below with a grade of＂C＂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：
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 General Studies requirements or four（4）sequential semesters of one foreign language or two（2） semesters of a current computer language．Adjustment to upper division hours is required if lower division courses are used．
5．completion of two sequential semesters of coursework in a current computer language


| Course Subject and Title （courses in bold／shading are critical） | Hrs． | $\begin{aligned} & \hline \text { Upper } \\ & \text { Division } \\ & \hline \end{aligned}$ | Transfer Course／Grade | Minimum Grade if Required | Additional Critical Tracking Notes |
| :---: | :---: | :---: | :---: | :---: | :---: |
| TERM EIGHT： 106120 CREDIT HOURS |  |  |  |  |  |
| SOC Cluster ${ }^{2}$ Upper Division （list in DARS） | 3 | 囚 |  | Grade of C |  |
|  | 3 | $\square$ |  |  |  |
| Language \＆Cultures：Global Awareness（G）or Cultural Diversity（C）${ }^{3}$ | 3 | $\square$ |  |  |  |
| Elective Upper Division | 3 | 区 |  |  |  |
| Elective Upper Division | 3 | 区 |  |  |  |

${ }^{1}$ Upper division equivalent：SOC 301
${ }^{2}$ Students are required to take one course from three（3）of the four（4）clusters and three additional courses from any of the four clusters．Cluster groups are：Culture \＆Power；Social Conflict \＆Change；Family，Work \＆Community，and Social Inequality．
${ }^{3}$ May be substituted with（4）semester hours of a foreign language or two（2）semesters of a current computer language．Adjustment to upper division hours is required if lower division course are used．

## Graduation Requirements Summary：

| Total Hours（120） | Total Hrs at ASU <br> （minimum 30） | Resident Credit for Academic <br> Recognition（minimum 56） | Major GPA <br> （2．00 Min．） | Total UD Hrs <br> （minimum 45） | Total Comm．College <br> Hrs．（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：

New College of Interdisciplinary Arts \＆Sciences Requirements
－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．
－A minimum of 12 upper－division semester hours in the major must be taken in campus resident credit．No credit is granted toward fulfilling major or minor requirements in any upper－division course in the subject of the major 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 and mathematics by passing an examination or by completing the courses specified below with a grade of＂C＂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：
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 General Studies requirements or four（4）sequential semesters of one foreign language or two（2） semesters of a current computer language．Adjustment to upper division hours is required if lower division courses are used．
5．completion of two sequential semesters of coursework in a current computer language

Major Map：Spanish－Bachelor of Arts（B．A．）
New College of Interdisciplinary Arts and Sciences，West Campus Catalog Year：2008－2009

| Course Subject and Title （courses in bold／shading are critical） |  |  | Completed ATP：$\square$ Yes $\quad \square$ No |  | Completed AGEC：$\square$ Yes $\square$ No |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Hrs． | Upper Division | Transfer Course／Grade | Minimum Grade if Required | Additional Critical Tracking Notes |
| TERM ONE： 015 CREDIT HOURS |  |  |  |  |  |
| ASU 101：The ASU Experience | 1 | $\square$ |  |  | ASU 101 is for ASU freshman students only． |
| 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 | Not required of transfer students <br> －An SAT，ACT，Accuplacer，or TOEFL score determines placement into first－year composition |
| SPA 101：Elementary Spanish | 4 | $\square$ |  |  | courses <br> ASU Math Placement Exam score determines |
| MAT 142：College Mathematics or higher（MA） | 3 | $\square$ |  |  | placement in Mathematics course |
| Social／Behavioral Science（SB） | 3 | $\square$ |  |  | －Complete First Year Composition by end of semester 3 <br> －Maintain minimum cumulative ASU GPA of 2.00 |
| TERM TWO： 1630 CREDIT HOURS |  |  |  |  |  |
| 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 | －Maintain minimum cumulative ASU GPA of 2.00 |
| SPA 102：Elementary Spanish | 4 | $\square$ |  | Grade of C |  |
| Social／Behavioral Science（SB） | 3 | $\square$ |  |  |  |
| Computer Literacy（CS） | 3 | $\square$ |  |  |  |
| TERM THREE： 3145 CREDIT HOURS |  |  |  |  |  |
| SPA 201：Intermediate Spanish（G） | 4 | $\square$ |  | Grade of C | Complete First－Year Composition requirement： |
| Cultural Diversity（C） | 3 | $\square$ |  |  | ENG 101 \＆ 102 OR ENG 107 \＆ 108 or 105 |
| Humanities／Fine Arts（HU）or Social／Behavioral Science（SB） | 3 | $\square$ |  |  |  |
| Natural Science－Quantitative（SQ）or General（SG） | 4 | $\square$ |  |  |  |
| Literacy \＆Critical Inquiry（L） （Recommended：PHI 103：Principles of Sound Reasoning） | 3 | $\square$ |  |  |  |
| TERM FOUR： $46 \mathbf{6 0}$ CREDIT HOURS |  |  |  |  |  |
| SPA 202：Intermediate Spanish | 4 | $\square$ |  | Grade of C | Maintain minimum cumulative ASU GPA of |
| Historical Awareness（H） | 3 | $\square$ |  |  |  |
| Humanities／Fine Arts（HU）or Social／Behavioral Science（SB）： | 3 | $\square$ |  |  |  |
| Natural Science－Quantitative（SQ） | 4 | $\square$ |  |  |  |
| Elective（Global Awareness（G）if needed） | 3 | $\square$ |  |  |  |
| TERM FIVE： 6175 CREDIT HOURS |  |  |  |  |  |
| SPA 313：Spanish Conversation and Composition（G）or SPA 315：Spanish Conversation and Composition for Bilinguals | 3 | ® |  | Grade of C |  |
| SPA 325：Introduction to Hispanic Literature（HU） | 3 | 区 |  |  |  |
| Literacy \＆Critical Inquiry Upper Division（L） | 3 | 区 |  |  |  |
| Related Area Lower Division | 2 | $\square$ |  |  |  |
| Related Area Lower Division | 3 | $\square$ |  |  |  |
| TERM SIX： $76 \mathbf{9 0}$ CREDIT HOURS |  |  |  |  |  |
| SPA 314：Spanish Conversation and Composition（G）or <br> SPA 316：Spanish Conversation and Composition for Bilinguals | 3 | 区 |  |  |  |
| SPA 425：Spanish Literature | 3 | 区 |  |  |  |
| Related Area Upper Division | 3 | 区 |  |  |  |
| Related Area Lower Division | 3 | $\square$ |  |  |  |
| Elective Upper Division | 3 | 区 |  |  |  |
| TERM SEVEN： 91105 CREDIT HOURS |  |  |  |  |  |
| SPA 426：Spanish Literature（HU） | 3 | 区 |  |  |  |
| SPA 412：Advanced Conversation and Composition（G） | 3 | 区 |  |  |  |
| SPA 471：Civilization of the Spanish Southwest（L or HU）\＆C or SPA 472：Spanish－American Civilization（HU） | 3 | 区 |  |  |  |
| SPA Elective | 3 | $\square$ |  |  |  |
| Elective Upper Division | 3 | 区 |  |  |  |
| TERM EIGHT： $106 \mathbf{1 2 0}$ CREDIT HOURS |  |  |  |  |  |
| SPA 427：Spanish－American Literature or SPA 428：Spanish－American Literature | 3 | 囚 |  |  |  |
| SPA Upper Division Elective（see Department advisor） | 3 | 区 |  |  |  |
| Related Area Upper Division | 3 | 区 |  |  |  |
| Elective Upper Division | 3 | 区 |  |  |  |
| Elective Upper Division | 3 | 囚 |  |  |  |

Graduation Requirements Summary:

| Total Hours (120) | Total Hrs at ASU <br> $($ minimum 30) | Resident Credit for Academic <br> Recognition (minimum 56) | Major GPA <br> $(2.00$ Min.) | Total UD Hrs <br> (minimum 45) | Total Comm. College <br> Hrs. (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:

New College of Interdisciplinary Arts \& Sciences Requirements:

- 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.
- A minimum of 12 upper-division semester hours in the major must be taken in campus resident credit. No credit is granted toward fulfilling major or minor requirements in any upper-division course in the subject of the major 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 and mathematics by passing an examination or by completing the courses specified below with a grade of "C" 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:

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 General Studies requirements or four (4) sequential semesters of one foreign language or two (2) semesters of a current computer language. Adjustment to upper division hours is required if lower division courses are used.
5. completion of two sequential semesters of coursework in a current computer language

Major Map：Women＇s Studies－Bachelor of Arts（B．A．） New College of Interdisciplinary Arts and Sciences，West Campus Catalog Year：2008－2009

|  |  |  | Completed ATP：$\square$ Yes $\square$ No |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Course Subject and Title （courses in bold／shading are critical） | Hrs． | Upper <br> Division | Transfer Course／Grade | Minimum Grade if Required | Additional Critical Tracking Notes |
| TERM ONE： 015 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> －Complete Math（MA）requirement by end of semester 3 <br> －Complete First Year Composition by end of semester 3 <br> －Complete critical courses by end of semester 5 <br> －Minimum 2．0 GPA in all critical courses |
| 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 |  |
| Computer／Statistics／Quantitative applications（CS） | 3 | $\square$ |  |  |  |
| Humanities／Fine Arts（HU） | 3 | $\square$ |  |  |  |
| Cultural Diversity（C） | 3 | $\square$ |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| TERM TWO： 1630 CREDIT HOURS |  |  |  |  |  |
| 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 | －Minimum 2．0 GPA in all critical courses |
| WST 100：Women and Society（SB，C） | 3 | $\square$ |  | Grade of C |  |
| Science（SQ） | 4 | $\square$ |  |  |  |
| Humanities／Fine Arts（HU） | 3 | $\square$ |  |  |  |
| Historical Awareness（H）： | 3 | $\square$ |  |  |  |
| TERM THREE： 3145 CREDIT HOURS |  |  |  |  |  |
| MAT 142：College Mathematics／or higher（MA） | 3 | $\square$ |  | Grade of C | －Complete First Year Composition requirement： ENG 101 \＆ 102 OR ENG 107 \＆ 108 or 105 <br> －Mathematics（MA）completed <br> －Minimum 2．0 GPA in all critical courses |
| Literacy \＆Critical Inquiry（L） | 3 | $\square$ |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| TERM FOUR： 4660 CREDIT HOURS |  |  |  |  |  |
| WST Representation and Cultural Studies（list in DARS） | 3 | 区 |  | Grade of C | －Minimum 2．0 GPA in all critical courses |
| WST Elective Upper Division | 3 | 区 |  |  |  |
| Science（SQ／SG） | 4 | $\square$ |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| TERM FIVE： 6175 CREDIT HOURS |  |  |  |  |  |
| WST 350：Race，Class，and Gender（SB，C） | 3 | 区 |  | Grade of C | －Minimum 2．0 GPA in all critical courses <br> －All critical courses completed |
| WST 457：Women，Cultures，and Societies（SB，G） | 3 | 区 |  | Grade of C |  |
| WST Related Course work | 3 | $\square$ |  |  |  |
| Elective Upper Division | 3 | 区 |  |  |  |
| Elective Upper Division | 3 | 区 |  |  |  |
| TERM SIX： $76 \mathbf{9 0}$ CREDIT HOURS |  |  |  |  |  |
| WST 376：Feminist Theory（H \＆C） | 3 | 区 |  | Grade of C |  |
| WST Global Perspective Course（list in DARS） | 3 | 区 |  | Grade of C |  |
| WST Related Course work，Upper Division | 3 | 区 |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| Elective Upper Division | 3 | 区 |  |  |  |
| TERM SEVEN： 91105 CREDIT HOURS |  |  |  |  |  |
| WST Gender Studies Course（list in DARS） | 3 | $\square$ |  | Grade of C |  |
| WST Related Course work：Upper Division | 3 | 区 |  |  |  |
| WST Elective Upper Division | 3 | 区 |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| TERM EIGHT： 106120 CREDIT HOURS |  |  |  |  |  |
| WST 498：Pro－Seminar：Theory and Method in Women＇s Studies（L） | 3 | 区 |  | Grade of C |  |
| WST Applied Women＇s Studies Course Work | 3 | 区 |  |  |  |
| WST Related Course work Upper Division | 3 | 区 |  |  |  |
| Elective | 3 | $\square$ |  |  |  |

Achievement of a Foreign Language may be accomplished by substitution of four（4）general electives．
Adjustment to upper division hours is required if lower division courses are used．

## Graduation Requirements Summary:

| Total Hours (120) | Total Hrs at ASU <br> (minimum 30) | Resident Credit for Academic <br> Recognition (minimum 56) | Major GPA <br> (2.00 Min.) | Total UD Hrs <br> (minimum 45) | Total Comm. College <br> Hrs. (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:

New College of Interdisciplinary Arts \& Sciences Requirements:

- 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.
- A minimum of 12 upper-division semester hours in the major must be taken in campus resident credit. No credit is granted toward fulfilling major or minor requirements in any upper-division course in the subject of the major 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 and mathematics by passing an examination or by completing the courses specified below with a grade of "C" 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:

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 General Studies requirements or four (4) sequential semesters of one foreign language or two (2) semesters of a current computer language. Adjustment to upper division hours is required if lower division courses are used.
5. completion of two sequential semesters of coursework in a current computer language

## Graduation Requirements Summary:

| Total Hours (120) | Total Hrs at ASU <br> (minimum 30) | Resident Credit for Academic <br> Recognition (minimum 56) | Major GPA <br> $(2.00$ Min.) | Total UD Hrs <br> (minimum 45) | Total Comm. College <br> Hrs. (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:

New College of Interdisciplinary Arts \& Sciences Requirements:

- 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.
- A minimum of 12 upper-division semester hours in the major must be taken in campus resident credit. No credit is granted toward fulfilling major or minor requirements in any upper-division course in the subject of the major 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 and mathematics by passing an examination or by completing the courses specified below with a grade of "C" 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:

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 ( $\mathbf{G}$ ) or Cultural Diversity (C) designation, in addition to the courses used to meet the University General Studies requirements or four (4) sequential semesters of one foreign language or two (2) semesters of a current computer language. Adjustment to upper division hours is required if lower division courses are used.
5. completion of two sequential semesters of coursework in a current computer language

## Major Map：Nursing－

Bachelor of Science in Nursing（B．S．N．）
College of Nursing and Healthcare Innovation，Downtown Phoenix Campus Catalog Year：2008－2009

|  |  |  | Completed ATP：$\square$ Yes $\quad \square$ No |  | Completed AGEC：$\square$ Yes $\square$ No |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 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： 015 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> －All critical courses must be completed by the end of term 4 <br> －Minimum 2.75 cumulative GPA in all critical courses <br> －Minimum 2．75 ASU cumulative GPA <br> －Complete First－Year Composition by end of term 3 <br> －Complete MAT 142 by end of term 3 |
| Complete one course from： <br> CHM 101：Introductory Chemistry（SQ） <br> BIO 201：Human Anatomy \＆Physiology I（SG） | 4 | $\square$ |  | Grade of C |  |
| MAT 142：College Mathematics（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 | $\square$ |  | Grade of C |  |
| Complete one course from： <br> CDE 232：Human Development（SB） <br> HCR 220：Healthcare Organizations（H） <br> HCR 230：Culture and Health（C，G） <br> PGS 101：Introduction to Psychology（SB） | 3 | $\square$ |  | Grade of C |  |
| TERM TWO： 1630 CREDIT HOURS |  |  |  |  |  |
| Complete one additional course from： <br> CHM 101：Introductory Chemistry（SQ） <br> BIO 201：Human Anatomy Physiology I（SG） <br> BIO 202：Human Anatomy \＆Physiology II <br> MIC 205：Microbiology \＆MIC 206：Microbiology Lab | 4 | $\square$ |  | Grade of C | －All critical courses must be completed by the end of term 4 <br> －Minimum 2.75 cumulative GPA in all critical courses <br> －Minimum 2．75 ASU cumulative GPA <br> －Complete First－Year Composition by end of term 3 <br> －Complete MAT 142 by end of term 3 |
| 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 |  |
| Complete two（2）additional courses from： <br> CDE 232：Human Development（SB） <br> HCR 220：Healthcare Organizations（H） <br> HCR 230：Culture and Health（C，G） <br> NTR 241：Human Nutrition（if CHM 101 completed） <br> PGS 101：Introduction to Psychology（SB） <br> PHI 103：Principles of Sound Reasoning（L）（if ENG 101 completed） | 3 | $\square$ $\square$ |  | Grade of C <br> Grade of C |  |
| Complete 1 course from： <br> Humanities，Fine Arts \＆Design（HU）OR <br> Social Behavioral Science（SB） | 3 | $\square$ |  | Grade of C |  |
| TERM THREE： 3145 CREDIT HOURS |  |  |  |  |  |
| Complete remaining courses from： <br> CHM 101：Introductory Chemistry（SQ）or <br> BIO 201：Human Anatomy Physiology I（SG）or <br> BIO 202：Human Anatomy \＆Physiology II <br> MIC 205：Microbiology \＆MIC 206：Microbiology Lab | 4 | $\square$ $\square$ |  | Grade of C <br> Grade of C | －All critical courses must be completed by the end of term 4 <br> －Minimum 2.75 cumulative GPA in all critical courses <br> －Minimum 2．75 ASU cumulative GPA <br> －Complete First－Year Composition by end of term 3 <br> －Complete MAT 142 by end of term 3 <br> －Submit materials for advancement review－ recommended |
| Complete one（1）additional courses from： CDE 232：Human Development（SB） HCR 210：Clinical Healthcare Ethics（HU） HCR 220：Healthcare Organizations（H） HCR 230：Culture and Health（C，G） <br> NTR 241：Human Nutrition PGS 101：Introduction to Psychology（SB） PHI 103：Principles of Sound Reasoning（L） | 3 3 | $\square$ $\square$ |  | Grade of C <br> Grade of C |  |
| Statistics（CS）course | 3 | $\square$ |  | Grade of C |  |
| TERM FOUR： $46 \mathbf{6 0}$ CREDIT HOURS |  |  |  |  |  |
| HCR 240：Human Pathophysiology | 4 | $\square$ |  | Grade of C | －All critical courses must be completed by the end of term 4 <br> －Minimum 2.75 cumulative GPA in all critical courses <br> －Minimum 2．75 ASU Cumulative GPA <br> －Successful completion of requirements for advancement to upper division Nursing program （see details in Additional Notes below） |
| Complete three（3）remaining courses from： <br> CDE 232：Human Development（SB） <br> HCR 210：Clinical Healthcare Ethics <br> HCR 220：Healthcare Organizations（H） <br> HCR 230：Culture and Health（C，G） <br> NTR 241：Human Nutrition <br> PGS 101：Introduction to Psychology（SB） <br> PHI 103：Principles of Sound Reasoning（L） | 3 |  |  | Grade of C <br> Grade of C <br> Grade of C |  |
| TERM FIVE： 6578 CREDIT HOURS |  |  |  |  |  |
| NUR 341：Theory I：Health Integrity | 4 | 区 |  | Grade of C | －Maintain 2.0 minimum cumulative ASU GPA |
| NUR 351：Pharmacology in Nursing | 3 | 区 |  | Grade of C |  |
| NUR 361：Professional Development I（HU） | 2 | 区 |  | Grade of C |  |
| NUR 381：Nursing Practice I | 7 | 区 |  | Grade of C |  |


| Course Subject and Title （courses in bold／shading are critical） | Hrs． | $\begin{aligned} & \hline \text { Upper } \\ & \text { Division } \\ & \hline \end{aligned}$ | Transfer Course／Grade | Minimum Grade if Required | Additional Critical Requirement Notes |
| :---: | :---: | :---: | :---: | :---: | :---: |
| TERM SIX： $79 \mathbf{9 2}$ CREDIT HOURS |  |  |  |  |  |
| NUR 342：Theory II：Health Integrity and Alterations | 5 | 囚 |  | Grade of C | －Maintain 2.0 minimum cumulative ASU GPA |
| NUR 362：Research Methods（L） | 3 | 区 |  | Grade of C |  |
| NUR 382：Nursing Practice II | 7 | 区 |  | Grade of C |  |
| TERM SEVEN： 93106 CREDIT HOURS |  |  |  |  |  |
| NUR 461：Professional Development III：The Art of Nursing | 3 | 区 |  | Grade of C | －Maintain 2.0 minimum cumulative ASU GPA |
| NUR 441：Theory III：Health Integrity and Alterations | 6 | 区 |  | Grade of C |  |
| NUR 481：Nursing Practice III | 7 | 区 |  | Grade of C |  |
| TERM EIGHT： 107120 CREDIT HOURS |  |  |  |  |  |
| NUR 442：Theory IV：Health Integrity and Alterations | 3 | 区 |  | Grade of C | －Maintain 2.0 minimum cumulative ASU GPA |
| NUR 443：Theory V：Leadership and Management | 3 | 区 |  | Grade of C |  |
| NUR 462：Professional Development IV | 2 | 区 |  | Grade of C |  |
| NUR 482：Nursing Practice IV | 8 | 区 |  | Grade of C |  |

## 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：

Advancement to upper division nursing program：
In order to advance into the upper division Nursing program，students must submit the following materials by the corresponding deadline dates（July 1 for Spring／January consideration，or December 1 for Fall／August consideration）：
－$\quad 13$ or 17 critical courses completed with minimum grades of C
－Earn＞． 65 in mathematics and＞． 60 in reading on Nurses Entrance Test（NET）
－Write essay during NET testing time
－Signed＂Essential Functional Abilities of the Undergraduate Nursing Student＂
－Signed＂Academic Responsibility and Advancement Disclaimer＂
－Signed＂Consent to Release Health and Immunization Information＂
－Proof of fee for fingerprint clearance card
－Proof of Measles，Mumps，and Rubella immunity
－Proof of a Tetanus／Diphtheria（Td）vaccine within the past ten（10）years
－Proof of Varicella immunity（Chicken Pox）
－Proof of a current negative TB（tuberculosis）skin test．If the skin test is positive，proof of follow－up treatment
－Proof of completion of the first Hepatitis B vaccine in the series of 3 inoculations．
All students meeting the minimum critical and milestone requirements outlined above will be assigned an Upper Division Nursing Program Score reflecting the sum of the Critical Requirement Course GPA，the scores on the 2 parts of the NET，and the score on the essay．Due to clinical space limitations，not all students meeting the minimum qualifications will secure a space in the Upper Division Nursing Program．Those who do not secure a space should meet with their academic advisor to discuss academic options．

Upon notification of successful advancement to the upper division Nursing program，students must submit the following to remain eligible：
－All transfer coursework must be received by the ASU Registrar＇s office
－Proof of Level C CPR card
－Proof of fingerprint clearance card
－Proof of a negative drug screen
－Proof of completion of 3 inoculations of Hepatitis B．
－Proof of health exam and functional abilities

Major Map : Criminal Justice \& Criminology Bachelor of Science (B.S.)
College of Public Programs
Catalog Year: 2008-2009


Major Map : Criminal Justice \& Criminology -
Bachelor of Science (B.S.)
College of Public Programs
Catalog Year: 2008-2009

## Graduation Requirements Summary:

| Total Hours (120) | Total Hrs at ASU <br> (minimum 30) | Resident Credit for Academic <br> Recognition (minimum 56) | Major GPA <br> (2.50 Min.) | Total UD Hrs <br> (minimum 45) | Total Comm. College <br> Hrs. (maximum 64) |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |

General University Requirements: Legend

- General Studies Core Requirements:

$$
\begin{array}{ll}
\circ & \text { Literacy and Critical Inquiry (L) } \\
\circ & \text { Mathematical Studies (MA) } \\
\circ & \text { Computer/Statistics/Quantitative applications (CS) } \\
\circ & \text { Humanities, Fine Arts, and Design (HU) } \\
\circ & \text { Social and Behavioral Sciences (SB) } \\
\circ & \text { Natural Science-Quantitative (SQ) } \\
\circ & \text { Natural Science-General (SG) }
\end{array}
$$

- General Studies Awareness Requirements
- Cultural Diversity in the US (C)
- Global Awareness (G)
- Historical Awareness (H)
- First-Year Composition

Additional Notes:

Major Map : Nonprofit Leadership \& Management Bachelor of Science (B.S.)<br>College of Public Programs, Downtown Phoenix Campus<br>Catalog Year: 2008-2009



# Major Map : Nonprofit Leadership \& Management - 

Bachelor of Science (B.S.)
College of Public Programs, Downtown Phoenix Campus
Catalog Year: 2008-2009

## Graduation Requirements Summary:

| Total Hours (120 <br> minimum) | Total Hrs at ASU (30 <br> minimum) | Hrs Resident Credit for Academic <br> 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:

$$
\begin{array}{ll}
\circ & \text { Literacy and Critical Inquiry (L) } \\
\circ & \text { Mathematical Studies (MA) } \\
\circ & \text { Computer/Statistics/Quantitative applications (CS) } \\
\circ & \text { Humanities, Fine Arts, and Design (HU) } \\
\circ & \text { Social and Behavioral Sciences (SB) } \\
\circ & \text { Natural Science-Quantitative (SQ) } \\
\circ & \text { Natural Science-General (SG) }
\end{array}
$$

- General Studies Awareness Requirements
- Cultural Diversity in the US (C)
- Global Awareness (G)
- Historical Awareness (H)
- First Year Composition

Additional Notes:

Major Map: Parks \& Recreation Management Bachelor of Science (B.S.)
College of Public Programs, Downtown Phoenix Campus
Catalog Year: 2008-2009

## Graduation Requirements Summary:

| Total Hours (120 <br> minimum) | Total Hrs at ASU (30 <br> minimum) | Hrs Resident Credit for Academic <br> 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:

Major Map: Social Work -<br>Bachelor of Social Work (B.S.W.)<br>College of Public Programs Downtown, Phoenix Campus<br>Catalog Year: 2008-2009



Major Map：Social Work－
Bachelor of Social Work（B．S．W．）
College of Public Programs Downtown，Phoenix Campus Catalog Year：2008－2009

| Course Subject and Title （courses in bold／shading are critical） | Hrs． | Upper Division | Transfer Course／Grade | $\begin{aligned} & \text { Minimum Grade if } \\ & \text { Required } \end{aligned}$ | Additional Critical Requirement Notes |
| :---: | :---: | :---: | :---: | :---: | :---: |
| TERM FIVE： 6175 CREDIT HOURS |  |  |  |  |  |
| Complete all remaining courses from： <br> －ECN 211：Macroeconomics Principles（or SWU 194：Economic Social Issues Perspective） <br> －PGS 101：Introduction to Psychology（SB）（or SOC 101： Introduction to Sociology（SB） <br> －PHI 101：Introduction to Philosophy（HU）（or 105：Introduction to Ethics or 306：Applied Ethics（HU） <br> －SWU 171：Intro to Social Work（SB，H） <br> －SWU 291：Social Service Delivery Systems <br> －SWU 295：Foundations of Social Work Practice（SB，C） <br> －SWU 303：Micro Human Behavior in Social Environment（L） | 3 | 区 |  | $\begin{aligned} & \text { Grade of C in SWU } \\ & 171,291,295,303 \\ & \hline \end{aligned}$ | －Minimum 2.75 cumulative GPA for SWU 171， 291，295，301，and 310. <br> －ASU cumulative GPA of 2.5 or higher <br> －MILESTONE－Successful submission and review of： <br> －Statement of Educational and Career Goals． <br> Two approved letters of reference Documented completion of 240 hours of human services experience． |
| SWU 310：Social Work Practice I | 3 | 囚 |  | Grade of C |  |
| SWU 321 Statistics for Social Workers（preferred）or any other（CS） statistics course | 3 | $\square$ |  |  |  |
| SWU 320 Research Methods for Social Workers | 3 | 区 |  | Grade of C |  |
| Approved non－English or Sign Language course or if completed，take Elective | 4 | $\square$ |  |  |  |
| TERM SIX： $76 \mathbf{9 0}$ CREDIT HOURS |  |  |  |  |  |
| SWU 340：Human Behavior in the Social Environment I（SB） | 3 | 区 |  | Grade of C |  |
| SWU 374：Diversity and Oppression in a Social Work Context | 3 | 区 |  | Grade of C |  |
| BIO 201：Human Physiology \＆Anatomy I（SG） | 4 | $\square$ |  |  |  |
| Upper Division Elective | 3 | 区 |  |  |  |
| Upper Division Elective | 3 | 区 |  |  |  |
| TERM SEVEN： 91105 CREDIT HOURS |  |  |  |  |  |
| SWU 332：Social Policy and Service | 3 | 区 |  | Grade of C |  |
| SWU 410：Social Work Practice II | 3 | 区 |  | Grade of C |  |
| SWU 412：Field Instruction I | 3 | 区 |  | Grade of C |  |
| SWU 413：Field Instruction Seminar | 3 | 区 |  | Grade of C |  |
| Elective | 3 | $\square$ |  |  |  |
| TERM EIGHT： 106120 CREDIT HOURS |  |  |  |  |  |
| SWU 411：Social Work Practice III | 3 | 区 |  | Grade of C |  |
| SWU 414：Field Instruction Seminar | 3 | 区 |  | Grade of C |  |
| SWU 415：Integrative Field Seminar | 3 | 囚 |  | Grade of C |  |
| SWU 442：Intro to Practice with Children and Families or SWU 444：Issues in School Social Work | 3 | 区 |  | Grade of C |  |
| Elective | 2 | $\square$ |  |  |  |

Graduation Requirements Summary：

| Total Hours（120 <br> minimum） | Total Hrs at ASU（30 <br> minimum） | Hrs Resident Credit for Academic <br> 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

Major Map: Tourism Development \& Management Bachelor of Science (B.S.)<br>College of Public Programs, Downtown Phoenix Campus<br>Catalog Year: 2008-2009



Major Map: Tourism Development \& Management Bachelor of Science (B.S.)<br>College of Public Programs, Downtown Phoenix Campus<br>Catalog Year: 2008-2009

## Graduation Requirements Summary:

| Total Hours (120 <br> minimum) | Total Hrs at ASU (30 <br> minimum) | Hrs Resident Credit for Academic <br> 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:

Major Map: Urban \& Metropolitan Studies Bachelor of Arts (B.A.)
College of Public Programs, Downtown Phoenix Campus Catalog Year: 2008-2009


Major Map: Urban \& Metropolitan Studies -
Bachelor of Arts (B.A.)
College of Public Programs, Downtown Phoenix Campus
Catalog Year: 2008-2009

| Course Subject and Title <br> (courses in bold/shading are critical) | Hrs. | Upper <br> Division | Transfer <br> Course/Grade | Minimum Grade if <br> Required | Additional Critical Tracking Notes |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |

## Graduation Requirements Summary:

| Total Hours (120 <br> minimum) | Total Hrs at ASU (30 <br> minimum) | Hrs Resident Credit for Academic <br> 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:

| $\circ$ | 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) |
| $\circ$ | 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:

## Major Map: Urban \& Metropolitan Studies Bachelor of Science (B.S.) <br> College of Public Programs, Downtown Phoenix Campus <br> Catalog Year: 2008-2009



Major Map：Urban \＆Metropolitan Studies－ Bachelor of Science（B．S．）<br>College of Public Programs，Downtown Phoenix Campus<br>Catalog Year：2008－2009

| 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 SIX： 7690 CREDIT HOURS |  |  |  |  |  |
| URB 302：Urban Research II | 3 | 区 |  | Grade of C |  |
| Upper division Literacy and Critical Inquiry（L） | 3 | 区 |  |  |  |
| URB Related | 3 | $\square$ |  |  |  |
| URB Related | 3 | $\square$ |  |  |  |
| Upper division elective | 3 | 区 |  |  |  |
| TERM SEVEN： 91105 CREDIT HOURS |  |  |  |  |  |
| URB 400：Senior Professional Seminar | 3 | 区 |  | Grade of C |  |
| URB 410：Urban Leadership and Collaborative Skills | 3 | 区 |  | Grade of C |  |
| Upper division URB Related | 3 | 区 |  |  |  |
| Upper division URB Related | 3 | 区 |  |  |  |
| Upper division elective | 3 | 区 |  |  |  |
| TERM EIGHT： 106120 CREDIT HOURS |  |  |  |  |  |
| URB 484：Internship＊ | 3－6＊ | 区 |  |  | ＊A minimum of 3 hours much be taken in each： |
| Upper division URB Related＊ | 6－3＊ | 区 |  |  | URB 484 and upper division URB Related．The |
| Upper division Elective | 3 | 囚 |  |  | remaining 6 hours can be from either requirement for a total of 12 hours． |

## Graduation Requirements Summary：

| Total Hours（120 <br> minimum） | Total Hrs at ASU（30 <br> minimum） | Hrs Resident Credit for Academic <br> 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

Major Map：Sustainability－Bachelor of Arts（B．A．）
School of Sustainability，Tempe Campus
Catalog Year：2008－2009

| Course Subject and Title （courses in bold／shading are critical） | Hrs． | Upper Division | Transfer Course／Grade | Minimum Grade if Required | Additional Critical Requirements Notes |
| :---: | :---: | :---: | :---: | :---: | :---: |
| TERM SIX： 7690 CREDIT HOURS |  |  |  |  |  |
| SOS Elective（Major Course）（must be a 400 －level course） | 3 | 区 |  | Grade of C | － 9 （out of 12 ）must be completed from SOS 320－ 326 by end of term 6；one of these courses must be related to the student＇s track（SOS 324－326） <br> － 2.5 cumulative GPA in all SOS major courses |
| Humanities，Fine Arts，and Design（HU） | 3 | $\square$ |  |  |  |
| Social and Behavioral Sciences（SB） | 3 | $\square$ |  |  |  |
| Upper division General Elective | 3 | 区 |  |  |  |
| Upper division General Elective | 3 | 区 |  |  |  |
| TERM SEVEN： 91105 CREDIT HOURS |  |  |  |  |  |
| SOS 484：Sustainability Internship or SOS 494：Sustainability Workshop／Service Learning（Major Course） | 3 | 区 |  | Grade of C | － 2.5 cumulative GPA in all SOS major courses |
| Humanities，Fine Arts，and Design（HU）or Social and Behavioral Sciences（SB） | 3 | $\square$ |  |  |  |
| Upper division Humanities，Fine Arts，and Design（HU）or Social and Behavioral Sciences（SB） | 3 | 区 |  |  |  |
| Historical Awareness（H） | 3 | 区 |  |  |  |
| Cultural Diversity in the United States（C） | 3 | $\square$ |  |  |  |
| TERM EIGHT： 106120 CREDIT HOURS |  |  |  |  |  |
| Complete 1 additional Major Course from： <br> －SOS 320：Society and Sustainability <br> －SOS 321：Policy and Governance in Sustainable Systems <br> －SOS 322：International Development and Sustainability <br> －SOS 323：Sustainable Urban Dynamics <br> －SOS 324：Sustainable Energy，Materials，and Technology <br> －SOS 325：The Economics of Sustainability <br> －SOS 326：Sustainable Ecosystems | 3 | 区 |  | Grade of C | － 2.5 cumulative GPA in all SOS major courses |
| Challenge Area Elective（Major Course） <br> Please see an advisor to determine which electives can be taken | 3 | 区 |  | Grade of C |  |
| Upper division General Elective | 3 | 区 |  |  |  |
| General Elective | 2 | $\square$ |  |  |  |

## Graduation Requirements Summary：

| Total Hours <br> $(120$ minimum $)$ | Total Hrs at ASU <br> $(30$ minimum $)$ | Hrs Resident Credit for <br> Academic Recognition <br> $(56$ minimum $)$ | Total UD Hrs <br> $(45$ minimum $)$ | Total Comm．College <br> Hrs． <br> $(64$ maximum $)$ | Cumulative ASU GPA <br> $(2.00$ minimum $)$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  | SOS Major courses <br> cumulative GPA（2．50 <br> 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）
－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 major in sustainability consists of at least 45 semester hours in sustainability－related courses，of which at least 24 semester hours must be in upper－division courses． Upper－division courses are courses numbered at the 300 and 400 level．

Students pursuing a B．A．in Sustainability can choose from the following four tracks：
－Society and Sustainability
－Policy and Governance in Sustainable Systems
－International Development and Sustainability
－Sustainable Urban Dynamics
Students should meet with an advisor to determine which courses to take within the track they are pursuing．The track will determine which related disciplinary courses， challenge area courses，and challenge area electives the student will take．

Major Map: Sustainability - Bachelor of Science (B.S.)
School of Sustainability, Tempe Campus
Catalog Year: 2008-2009


| Course Subject and Title （courses in bold／shading are critical） | Hrs． | Upper Division | Transfer Course／Grade | Minimum Grade if Required | Additional Critical Requirements Notes |
| :---: | :---: | :---: | :---: | :---: | :---: |
| TERM SIX： $76 \mathbf{9 0}$ CREDIT HOURS |  |  |  |  |  |
| SOS Elective（Major Course）（must be a 400 －level course） | 3 | 区 |  | Grade of C | － 9 （out of 12 ）must be completed from SOS 320－326 by end of term 6 ；one of these courses must be related to the student＇s track（SOS 324－326） <br> － 2.5 cumulative GPA in all SOS major courses |
| Humanities，Fine Arts，and Design（HU） | 3 | $\square$ |  |  |  |
| Social and Behavioral Sciences（SB） | 3 | $\square$ |  |  |  |
| General Elective（s） | 2－4 | $\square$ |  |  |  |
| TERM SEVEN： 91105 CREDIT HOURS |  |  |  |  |  |
| SOS 484：Sustainability Internship or <br> SOS 494：Sustainability Workshop／Service Learning（Major Course） | 3 | 区 |  | Grade of C | － 2.5 cumulative GPA in all SOS major courses |
| Humanities，Fine Arts，and Design（HU）or Social and Behavioral Sciences（SB） | 3 | $\square$ |  |  |  |
| Upper division Humanities，Fine Arts，and Design（HU）or Social and Behavioral Sciences（SB） | 3 | 区 |  |  |  |
| Historical Awareness（H） | 3 | $\square$ |  |  |  |
| Upper division General Elective | 3 | 区 |  |  |  |
| TERM EIGHT： $106 \mathbf{1 2 0}$ CREDIT HOURS |  |  |  |  |  |
| Complete 1 additional Major Course from： <br> －SOS 320：Society and Sustainability <br> －SOS 321：Policy and Governance in Sustainable Systems <br> －SOS 322：International Development and Sustainability <br> －SOS 323：Sustainable Urban Dynamics <br> －SOS 324：Sustainable Energy，Materials，and Technology <br> －SOS 325：The Economics of Sustainability <br> －SOS 326：Sustainable Ecosystems | 3 | 区 |  | Grade of C | － 2.5 cumulative GPA in all SOS major courses |
| Challenge Area Elective（Major Course） <br> Please see an advisor to determine which electives can be taken | 3 | 区 |  | Grade of C |  |
| Upper division General Elective | 3 | 区 |  |  |  |
| Upper division General Elective | 3 | 区 |  |  |  |
| Upper division General Elective | 3 | 区 |  |  |  |

## Graduation Requirements Summary：

| Total Hours <br> $(120$ minimum $)$ | Total Hrs at ASU <br> （30 minimum） | Hrs Resident Credit for <br> Academic Recognition <br> $(56$ minimum） | Total UD Hrs <br> $(45$ minimum） | Total Comm．College <br> Hrs． <br> $(64$ maximum $)$ | Cumulative ASU GPA <br> $(2.00$ minimum） |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  | SOS Major courses <br> cumulative GPA（2．50 <br> 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）
－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 major in sustainability consists of at least 45 semester hours in sustainability－related courses，of which at least 24 semester hours must be in upper－division courses．Upper－ division courses are courses numbered at the 300 and 400 level．

Students pursuing a B．S．in Sustainability can choose from the following three tracks：
－Sustainable Energy，Materials，and Technology
－Economics of Sustainability
－Sustainable Ecosystems
Students should meet with an advisor to determine which courses to take within the track they are pursuing．The track will determine which related disciplinary courses， challenge area courses，and challenge area electives the student will take．

Major Map: Early Childhood Teaching \& Leadership Bachelor of Arts in Education (B.A.E.)
College of Teacher Education and Leadership, Downtown and West campuses Catalog Year: 2008-2009


## Graduation Requirements Summary:

| Total Hours <br> $(120$ minimum $)$ | Total Hrs at ASU <br> $(30$ minimum $)$ | Hrs Resident Credit for Academic <br> Recognition ( 56 minimum) | Major GPA <br> $(2.00$ Min. $)$ | Total UD Hrs <br> $(45$ minimum $)$ | Total Comm. College <br> Hrs. (64 maximum) |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |

General University Requirements: Legend

- General Studies Core Requirements:
- Literacy and Critical Inquiry (L) (6 credit hours)
- Mathematical Studies (MA) (3 credit hours)
- Computer/Statistics/Quantitative applications (CS) (3 credit hours)
- Humanities, Fine Arts, and Design (HU) (6-9 credit hours)
- Social and Behavioral Sciences (SB) (6-9 credit hours)
- Natural Science-Quantitative (SQ) (4-8 credit hours) (cumulative SQ/SG credit must equal 8 credit hours)
- Natural Science-General (SG) (0-4 credit hours) (cumulative SQ/SG credit must equal 8 credit hours)
- General Studies Awareness Requirements
- Cultural Diversity in the US (C) (3 credit hours) (may be combined with other general studies requirements.)
- Global Awareness (G) (3 credit hours) (may be combined with other general studies requirements.)
- Historical Awareness (H) (3 credit hours) (may be combined with other general studies requirements.)
- First-Year Composition (ENG 101 \& 102 OR ENG 107 \& 108 or ENG 105)

The requirements outlined on this major map meet ASU's graduation requirements for this catalog year and major; however, certification requirements are determined by the Arizona Department of Education (ADE) and are subject to change. Occasionally, additional courses, which are not outlined on this major map, may be required to obtain certification and/or an Institutional Recommendation. It is highly recommended that you speak with your advisor regarding any certification updates or changes.

Major Map: Elementary Education - Bachelor of Arts in Education (B.A.E.)<br>College of Teacher Education and Leadership, West and Downtown campuses Catalog Year: 2008-2009



Major Map: Elementary Education - Bachelor of Arts in Education (B.A.E.)
College of Teacher Education and Leadership, West and Downtown campuses
Catalog Year: 2008-2009

Graduation Requirements Summary:

| Total Hours <br> $(120$ minimum $)$ | Total Hrs at ASU <br> $(30$ minimum $)$ | Hrs Resident Credit for Academic <br> Recognition $(56$ minimum $)$ | Major GPA <br> $(2.00$ Min. $)$ | Total UD Hrs <br> $(45$ minimum $)$ | Total Comm. College <br> Hrs. ( 64 maximum $)$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |

## General University Requirements: Legend

- General Studies Core Requirements:
- Literacy and Critical Inquiry (L) (6 credit hours)
- Mathematical Studies (MA) (3 credit hours)
- Computer/Statistics/Quantitative applications (CS) (3 credit hours)
- Humanities, Fine Arts, and Design (HU) (6-9 credit hours)
- Social and Behavioral Sciences (SB) (6-9 credit hours)
- Natural Science-Quantitative (SQ) (4-8 credit hours) (cumulative SQ/SG credit must equal 8 credit hours)
- Natural Science-General (SG) (0-4 credit hours) (cumulative SQ/SG credit must equal 8 credit hours)
- General Studies Awareness Requirements
- Cultural Diversity in the US (C) (3 credit hours) (may be combined with other general studies requirements.)
- Global Awareness (G) (3 credit hours) (may be combined with other general studies requirements.)
- Historical Awareness (H) (3 credit hours) (may be combined with other general studies requirements.)
- First-Year Composition (ENG 101 \& 102 OR ENG 107 \& 108 or ENG 105)

The requirements outlined on this major map meet ASU's graduation requirements for this catalog year and major; however, certification requirements are determined by the Arizona Department of Education (ADE) and are subject to change. Occasionally, additional courses, which are not outlined on this major map, may be required to obtain certification and/or an Institutional Recommendation. It is highly recommended that you speak with your advisor regarding any certification updates or changes.

Major Map: Elementary Education (Bilingual Education) -
Bachelor of Arts in Education (B.A.E.)
College of Teacher Education and Leadership, West and Downtown campuses Catalog Year: 2008-2009

|  |  | Upper <br> Division | Completed ATP: $\square$ Yes $\square$ No |  | Completed AGEC: $\square$ Yes $\square$ No |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Course Subject and Title (courses in bold/shading are critical,) | Hrs. |  | Transfer Course/Grade | Minimum Grade if Required | Additional Critical Tracking Notes |
| TERM ONE: 015 CREDIT HOURS |  |  |  |  |  |
| ASU 101: The ASU Experience |  | $\square$ |  | Grade of C | - ASU 101 is for ASU 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> - Minimum 2.00 cumulative GPA in critical courses <br> - Minimum 2.00 ASU cumulative GPA |
| ENG 101 and 102: First-Year Composition OR ENG 107 and 108: English for Foreign Students OR ENG 105: Advanced First-Year Composition | 3 | $\square$ | Grade of C |  |  |
| MAT 142: College Mathematics/or higher (MA) | 3 | $\square$ |  | Grade of C |  |
| Select one: <br> SPE 222: Orientation to Education of Exceptional Children (SB, C) <br> TEL 212: Understanding the Culturally Diverse Child (C) | 3 | $\square$ |  | Grade of C |  |
| Computer/Statistics/Quantitative (CS): <br> (EDT 180: Computer Literacy OR CIS 105: Computer Applications and Information Technology recommended) | 3 | $\square$ |  |  |  |
| Spanish 201 (G) or higher | 4 | $\square$ |  |  |  |
| TERM TWO: 1630 CREDIT HOURS |  |  |  |  |  |
| ENG 101 and 102: First-Year Composition OR ENG 107 and 108: English for Foreign Students OR ENG 105: Advanced First-Year Composition | 3 | $\square$ |  | Grade of C | - Complete Mathematical Studies (MA) <br> - Complete SPE 222 or TEL 212 <br> - Minimum 2.20 cumulative GPA in critical courses <br> - Minimum 2.20 ASU cumulative GPA |
| MTE 180: Math for Elementary Teachers | 3 | $\square$ |  | Grade of C |  |
| Select one: <br> SPE 222: Orientation to Education of Exceptional Children (SB, C) <br> TEL 212: Understanding the Culturally Diverse Child (C) | 3 | $\square$ |  | Grade of C |  |
| Science (SQ/SG): <br> (Life Science course recommended) 4 $\square$ |  |  |  |  |  |
| Spanish 202 (G) or higher | 4 | $\square$ |  |  |  |
| TERM THREE: 3145 CREDIT HOURS |  |  |  |  |  |
| SPE 222: Orientation to Education of Exceptional Children | 3 | $\square$ |  | Grade of C | - Complete First-Year Composition requirement: <br> ENG 101 \& 102 OR ENG 107 \& 108 or 105 <br> - Complete MTE 180 <br> - Complete both SPE 222 and TEL 212 <br> - Minimum 2.40 cumulative GPA in critical courses <br> - Minimum 2.40 ASU cumulative GPA |
| MTE 181: Mathematics for Elementary Teachers II | 3 | $\square$ |  | Grade of C |  |
| HIS 103: The United States (SB,H) OR HIS 104: The United States (SB,H) | 3 | $\square$ |  |  |  |
| Science (SQ) : <br> (Physical Science course recommended) | 4 | $\square$ |  |  |  |
| Humanities/Fine Arts (HU): | 3 | $\square$ |  |  |  |
| TERM FOUR: 4660 CREDIT HOURS |  |  |  |  |  |
| Literacy \& Citical Inquiry (L): | 3 | $\square$ |  | Grade of C | - Complete all critical courses <br> - MILESTONE: Fingerprint Clearance Card <br> - Non-Critical Milestone: Freedom from Conviction form <br> - Minimum 2.50 cumulative GPA in critical courses <br> - Minimum 2.50 ASU cumulative GPA |
| Humanities/Fine Arts (HU): | 3 | $\square$ |  |  |  |
| Upper Division Elective: | 3 | $\square$ |  |  |  |
| Elective: | 3 | $\square$ |  |  |  |
| Elective: | 1 | $\square$ |  |  |  |
| TERM FIVE: 6175 CREDIT HOURS |  |  |  |  |  |
| BLE 312: ESL, Diversity, and Culture in Education (L) | 3 | $\square$ |  | Grade of C | - Minimum 2.50 ASU cumulative GPA |
| TEL 311: Instruction and Management in the Inclusive Classroom | 3 | $\square$ |  | Grade of C |  |
| TEL 313: Educational Technology in the K-12 Curriculum | 3 | $\square$ |  | Grade of C |  |
| TEL 314: Classroom Assessment | 3 | $\square$ |  | Grade of C |  |
| TEL 315: Child and Adolescent Development (SB) | 3 | $\square$ |  | Grade of C |  |
| TEL 396: Field Experience I | 0 | $\square$ |  | Grade of Y |  |
| TERM SIX: $76 \mathbf{9 0}$ CREDIT HOURS |  |  |  |  |  |
| BLE 321: ESL Methods for Diverse Language Classrooms | 3 | $\square$ |  | Grade of C | - Minimum 2.50 ASU cumulative GPA |
| BLE 322: Second-Language Literacy 1 in Elementary Schools | 3 | $\square$ |  | Grade of C |  |
| BLE 324: Social Studies for Diverse Language Classrooms | 3 | $\square$ |  | Grade of C |  |
| EDP 323: Professional Development, Learning, and Motivation | 0 | $\square$ |  | Grade of C |  |
| EED 397: Field Experience II | 3 | $\square$ |  | Grade of Y |  |
| Science Upper Division (AST, BIO, LSC, PHS, PHY): | 3 | $\square$ |  |  |  |
| TERM SEVEN: 91105 CREDIT HOURS |  |  |  |  |  |
| BLE 413: Second-Language Literacy 2 in Elementary Schools | 3 | $\square$ |  | Grade of C | - Minimum 2.50 ASU cumulative GPA |
| BLE 414: Reading Methods, Management, and Assessment in BLE/ESL Settings | 3 | $\square$ |  | Grade of C |  |
| EED 411: Science in Elementary Schools | 3 | $\square$ |  | Grade of C |  |
| EED 412: Mathematics in Elementary Schools | 0 | $\square$ |  | Grade of C |  |
| EED 496: Field Experience | 3 | $\square$ |  | Grade of Y |  |
| Content Area Upper Division (SPA): | 3 | $\square$ |  |  |  |
| TERM EIGHT: 106120 CREDIT HOURS |  |  |  |  |  |
| BLE 478: Student Teaching in Diverse Language Classrooms | 9 | $\square$ |  | Grade of Y | - Minimum 2.50 ASU cumulative GPA |
| BLE 479: Capstone Seminar in Bilingual/ESL Education | 3 | $\square$ |  | Grade of C |  |

## Graduation Requirements Summary:

| Total Hours <br> $(120$ minimum $)$ | Total Hrs at ASU <br> $(30$ minimum $)$ | Hrs Resident Credit for Academic <br> Recognition ( 56 minimum $)$ | Major GPA <br> $(2.00$ Min. $)$ | Total UD Hrs <br> $(45$ minimum $)$ | Total Comm. College <br> Hrs. ( 64 maximum $)$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |

## General University Requirements: Legend

- General Studies Core Requirements:
- Literacy and Critical Inquiry (L) (6 credit hours)
- Mathematical Studies (MA) (3 credit hours)
- Computer/Statistics/Quantitative applications (CS) (3 credit hours)
- Humanities, Fine Arts, and Design (HU) (6-9 credit hours)
- Social and Behavioral Sciences (SB) (6-9 credit hours)
- Natural Science-Quantitative (SQ) (4-8 credit hours) (cumulative SQ/SG credit must equal 8 credit hours)
- Natural Science-General (SG) (0-4 credit hours) (cumulative SQ/SG credit must equal 8 credit hours)
- General Studies Awareness Requirements
- Cultural Diversity in the US (C) (3 credit hours) (may be combined with other general studies requirements.)
- Global Awareness (G) (3 credit hours) (may be combined with other general studies requirements.)
- Historical Awareness (H) (3 credit hours) (may be combined with other general studies requirements.)
- First-Year Composition (ENG 101 \& 102 OR ENG 107 \& 108 or ENG 105)

The requirements outlined on this major map meet ASU's graduation requirements for this catalog year and major; however, certification requirements are determined by the Arizona Department of Education (ADE) and are subject to change. Occasionally, additional courses, which are not outlined on this major map, may be required to obtain certification and/or an Institutional Recommendation. It is highly recommended that you speak with your advisor regarding any certification updates or changes.

|  | Hrs. |  | Completed ATP: $\square$ Yes $\square$ No |  | Completed AGEC: $\square$ Yes $\square$ No |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { Course Subject and Title } \\ & \text { (courses in bold/shading are critical, ) } \end{aligned}$ |  | Upper Division | Transfer Course/Grade | Minimum Grade if Required | Additional Critical Tracking Notes |
| TERM ONE: 015 CREDIT HOURS |  |  |  |  |  |
| ASU 101: The ASU Experience | 1 | $\square$ |  | Grade of C | - ASU 101 is for ASU 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> - Minimum 2.00 cumulative GPA in critical courses <br> - Minimum 2.00 ASU cumulative GPA |
| ENG 101 and 102: First-Year Composition OR ENG 107 and 108: English for Foreign Students OR ENG 105: Advanced First-Year Composition | 3 | $\square$ | Grade of C |  |  |
| MAT 142: College Mathematics/or higher (MA) | 3 | $\square$ |  | Grade of C |  |
| Select one: <br> SPE 222: Orientation to Education of Exceptional Children (SB, C) <br> TEL 212: Understanding the Culturally Diverse Child (C) | 3 | $\square$ |  | Grade of C |  |
| Computer/Statistics/Quantitative (CS): <br> (EDT 180: Computer Literacy OR CIS 105: Computer Applications <br> and Information Technology recommended) | 3 | $\square$ |  |  |  |
| Second Language | 4 | $\square$ |  |  |  |
| TERM TWO: 1630 CREDIT HOURS |  |  |  |  |  |
| ENG 101 and 102: First-Year Composition OR ENG 107 and 108: English for Foreign Students OR ENG 105: Advanced First-Year Composition | 3 | $\square$ |  | Grade of C | - Complete Mathematical Studies (MA) <br> - Complete SPE 222 or TEL 212 <br> - Minimum 2.20 cumulative GPA in critical courses <br> - Minimum 2.20 ASU cumulative GPA |
| MTE 180: Math for Elementary Teachers | 3 | $\square$ |  | Grade of C |  |
| Select one: <br> SPE 222: Orientation to Education of Exceptional Children (SB, C) <br> TEL 212: Understanding the Culturally Diverse Child (C) | 3 | $\square$ |  | Grade of C |  |
| Science (SQ/SG): <br> (Life Science course recommended) | 4 | $\square$ |  |  |  |
| Second Language | 4 | $\square$ |  |  |  |
| TERM THREE: 3145 CREDIT HOURS |  |  |  |  |  |
| SPE 222: Orientation to Education of Exceptional Children | 3 | $\square$ |  | Grade of C | - Complete First-Year Composition requirement: <br> ENG 101 \& 102 OR ENG 107 \& 108 or 105 <br> - Complete MTE 180 <br> - Complete both SPE 222 and TEL 212 <br> - Minimum 2.40 cumulative GPA in critical courses <br> - Minimum 2.40 ASU cumulative GPA |
| MTE 181: Mathematics for Elementary Teachers II | 3 | $\square$ |  | Grade of C |  |
| HIS 103: The United States (SB,H) OR HIS 104: The United States (SB,H) | 3 | $\square$ |  |  |  |
| Science (SQ) : <br> (Physical Science course recommended) | 4 | $\square$ |  |  |  |
| Humanities/Fine Arts (HU): | 3 | $\square$ |  |  |  |
| TERM FOUR: $46 \mathbf{6 0}$ CREDIT HOURS |  |  |  |  |  |
| Literacy \& Citical Inquiry (L): | 3 | $\square$ |  | Grade of C | - Complete all critical courses <br> - MILESTONE: Fingerprint Clearance Card <br> - Non-Critical Milestone: Freedom from Conviction form <br> - Minimum 2.50 cumulative GPA in critical courses <br> - Minimum 2.50 ASU cumulative GPA |
| Humanities/Fine Arts (HU): | 3 | $\square$ |  |  |  |
| Upper Division Elective: | 3 | $\square$ |  |  |  |
| Elective: | 3 | $\square$ |  |  |  |
| Elective: | 1 | $\square$ |  |  |  |
| TERM FIVE: 6175 CREDIT HOURS |  |  |  |  |  |
| BLE 312: ESL, Diversity, and Culture in Education (L) | 3 | $\square$ |  | Grade of C | - Minimum 2.50 ASU cumulative GPA |
| TEL 311: Instruction and Management in the Inclusive Classroom | 3 | $\square$ |  | Grade of C |  |
| TEL 313: Educational Technology in the K-12 Curriculum | 3 | $\square$ |  | Grade of C |  |
| TEL 314: Classroom Assessment | 3 | $\square$ |  | Grade of C |  |
| TEL 315: Child and Adolescent Development (SB) | 3 | $\square$ |  | Grade of C |  |
| TEL 396: Field Experience I | 0 | $\square$ |  | Grade of Y |  |
| TERM SIX: $76 \mathbf{9 0}$ CREDIT HOURS |  |  |  |  |  |
| BLE 321: ESL Methods for Diverse Language Classrooms | 3 | $\square$ |  | Grade of C | - Minimum 2.50 ASU cumulative GPA |
| BLE 322: Second-Language Literacy 1 in Elementary Schools | 3 | $\square$ |  | Grade of C |  |
| BLE 324: Social Studies for Diverse Language Classrooms | 3 | $\square$ |  | Grade of C |  |
| EDP 323: Professional Development, Learning, and Motivation | 0 | $\square$ |  | Grade of C |  |
| EED 397: Field Experience II | 3 | $\square$ |  | Grade of Y |  |
| Science Upper Division (AST, BIO, LSC, PHS, PHY): | 3 | $\square$ |  |  |  |
| TERM SEVEN: 91105 CREDIT HOURS |  |  |  |  |  |
| BLE 413: Second-Language Literacy 2 in Elementary Schools | 3 | $\square$ |  | Grade of C | - Minimum 2.50 ASU cumulative GPA |
| BLE 414: Reading Methods, Management, and Assessment in BLE/ESL Settings | 3 | $\square$ |  | Grade of C |  |
| EED 411: Science in Elementary Schools | 3 | $\square$ |  | Grade of C |  |
| EED 412: Mathematics in Elementary Schools | 0 | $\square$ |  | Grade of C |  |
| EED 496: Field Experience | 3 | $\square$ |  | Grade of Y |  |
| Content Area Upper Division (SPA): | 3 | $\square$ |  |  |  |
| TERM EIGHT: 106120 CREDIT HOURS |  |  |  |  |  |
| BLE 478: Student Teaching in Diverse Language Classrooms | 9 | $\square$ |  | Grade of Y | - Minimum 2.50 ASU cumulative GPA |
| BLE 479: Capstone Seminar in Bilingual/ESL Education | 3 | $\square$ |  | Grade of C |  |

Major Map: Elementary Education (English as a Second
Language) - Bachelor of Arts in Education (B.A.E.)
College of Teacher Education and Leadership, West and Downtown campuses
Catalog Year: 2008-2009

## Graduation Requirements Summary:

| Total Hours <br> $(120$ minimum $)$ | Total Hrs at ASU <br> $(30$ minimum $)$ | Hrs Resident Credit for Academic <br> Recognition (56 minimum) | Major GPA <br> $(2.00$ Min. $)$ | Total UD Hrs <br> $(45$ minimum $)$ | Total Comm. College <br> Hrs. ( 64 maximum) |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |

## General University Requirements: Legend

- General Studies Core Requirements:
- Literacy and Critical Inquiry (L) (6 credit hours)
- Mathematical Studies (MA) (3 credit hours)
- Computer/Statistics/Quantitative applications (CS) (3 credit hours)
- Humanities, Fine Arts, and Design (HU) (6-9 credit hours)
- Social and Behavioral Sciences (SB) (6-9 credit hours)
- Natural Science-Quantitative (SQ) (4-8 credit hours) (cumulative SQ/SG credit must equal 8 credit hours)
- Natural Science-General (SG) (0-4 credit hours) (cumulative SQ/SG credit must equal 8 credit hours)
- General Studies Awareness Requirements
- Cultural Diversity in the US (C) (3 credit hours) (may be combined with other general studies requirements.)
- Global Awareness (G) (3 credit hours) (may be combined with other general studies requirements.)
- Historical Awareness (H) (3 credit hours) (may be combined with other general studies requirements.)
- First-Year Composition (ENG 101 \& 102 OR ENG 107 \& 108 or ENG 105)

The requirements outlined on this major map meet ASU's graduation requirements for this catalog year and major; however, certification requirements are determined by the Arizona Department of Education (ADE) and are subject to change. Occasionally, additional courses, which are not outlined on this major map, may be required to obtain certification and/or an Institutional Recommendation. It is highly recommended that you speak with your advisor regarding any certification updates or changes.

| Course Subject and Title （courses in bold／shading are critical，） | Hrs． | $\begin{aligned} & \hline \text { Upper } \\ & \text { Division } \\ & \hline \end{aligned}$ | Transfer Course／Grade | $\begin{aligned} & \text { Minimum Grade if } \\ & \text { Required } \\ & \hline \end{aligned}$ | Additional Critical Tracking Notes |
| :---: | :---: | :---: | :---: | :---: | :---: |
| TERM SEVEN： 91105 CREDIT HOURS |  |  |  |  |  |
| ENG 300 or 400 level course： | 3 | 区 |  | Grade of C | －Minimum 2．50 ASU cumulative GPA <br> －MILESTONE：Passing score on the Writing Assessment |
| Ethnicity／Gender course（ENG 300 or 400 level）（list in DARS）： | 3 | 区 |  | Grade of C |  |
| Global Awareness（G）： | 3 | $\square$ |  |  |  |
| ENG 300 or 400 level（list in DARS）：： | 3 | 区 |  | Grade of C |  |
| Elective： | 3 | $\square$ |  |  |  |
| TERM EIGHT： $106 \mathbf{1 2 0}$ CREDIT HOURS |  |  |  |  |  |
| SED 478：Student Teaching in Secondary Schools | 12 | 区 |  | Grade of Y | －Minimum 2.5 cumulative ASU GPA |

Graduation Requirements Summary：

| Total Hours <br> $(120$ minimum $)$ | Total Hrs at ASU <br> $(30$ minimum $)$ | Hrs Resident Credit for Academic <br> Recognition（ 56 minimum $)$ | Major GPA <br> $(2.00$ Min．$)$ | Total UD Hrs <br> $(45$ minimum $)$ | Total Comm．College <br> Hrs．（ 64 maximum） |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |

## General University Requirements：Legend

－General Studies Core Requirements：
－Literacy and Critical Inquiry（L）（6 credit hours）
－Mathematical Studies（MA）（3 credit hours）
－Computer／Statistics／Quantitative applications（CS）（3 credit hours）
－Humanities，Fine Arts，and Design（HU）（6－9 credit hours）
－Social and Behavioral Sciences（SB）（6－9 credit hours）
－Natural Science－Quantitative（SQ）（4－8 credit hours）（cumulative SQ／SG credit must equal 8 credit hours）
－Natural Science－General（SG）（0－4 credit hours）（cumulative SQ／SG credit must equal 8 credit hours）
－General Studies Awareness Requirements
－Cultural Diversity in the US（C）（3 credit hours）（may be combined with other general studies requirements．）
－Global Awareness（G）（3 credit hours）（may be combined with other general studies requirements．）
－Historical Awareness（H）（3 credit hours）（may be combined with other general studies requirements．）
－First－Year Composition（ENG 101 \＆ 102 OR ENG 107 \＆ 108 or ENG 105）

The requirements outlined on this major map meet ASU＇s graduation requirements for this catalog year and major；however，certification requirements are determined by the Arizona Department of Education（ADE）and are subject to change．Occasionally，additional courses，which are not outlined on this major map，may be required to obtain certification and／or an Institutional Recommendation．It is highly recommended that you speak with your advisor regarding any certification updates or changes．

Major Map: Secondary Education (History) -<br>Bachelor of Arts in Education (B.A.E.)<br>College of Teacher Education and Leadership, West Campus

Catalog Year: 2008-2009


| Course Subject and Title （courses in bold／shading are critical courses，） | Hrs． | Upper Division | Transfer Course／Grade | Minimum Grade if Required | Additional Critical Tracking Notes |
| :---: | :---: | :---: | :---: | :---: | :---: |
| TERM SEVEN： 91105 CREDIT HOURS |  |  |  |  |  |
| Non－US history： <br> Recommend：HIS 356：World History since 1500 （G，H） | 3 | 区 |  | Grade of C | －Minimum 2．50 ASU cumulative GPA <br> －MILESTONE：Passing score on the Writing Assessment |
| Social Studies Supporting Course（list on page 2）： | 3 | 区 |  | Grade of C |  |
| HIS $3^{* *}$ or HIS $4^{* *}$ ： | 3 | 区 |  | Grade of C |  |
| Non－US history ： | 3 | 区 |  | Grade of C |  |
| Social Studies Supporting Course（list below）： | 3 | $\square$ |  | Grade of C |  |
| TERM EIGHT： $106 \mathbf{1 2 0}$ CREDIT HOURS |  |  |  |  |  |
| SED 478：Student Teaching in Secondary Schools | 12 | 区 |  | Grade of Y | －Minimum 2．50 ASU cumulative GPA |

## Social Studies Supporting Course list：

－ECN 211：Macroeconomic Principles（SB）
－GCU 102：Introduction to Human Geography（SB）
－GCU 121：World Geography（SB，G）
－POL 101：Political Ideologies（SB）
－POL 110：Government and Politics（SB）
－POL 160：Global Politics（SB，G）

## Graduation Requirements Summary：

| Total Hours <br> $(120$ minimum $)$ | Total Hrs at ASU <br> $(30$ minimum $)$ | Hrs Resident Credit for Academic <br> Recognition（ 56 minimum $)$ | Major GPA <br> $(2.00$ Min．$)$ | Total UD Hrs <br> $(45$ minimum $)$ | Total Comm．College <br> Hrs．（ 64 maximum $)$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |

## General University Requirements：Legend

－General Studies Core Requirements：
－Literacy and Critical Inquiry（L）（6 credit hours）
－Mathematical Studies（MA）（3 credit hours）
－Computer／Statistics／Quantitative applications（CS）（3 credit hours）
－Humanities，Fine Arts，and Design（HU）（6－9 credit hours）
－Social and Behavioral Sciences（SB）（6－9 credit hours）
－Natural Science－Quantitative（SQ）（ $4-8$ credit hours）（cumulative SQ／SG credit must equal 8 credit hours）
－Natural Science－General（SG）（0－4 credit hours）（cumulative SQ／SG credit must equal 8 credit hours）
－General Studies Awareness Requirements
－Cultural Diversity in the US（C）（3 credit hours）（may be combined with other general studies requirements．）
－Global Awareness（G）（3 credit hours）（may be combined with other general studies requirements．）
－Historical Awareness（H）（3 credit hours）（may be combined with other general studies requirements．）
－First－Year Composition（ENG 101 \＆ 102 OR ENG 107 \＆ 108 or ENG 105）
The requirements outlined on this major map meet ASU＇s graduation requirements for this catalog year and major；however，certification requirements are determined by the Arizona Department of Education（ADE）and are subject to change．Occasionally，additional courses，which are not outlined on this major map，may be required to obtain certification and／or an Institutional Recommendation．It is highly recommended that you speak with your advisor regarding any certification updates or changes．

Major Map: Secondary Education (Mathematics) -<br>Bachelor of Arts in Education (B.A.E.)<br>College of Teacher Education and Leadership, West Campus<br>Catalog Year: 2008-2009



## Graduation Requirements Summary:

| Total Hours <br> $(120$ minimum $)$ | Total Hrs at ASU <br> $(30$ minimum $)$ | Hrs Resident Credit for Academic <br> Recognition $(56$ minimum $)$ | Major GPA <br> $(2.00$ Min. $)$ | Total UD Hrs <br> $(45$ minimum $)$ | Total Comm. College <br> Hrs. ( 64 maximum $)$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |

## General University Requirements: Legend

- General Studies Core Requirements:
- Literacy and Critical Inquiry (L) (6 credit hours)
- Mathematical Studies (MA) (3 credit hours)
- Computer/Statistics/Quantitative applications (CS) (3 credit hours)
- Humanities, Fine Arts, and Design (HU) (6-9 credit hours)
- Social and Behavioral Sciences (SB) (6-9 credit hours)
- Natural Science-Quantitative (SQ) (4-8 credit hours) (cumulative SQ/SG credit must equal 8 credit hours)
- Natural Science-General (SG) (0-4 credit hours) (cumulative SQ/SG credit must equal 8 credit hours)
- General Studies Awareness Requirements
- Cultural Diversity in the US (C) (3 credit hours) (may be combined with other general studies requirements.)
- Global Awareness (G) (3 credit hours) (may be combined with other general studies requirements.)
- Historical Awareness (H) (3 credit hours) (may be combined with other general studies requirements.)
- First-Year Composition (ENG 101 \& 102 OR ENG 107 \& 108 or ENG 105)

The requirements outlined on this major map meet ASU's graduation requirements for this catalog year and major; however, certification requirements are determined by the Arizona Department of Education (ADE) and are subject to change. Occasionally, additional courses, which are not outlined on this major map, may be required to obtain certification and/or an Institutional Recommendation. It is highly recommended that you speak with your advisor regarding any certification updates or changes.

Major Map: Secondary Education (Social Studies) Bachelor of Arts in Education (B.A.E.)<br>College of Teacher Education and Leadership, West Campus<br>Catalog Year: 2008-2009



College of Teacher Education and Leadership，West Campus
Catalog Year：2008－2009

| Course Subject and Title （courses in bold／shading are critical．） | Hrs． | $\begin{aligned} & \hline \text { Upper } \\ & \text { Division } \\ & \hline \end{aligned}$ | Transfer Course／Grade | $\begin{aligned} & \text { Minimum Grade if } \\ & \text { Required } \\ & \hline \end{aligned}$ | Additional Critical Tracking Notes |
| :---: | :---: | :---: | :---: | :---: | :---: |
| TERM FIVE： 6175 CREDIT HOURS |  |  |  |  |  |
| BLE 312：ESL，Diversity，and Culture in Education（L） | 3 | 区 |  | Grade of C | －Minimum 2．50 ASU cumulative GPA |
| TEL 311：Instruction and Management in the Inclusive Classroom | 3 | 区 |  | Grade of C |  |
| TEL 313：Educational Technology in the K－12 Curriculum | 3 | 区 |  | Grade of C |  |
| TEL 314：Classroom Assessment | 3 | 区 |  | Grade of C |  |
| TEL 315：Child and Adolescent Development（SB） | 3 | 区 |  | Grade of C |  |
| TEL 396：Field Experience I | 0 | 区 |  | Grade of Y |  |
| TERM SIX： 7690 CREDIT HOURS |  |  |  |  |  |
| BLE 321：ESL Methods for Diverse Language Classrooms | 3 | 区 |  | Grade of C | －Minimum 2．50 ASU cumulative GPA |
| RDG 323：Literacy Processes in Content Areas | 3 | 区 |  | Grade of C |  |
| SED 321：Critical Issues in Secondary Education | 3 | 区 |  | Grade of C |  |
| SED 322：Classroom Leadership in Secondary Schools | 3 | 区 |  | Grade of C |  |
| SED 480：Special Methods of Teaching Social Studies | 3 | 区 |  | Grade of C |  |
| SED 397：Field Experience II | 0 | 区 |  | Grade of Y |  |
| TERM SEVEN： 91105 CREDIT HOURS |  |  |  |  |  |
| HIS 443：Constitutional History of the United States（SB，H） | 3 | 区 |  | Grade of C | －Minimum 2．50 ASU cumulative GPA <br> －MILESTONE：Passing score on the Writing Assessment |
| POL 460：Politics of Globalization（SB，G）OR POL 486：Global Political Economy（SB，G） | 3 | 区 |  | Grade of C |  |
| Anthropology，Geography，Sociology course（list in DARS）： （recommend ASB 311：Principles of Social Anthropology） | 3 | $\square$ |  | Grade of C |  |
| Social \＆Behavioral Science（SB）： | 3 | $\square$ |  |  |  |
| Elective（HIS course recommended＊＊） | 3 | $\square$ |  |  |  |
| TERM EIGHT： $106 \mathbf{1 2 0}$ CREDIT HOURS |  |  |  |  |  |
| SED 478：Student Teaching in Secondary Schools | 12 | 区 |  | Grade of Y | －Minimum 2．50 ASU cumulative GPA |

## Graduation Requirements Summary：

| Total Hours <br> $(120$ minimum $)$ | Total Hrs at ASU <br> $(30$ minimum $)$ | Hrs Resident Credit for Academic <br> Recognition $(56$ minimum $)$ | Major GPA <br> $(2.00 \mathrm{Min})$. | Total UD Hrs <br> $(45$ minimum $)$ | Total Comm．College <br> Hrs．（ 64 maximum） |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |

## General University Requirements：Legend

－General Studies Core Requirements：
－Literacy and Critical Inquiry（L）（6 credit hours）
－Mathematical Studies（MA）（3 credit hours）
－Computer／Statistics／Quantitative applications（CS）（3 credit hours）
－Humanities，Fine Arts，and Design（HU）（6－9 credit hours）
－Social and Behavioral Sciences（SB）（6－9 credit hours）
－Natural Science－Quantitative（SQ）（4－8 credit hours）（cumulative SQ／SG credit must equal 8 credit hours）
－Natural Science－General（SG）（0－4 credit hours）（cumulative SQ／SG credit must equal 8 credit hours）
－General Studies Awareness Requirements
－Cultural Diversity in the US（C）（3 credit hours）（may be combined with other general studies requirements．）
－Global Awareness（G）（3 credit hours）（may be combined with other general studies requirements．）
－Historical Awareness（H）（3 credit hours）（may be combined with other general studies requirements．）
－First－Year Composition（ENG 101 \＆ 102 OR ENG 107 \＆ 108 or ENG 105）

The requirements outlined on this major map meet ASU＇s graduation requirements for this catalog year and major；however，certification requirements are determined by the Arizona Department of Education（ADE）and are subject to change．Occasionally，additional courses，which are not outlined on this major map，may be required to obtain certification and／or an Institutional Recommendation．It is highly recommended that you speak with your advisor regarding any certification updates or changes．

Major Map: Special Education -
Bachelor of Arts in Education (B.A.E.)
Bachelor of Arts in Education (B.A.E.) Catalog Year: 2008-2009


| $\begin{aligned} & \hline \text { Course Subject and Title } \\ & \text { (courses in bold/shading are critical) } \end{aligned}$ | Hrs. | $\begin{aligned} & \hline \text { Upper } \\ & \text { Division } \\ & \hline \end{aligned}$ | Transfer Course/Grade | Minimum Grade if Required | Additional Critical Tracking Notes |
| :---: | :---: | :---: | :---: | :---: | :---: |
| TERM EIGHT: $106 \mathbf{1 2 0}$ CREDIT HOURS |  |  |  |  |  |
| SPE 440: Professional Seminar in Special Education | 3 | 囚 |  | Grade of C | - Minimum 2.50 ASU cumulative GPA |
| SPE 478 Student Teaching in Special Education | 12 | 囚 |  | Grade of Y |  |

## Graduation Requirements Summary:

| Total Hours <br> $(120$ minimum $)$ | Total Hrs at ASU <br> $(30$ minimum $)$ | Hrs Resident Credit for Academic <br> Recognition $(56$ minimum $)$ | Major GPA <br> $(2.00$ Min. $)$ | Total UD Hrs <br> $(45$ minimum $)$ | Total Comm. College <br> Hrs. ( 64 maximum $)$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |

## General University Requirements: Legend

- General Studies Core Requirements:
- Literacy and Critical Inquiry (L) (6 credit hours)
- Mathematical Studies (MA) (3 credit hours)
- Computer/Statistics/Quantitative applications (CS) (3 credit hours)
- Humanities, Fine Arts, and Design (HU) (6-9 credit hours)
- Social and Behavioral Sciences (SB) (6-9 credit hours)
- Natural Science-Quantitative (SQ) ( $4-8$ credit hours) (cumulative SQ/SG credit must equal 8 credit hours)
- Natural Science-General (SG) (0-4 credit hours) (cumulative SQ/SG credit must equal 8 credit hours)
- General Studies Awareness Requirements
- Cultural Diversity in the US (C) (3 credit hours) (may be combined with other general studies requirements.)
- Global Awareness (G) (3 credit hours) (may be combined with other general studies requirements.)
- Historical Awareness (H) (3 credit hours) (may be combined with other general studies requirements.)
- First-Year Composition (ENG 101 \& 102 OR ENG 107 \& 108 or ENG 105)

The requirements outlined on this major map meet ASU's graduation requirements for this catalog year and major; however, certification requirements are determined by the Arizona Department of Education (ADE) and are subject to change. Occasionally, additional courses, which are not outlined on this major map, may be required to obtain certification and/or an Institutional Recommendation. It is highly recommended that you speak with your advisor regarding any certification updates or changes.

Major Map：Aeronautical Management Technology
（Air Transportation Management）－ Bachelor of Science（B．S．）
College of Technology and Innovation，Polytechnic Campus Catalog Year：2008－2009

|  |  |  | Completed ATP：Yes $\quad \square$ No |  | Completed AGEC：$\square$ Yes $\square$ No |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Course Subject and Title （courses in bold／shading are critical） | Hrs． | Upper <br> Division | Transfer Course／Grade | Minimum Grade if Required | Additional Critical Requirement Notes |
| TERM ONE： 015 CREDIT HOURS |  |  |  |  |  |
| AMT 101：Introduction to Aeronautical Management Technology | 1 | $\square$ |  | Grade of C | －ASU 101 is combined with AMT 101 <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 |
| AMT 182：Private Pilot Ground School | 3 | $\square$ |  | Grade of C |  |
| AMT 220：Aviation Meteorology | 3 | $\square$ |  | Grade of C |  |
| MA course：（APM 265：Mathematics of Change I＊） | 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 |  |
| TERM TWO： 1630 CREDIT HOURS |  |  |  |  |  |
| PHY 111：General Physics \＆PHY 113：Laboratory（SQ） | 3／1 | $\square$ |  |  |  |
| ECN 211：Macroeconomic Principles（SB）OR ECN 212：Microeconomic Principles（SB） | 3 | $\square$ |  |  |  |
| PGS 101：Introduction to Psychology（SB） | 3 | $\square$ |  |  |  |
| Humanities，Fine Arts \＆Design（HU） | 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 |  |
| TERM THREE： 3145 CREDIT HOURS |  |  |  |  |  |
| AMT 280：Aerospace Structures，Materials，Systems | 4 | $\square$ |  | Grade of C |  |
| PHY 112：General Physics \＆PHY 114：Laboratory（SQ） | 3／1 | $\square$ |  |  |  |
| ACC 231：Uses of Accounting Information I | 3 | $\square$ |  |  |  |
| AMT 201：Air Traffic Control | 3 | $\square$ |  | Grade of C |  |
| Humanities，Fine Arts \＆Design（HU）and Cultural Diversity in the US （C）and Historical Awareness（H） | 3 | $\square$ |  |  |  |
| TERM FOUR： 46 60 CREDIT HOURS |  |  |  |  |  |
| AMT 287：Aircraft Powerplants | 4 | $\square$ |  | Grade of C | －First Year Composition requirement completed <br> －Minimum grade of C in all AMT courses |
| Literacy and Critical Inquiry（L） | 3 | $\square$ |  |  |  |
| Technical Elective | 3 | $\square$ |  |  |  |
| Technical Elective | 3 | $\square$ |  |  |  |
| General Elective | 2 | $\square$ |  |  |  |
| TERM FIVE： 6175 CREDIT HOURS |  |  |  |  |  |
| AMT 308：Air Transportation（G） | 3 | 区 |  | Grade of C |  |
| AMT 350：Aircraft Design and Logistics Management | 3 | 区 |  | Grade of C |  |
| AMT 442：Aviation Law／Regulations | 3 | 区 |  | Grade of C |  |
| OMT 343：Occupational Safety and Ergonomics | 3 | 区 |  |  |  |
| General Elective | 3 | $\square$ |  |  |  |
| General Elective | 3 | $\square$ |  |  |  |
| TERM SIX： $76 \mathbf{9 0}$ CREDIT HOURS |  |  |  |  |  |
| AMT 444：Airport Management and Planning | 3 | 区 |  | Grade of C |  |
| AMT 396：Aviation Professional | 1 | 区 |  | Grade of C |  |
| OMT 452：Industrial Human Resource Management | 3 | 区 |  |  |  |
| TMC 346：Management Dynamics | 3 | 区 |  |  |  |
| General Elective | 3 | $\square$ |  |  |  |
| Upper division Humanities，Fine Arts \＆Design（HU）or Social \＆Behavioral Science（SB）Humanities，Fine Arts \＆Design （HU）AND remaining C or H awareness area | 3 | 区 |  |  |  |
| TERM SEVEN： 91105 CREDIT HOURS |  |  |  |  |  |
| AMT 408：National Aviation Policy | 3 | 区 |  | Grade of C |  |
| AMT 410：Aviation Safety and Human Factors | 3 | 区 |  | Grade of C |  |
| APM 301：Introductory Statistics（CS） | 3 | 区 |  |  |  |
| OMT 430：Ethical Issues in Technology | 3 | 区 |  |  |  |
| OMT 480：Organizational Effectiveness | 3 | 区 |  |  |  |
| TERM EIGHT： 106120 CREDIT HOURS |  |  |  |  |  |
| AMT 484：Internship | 3 | 区 |  | Grade of C |  |
| AMT 484：Internship OR Technical elective | 3 | 区 |  |  |  |
| AMT 489：Airline Administration | 3 | 区 |  | Grade of C |  |
| AMT 491：Aviation Management Capstone | 3 | 区 |  | Grade of C |  |
| OMT 456：Introduction to Organized Labor | 3 | 区 |  | Grade of C |  |
| TWC 400：Technical Communications（L） | 3 | 区 |  | Grade pf C |  |

Major Map: Aeronautical Management Technology
(Air Transportation Management) -
Bachelor of Science (B.S.)
College of Technology and Innovation, Polytechnic Campus
Catalog Year: 2008-2009

Graduation Requirements Summary:

| Total Hours (128 <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:

Major Map: Aeronautical Management Technology (Professional Flight) - Bachelor of Science (B.S.)
College of Technology and Innovation, Polytechnic Campus
Catalog Year: 2008-2009


Major Map：Aeronautical Management Technology （Professional Flight）－Bachelor of Science（B．S．）
College of Technology and Innovation，Polytechnic Campus
Catalog Year：2008－2009

| $\begin{aligned} & \begin{array}{l} \text { Course Subject and Title } \\ \text { (courses in bold/shading are critical) } \end{array} \end{aligned}$ | Hrs． | Upper Division | Transfer Course／Grade | Minimum Grade if Required | Additional Critical Requirement Notes |
| :---: | :---: | :---: | :---: | :---: | :---: |
| TERM SEVEN： 91105 CREDIT HOURS |  |  |  |  |  |
| AMT 408：National Aviation Policy | 3 | 区 |  | Grade of C |  |
| AMT 410：Aviation Safety and Human Factors | 3 | 区 |  | Grade of C |  |
| AMT 482：Airline Instrument Procedures | 3 | 区 |  | Grade of C |  |
| AMT 486：Regional Jet Aircraft Systems | 3 | 区 |  | Grade of C |  |
| AMT 488：Regional Jet Aircraft Systems II | 3 | 区 |  | Grade of C |  |
| TERM EIGHT： $106 \mathbf{1 2 0}$ CREDIT HOURS |  |  |  |  |  |
| AMT 484：Internship | 3 | 区 |  | Grade of C |  |
| AMT 489：Airline Administration | 3 | 区 |  | Grade of C |  |
| AMT 490：Regional Jet Operations Capstone | 3 | 区 |  | Grade of C |  |
| TWC 400：Technical Communications（L） | 3 | 区 |  |  |  |
| Technical Elective | 3 | 区 |  |  |  |

Graduation Requirements Summary：

| Total Hours（128 <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：

Major Map: Air Traffic Management -
Bachelor of Science (B.S.)
College of Technology and Innovation, Polytechnic Campus
Catalog Year: 2008-2009


## 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:

| 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 FIVE： 6175 CREDIT HOURS |  |  |  |  |  |
| APM 301 Introductory Statistics（CS） | 3 | 区 |  |  |  |
| CST 315 Software Enterprise I：Tools \＆Process | 3 | 区 |  |  |  |
| CST 420 Foundations of Distributed Web－based Applications in Java | 3 | 区 |  |  |  |
| CST 433 Database Technology | 3 | 区 |  |  |  |
| Technical elective | 3 | $\square$ |  |  |  |
| TERM SIX： $76 \mathbf{9 0}$ CREDIT HOURS |  |  |  |  |  |
| CST 316 Software Enterprise II：Construction \＆Transition | 3 | 区 |  |  |  |
| CST 355 Applications of Computer Theory | 3 | 区 |  |  |  |
| CST 400－level course | 3 | 区 |  |  |  |
| Literacy and Critical Inquiry（L） | 3 | $\square$ |  |  |  |
| Humanities，Fine Arts \＆Design（HU）AND Cultural Diversity in the US（C），Global Awareness（G）or Historical Awareness（H） | 3 | $\square$ |  |  |  |
| TERM SEVEN： 91105 CREDIT HOURS |  |  |  |  |  |
| CST 415 Software Enterprise III：Inception \＆Elaboration（L） | 3 | 囚 |  |  |  |
| CST 496 Ethics and Professionalism in Computing | 1 | 区 |  |  |  |
| CST 400－level course | 3 | 区 |  |  |  |
| Technical elective | 3 | $\square$ |  |  |  |
| Lab Science | 4 | $\square$ |  |  |  |
| TERM EIGHT： $106 \mathbf{1 2 0}$ 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 |
| CST 400－level course | 3 | 区 |  |  |  |
| CST 400－level course | 3 | 区 |  |  |  |
| Technical Elective | 3 | $\square$ |  |  |  |
| 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 | 囚 |  |  |  |

## 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：

## About the B.A.S. Program

The B.A.S. is a "capstone" or "inverted transfer" degree designed 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.

## Program Requirements

The BAS is a 60 -semester-hour program, divided into four segments:

## 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:

| Numeracy (NA) | 3 semester hours |
| :--- | :--- |
| Lab Science (SQ) | 4 semester hours |
| Literacy (L) | 3 semester hours |
| Humanities (HU) | 3 semester hours |
| Social Science (SB) | 3 semester hours |
| HU or SB | 3 semester hours |

While completing the Humanities and Social Behavioral course, it is important to satisfy the Cultural Diversity, Global and Historical Awareness Areas. In consultation with an advisor, you will choose 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 from a set curricula.

## 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.

## Please see the department for more information about the following concentrations:

Alternative Energy Technologies, Aviation Maintenance Management Technology, Aviation Management Technology, Computer Systems Administration, Cyber Security Applications, Digital Media Management, Digital Publishing, Emergency Management, Fire Service Management, Instrumentation, Internet \& Web Development, Law Enforcement Management, Manufacturing Technology \& Management, Materials Joining \& Manufacturing Technology, Microcomputer Systems, Municipal Operations Management, Operations Management Technology, Semiconductor Technology, and Software Technology Applications.

## Bachelor of Applied Science



## General Studies Sequence (19 Hours)

| ASU |  | Transfer |  | Transfer From |
| :--- | :---: | :--- | :--- | :--- |
| Numeracy - ASC 315 | 3 |  |  |  |
| Science - ASC 325 | 4 |  |  |  |
| Literacy [L1] ENG 301 | 3 |  |  |  |
| Humanities [HU] REL 321 [H] [C] | 3 |  |  |  |
| Social Science [SB] POS 310 | 3 |  |  |  |
| General Studies [HU or SB] REL 379 [G] | 3 |  |  |  |

(Suggested courses are tinted) Sub Total 19 Hrs.

## B.A.S. Area Core (15 Hours)

| BAS Degree Summary | Credit Hours |
| :---: | :---: |
| A.A.S. Degree Block Transfer | 60 |
| General Studies |  |
| B.A.S. Area Core |  |
| Digital Media Management |  |
| Assignable Credits |  |


| ASU |  |  |  |  |  |  |  | Transfer |  | Transfer From | Grade |
| :--- | :---: | :--- | :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| TMC 346 Management Dynamics | 3 |  |  |  |  |  |  |  |  |  |  |
| GIT 352 Technical Presentations | 3 |  |  |  |  |  |  |  |  |  |  |
| TWC 400 Technical Communications [L2] | 3 |  |  |  |  |  |  |  |  |  |  |
| APM 301 Intro to Applied Statistics [N2] | 3 |  |  |  |  |  |  |  |  |  |  |
| EET 407 Energy Conversion and Applications | 3 |  |  |  |  |  |  |  |  |  |  |

## Advisor Comments

Sub Total 15 Hrs .

## Concentration (20 Hours)

| ASU |  |  | Transfer |  |
| :--- | :---: | :---: | :---: | :---: |
| Transfer From |  | Grade |  |  |
| UET 331Electronic Materials | 3 |  |  |  |
| ALT 300 Alternative Energy Technologies: | 3 |  |  |  |
| ALT 310 Solar Cells and Modules | 3 |  |  |  |
| ALT 401 Hydrogen generation, Storage, and Distribution | 3 |  |  |  |
| ALT 420 Applied Science and Engineeering of Fuel Cells | 3 |  |  |  |
| ALT 410 Project | 3 |  |  |  |
| Tech.elective | 2 |  |  |  |

Sub Total 20 Hrs .

## Total Upper Division Hours

$\qquad$

## Assignable Credits (6 Hours)

|  | ASU | Transfer | Transfer From | Grade |
| :---: | :---: | :---: | :---: | :---: |
|  | 3 |  |  |  |
|  | 3 |  |  |  |

Total ASU Resident Hours $\qquad$


2008-2009 Curriculum Check Sheet
Arizona State University Polytechnic
College of Technology an d Innovation

ID. No.
Date A.A.S. Degree Granted $\qquad$
Catalog Year 2008-2009
Advisor:
Expected Grad. Date $\qquad$

| B.A.S. Degree Requirement Summary | Cr. Hrs. |
| :--- | :--- |
| A.A.S. Degree Block Transfer |  |
| Normalization |  |
| B.A.S. Area Core |  |
| Specialization |  |
| Assignable Credits (Technical Electives) |  |

Total (120 hrs)
Sub Total (I)
II. B.A.S. Area Core (15hrs)

| TMC 346 Management Dynamics | 3 |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| APM 301 Introductory Statistics | 3 |  |  |  |
| TWC 400 Technical Communications | 3 |  |  |  |
| CST 383 Shell \& Script Prog. w/ Unix | 3 |  |  |  |
| CST 386 Operating Systems Principles | 3 |  |  |  |
|  |  |  |  |  |

Sub Total (II)

## III. Concentration (20hrs)

| CST 315 SE1: Tools \& Testing | 3 |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| CST 359 Internet Networking Protocols | 3 |  |  |  |
| CST 488 Systems Administration of UNIX | 3 |  |  |  |
| CST 489 Network Administration with TCP/IP | 3 |  |  |  |
| CST 494 Professionalism | 1 |  |  |  |
| CST 3/4xx or other approved Technical Electives | 7 |  |  |  |
|  |  |  |  |  |

Sub Total (III) $\qquad$

## IV. Assignable Credits (Technical Electives) (6 hrs)

|  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |
|  |  |  |  |  |

Sub Total (IV)

Total Upper Division Hours (60hrs min.)

2008-2009 Curriculum Check Sheet
Arizona State University Polytechnic
College of Technology and Innovation

| Name |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| A.A.S. Degree |  |  |  |  |
| A.A.S. Degree Granting Institution |  |  |  |  |
| B.A.S. Academic Department |  |  |  |  |
| B.A.S. Degree Concentration: Cyber Security |  |  |  |  |
| I. General Studies (19hrs) |  | $\frac{\mathrm{Hrs}}{T r}$ | Trans <br> From | Grade |
| ASC 315 Numeracy in Technology | 3 |  |  |  |
| ASC 325 Physical Sciences in Technology | 4 |  |  |  |
| HU | 3 |  |  |  |
| SB | 3 |  |  |  |
| HU/SB | 3 |  |  |  |
| L | 3 |  |  |  |

Sub Total (I)
II. B.A.S. Area Core (15hrs)

| TMC 346 Management Dynamics | 3 |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| APM 301 Introductory Statistics | 3 |  |  |  |
| TWC 400 -Technical Communications | 3 |  |  |  |
| CST 359 - Internet Networking Protocols | 3 |  |  |  |
| CST 386 Operating Systems Principles | 3 |  |  |  |
|  |  |  |  |  |

Sub Total (II)

## III. Concentration (20hrs)

| CST 383 - Shell and Script Pgming w/ Unix | 3 |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| CST 488 - Systems Administration of Unix | 3 |  |  |  |
| CST 489 - Network Admin with TCP/IP | 3 |  |  |  |
| CST 481 - Information Systems Security | 3 |  |  |  |
| CST 482 - Network Forensics | 3 |  |  |  |
| CST 483 - Cyber Security Capstone Project | 2 |  |  |  |
| Technical Elec CST3XX or CST 4XX | 3 |  |  |  |

Sub Total (III) $\qquad$
IV. Assignable Credits (Technical Electives) (6 hrs)

|  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |
|  |  |  |  |  |

Sub Total (IV)

| B.A.S. Degree Requirement Summary | Cr. Hrs. |
| :--- | :--- |
| A.A.S. Degree Block Transfer |  |
| Normalization |  |
| B.A.S. Area Core |  |
| Specialization |  |
| Assignable Credits (Technical Electives) |  |

Total (120 hrs)

| Submitted by |  | Date |
| :---: | :---: | :---: |
|  | Student Signature |  |
| Approved |  |  |
|  | Advisor | Date |
| Approved |  |  |
|  | Chair | Date |
| Approved |  |  |
|  | Dean | Date |
| Approved |  |  |
|  | University | Date |

BAS- Digital Media Management

## Bachelor of Applied Science

2008-2009 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] ENG 301 | 3 |  |  |  |  |  |  |  |
| Humanities [HU] REL 321 [H] [C] | 3 |  |  |  |  |  |  |  |
| Social Science [SB] POS 310 | 3 |  |  |  |  |  |  |  |
| General Studies [HU or SB] REL 379 [G] | 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 |  |  |  |
| TMC 470 Project Management | 3 |  |  |  |
| TWC 400 Technical Communications [L] | 3 |  |  |  |
| APM 301 Introduction to Statistics [MA] | 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 |  |
| Digital Media Management |  |
| Assignable Credits |  |

Total (120 Hours Minimum)

Sub Total 15 Hrs .
Digital Media Management (20 Hours)

| ASU |  |  | Transfer | Transfer From |
| :--- | :---: | :---: | :---: | :---: |
| GIT 314 Multimedia Design,Planning\&Storybrd | 3 |  |  |  |
| GIT 334 Image Capture and Manipulation | 3 |  |  |  |
| GIT 337 Web Content Design | 3 |  |  |  |
| GIT 412 Multimedia Authoring,Scripting\&Prod | 3 |  |  |  |
| GIT 413 Professional Portfolio Design \& Pres. | 3 |  |  |  |
| GIT 414 Web Site Design \& Internet Tech | 3 |  |  |  |
| GIT 494 Technical Project | 2 |  |  |  |

Sub Total 20 Hrs.

## Assignable Credits (6 Hours)

|  | ASU | Transfer | Transfer From | Grade |
| :---: | :---: | :---: | :---: | :---: |
| GIT 384 Commercial Digital Photography | 3 |  |  |  |
| GIT 417 Advanced Internet Programming | 3 |  |  |  |

Sub Total 6 Hrs.

Advisor Comments
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## Total Upper Division Hours

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Total ASU Resident Hours $\qquad$
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## Bachelor of Applied Science

2008-2009 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 2008-2009 |
| B.A.S. Academic Department | Advisor |
| Number of Upper Division Transfer Credits _-_ | Expected Graduation Date |

## General Studies Sequence (19 Hours)

| ASU |  | Transfer | Transfer From | Grade |
| :--- | :---: | :---: | :---: | :---: |
| Numeracy - ASC 315 | 3 |  |  |  |
| Science - ASC 325 | 4 |  |  |  |
| Literacy [L] ENG 301 | 3 |  |  |  |
| Humanities [HU] REL 321 [H] [C] | 3 |  |  |  |
| Social Science [SB] POS 310 | 3 |  |  |  |
| General Studies [HU or SB] REL 379 [G] | 3 |  |  |  |

## B.A.S. Area Core (15 Hours)

| ASU | Transfer |  | Transfer From | Grade |
| :--- | :---: | :--- | :--- | :--- |
| TMC 346 Management Dynamics | 3 |  |  |  |
| TMC 470 Project Management | 3 |  |  |  |
| TWC 400 Technical Communications [L] | 3 |  |  |  |
| APM 301 Introduction to Statistics [MA] | 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 |  |
| Digital Publishing |  |
| Assignable Credits |  |

Total (120 Hours Minimum)

## Sub Total 15 Hrs.

## Digital Publishing (20 Hours)

|  | ASU | Transfer | Transfer From | Grade |
| :---: | :---: | :---: | :---: | :---: |
| GIT 303 Digital Publishing | 3 |  |  |  |
| GIT 333 Printing Technology | 3 |  |  |  |
| GIT 334 Image Capture \& Manipulation | 3 |  |  |  |
| GIT 436 Gravure Technology | 3 |  |  |  |
| GIT 437 Color Reproduction Systems | 3 |  |  |  |
| GIT 450 Digital Workflow in Graphic Industries | 3 |  |  |  |
| TMC 494 Senior Project | 2 |  |  |  |

Sub Total 20 Hrs .

## Advisor Comments

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## Total Upper Division Hours

$\qquad$

## Assignable Credits (6 Hours)

| ASU |  |  |  | Transfer |  | Transfer From |  | Grade |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| GIT 384 Commercial Digital Photography | 3 |  |  |  |  |  |  |  |
| GIT 432 Graphic Industry Business Practices | 3 |  |  |  |  |  |  |  |

Total ASU Resident Hours $\qquad$

Sub Total 6 Hrs.

## Bachelor of Applied Science

2008-2009 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] ENG 301 | 3 |  |  |  |  |  |  |  |
| Humanities [HU] REL 321 [H] [C] | 3 |  |  |  |  |  |  |  |
| Social Science [SB] POS 310 | 3 |  |  |  |  |  |  |  |
| General Studies [HU or SB] REL 379 [G] | 3 |  |  |  |  |  |  |  |

(Suggested courses are tinted) Sub Total 19 Hrs.

## B.A.S. Area Core ( $\mathbf{1 5}$ Hours)

|  | ASU | Transfer | Transfer From | Grade |
| :---: | :---: | :---: | :---: | :---: |
| TMC 346 Management Dynamics | 3 |  |  |  |
| OMT 452 Ind. Human Resource Management | 3 |  |  |  |
| TWC 400 Technical Communications [L] | 3 |  |  |  |
| APM 301 Introduction to Statistics [MA] | 3 |  |  |  |
| GIT 335 Computer Systems Technology | 3 |  |  |  |


| BAS Degree |
| :--- |
| Bummary |
| Sum |


| Credit <br> Hours |  |
| :--- | :---: |
| A.A.S. Degree Block Transfer | 60 |
| General Studies |  |
| B.A.S. Area Core |  |
| Emergency Management |  |
| Assignable Credits |  |
| He |  |

Total (120 Hours Minimum)

Sub Total 15 Hrs .

## Emergency Management (20 Hours)

| ASU |  |  | Transfer | Transfer From |
| :--- | :---: | :---: | :---: | :---: |
| 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 |  |  |  |
| ETM 494 Technical Project | 2 |  |  |  |

Sub Total 20 Hrs .

## Advisor Comments

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$\qquad$
$\qquad$

## Total Upper Division Hours

$\qquad$

Total ASU Resident Hours $\qquad$

## Assignable Credits (6 Hours)

| ASU |  |  | Transfer |  |
| :--- | :---: | :---: | :---: | :---: |
| ETM 461 Homeland Security | 3 |  |  |  |
| ETM 468 Simulators and Exercising | 3 |  |  |  |

Sub Total 6 Hrs.

## Bachelor of Applied Science

2008-2009 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 2008-2009 |
| 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)

| ASU |  | Transfer |  | Transfer From |  | Grade |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Numeracy - ASC 315 | 3 |  |  |  |  |  |
| Science - ASC 325 | 4 |  |  |  |  |  |
| Literacy [L] | 3 |  |  |  |  |  |
| Humanities [HU] (C, H, or G) | 3 |  |  |  |  |  |
| Social Science [SB] (C, H, or G) | 3 |  |  |  |  |  |
| General Studies [HU or SB] (C, H, or G) | 3 |  |  |  |  |  |

## B.A.S. Area Core ( $\mathbf{1 5}$ Hours)

|  | ASU | Transfer | Transfer From | Grade |
| :---: | :---: | :---: | :---: | :---: |
| FSM 425 Fire Service Admin or IMC 346 Mgmt Dyn | 3 |  |  |  |
| FSM 304 Fire Pers Mgt or OMT 452 Ind. HR or IMC 470 Proj Mgt | 3 |  |  |  |
| TWC 400 Technical Communications [L] | 3 |  |  |  |
| PAF 401 stats or APM 301 Intro to Stats [MA] | 3 |  |  |  |
| FSM 363 Comp App in Emr Mgt or GIT 335 Comp Sys Tech | 3 |  |  |  |
| Sub Tota | 15 | 0 |  |  |

## Fire Service Management (20 Hours)

|  | ASU | Transfer | Transfer From | Grade |
| :---: | :---: | :---: | :---: | :---: |
| FSM 306 Fire Prevention Org \& Mgt | 3 |  |  |  |
| FSM 308 Fire Department Budgeting | 3 |  |  |  |
| FSM 309 EMS Org \& Mgt | 3 |  |  |  |
| FSM 405 Fire Service Leadership | 3 |  |  |  |
| FSM UD Course | 3 |  |  |  |
| FSM UD Course | 3 |  |  |  |
| TMC 494 Senior Project | 2 |  |  |  |
|  | 20 | $\underline{0}$ |  |  |

## Assignable Credits (6 Hours)

|  | ASU | Transfer |  | Transfer From |  | Grade |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| FSM UD Course or satisfy a deficiency | 3 |  |  |  |  |  |  |  |
| FSS UD Course or satisfy a deficiency | 3 |  |  |  |  |  |  |  |
| Sub Total |  |  |  |  |  | $\underline{\mathbf{0}}$ |  |  |



| A.A.S. Degree Block Transfer | $\mathbf{0}$ |
| :--- | :---: |
| General Studies | $\mathbf{1 9}$ |
| B.A.S. Area Core | $\mathbf{1 5}$ |
| Fire Service Management | $\mathbf{2 0}$ |
| Assignable Credits | $\mathbf{6}$ |

Total (120 Hours minimum) 60
Hrs Earned at ASU + Transfer
60
Additional Hours Req.
0

Total Upper Div Hours
60
Total ASU Res Hours 60

Advisor Comments
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$\qquad$ $\xrightarrow{ }$

## Bachelor of Applied Science

2008-2009 Curriculum Check Sheet
College of Technology and Innovation

| Student Name |  |
| :--- | :--- |
| A.A.S. Degree | ID. Number |
| A.A.S. Degree Granting Institution |  |
| B.A.S. Academic Department |  |
| Number of Upper Division Transfer Credits |  |
| 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 [L1] ENG 301 | 3 |  |  |  |
| Humanities [HU] REL 321 [H] [C] | 3 |  |  |  |
| Social Science [SB] POS 310 | 3 |  |  |  |
| General Studies [HU or SB] REL 379 [G] | 3 |  |  |  | | (Suggested courses are tinted) Sub Total 19 HrS. |
| :--- |

## B.A.S. Area Core (15 Hours)

| ASU |  |  | Transfer |  |
| :--- | :---: | :--- | :--- | :--- |
| TMC 346 Management Dynamics | 3 |  |  |  |
| GIT 352 Technical Presentations | 3 |  |  |  |
| TWC 400 Technical Communications [L2] | 3 |  |  |  |
| APM 301 Intro to Applied Statistics [N2] | 3 |  |  |  |
| EET 403 PLC's Sensors and Actuators | 3 |  |  |  |

Sub Total 15 Hrs .

## Concentration ( 20 Hours)

|  | ASU | Transfer | Transfer From | Grade |
| :---: | :---: | :---: | :---: | :---: |
| CET 350 Digital Systems II | 4 |  |  |  |
| CET 354 Microcomputer Arch and Programming | 4 |  |  |  |
| EET 407 Electrical Power Systems | 4 |  |  |  |
| EET 430 Instrumentation Systems | 4 |  |  |  |
| CET 383 Shell and Script Programming with UNIX | 3 |  |  |  |
| EET 490 Electronics Project I | 1 |  |  |  |

Sub Total 20 Hrs .

## Assignable Credits (6 Hours)



Sub Total 6 Hrs.

| BAS Degree Summary | Credit Hours |
| :---: | :---: |
| A.A.S. Degree Block Transfer | 60 |
| General Studies |  |
| B.A.S. Area Core |  |
| Digital Media Management |  |
| Assignable Credits |  |

Advisor Comments
$\qquad$
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$\qquad$
$\qquad$

Total Upper Division Hours $\qquad$

Total ASU Resident Hours $\qquad$


## BAS- Internet/Web Development E-Learning Degree Program

## Bachelor of Applied Science

2008-2009 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 2008-2009 |
| B.A.S. Academic Department | Advisor |
| Number of Upper Division Transfer Credits $\qquad$ Institution of Transfer Course Work (Upper Division Only) | Expected Graduation Date |

## General Studies Sequence (19 Hours)

|  | ASU | Transfer | Transfer From | Grade |
| :---: | :---: | :---: | :---: | :---: |
| Numeracy - ASC 315 | 3 |  |  |  |
| Science - ASC 325 | 4 |  |  |  |
| Literacy [L] ENG 301 | 3 |  |  |  |
| Humanities [HU] REL 321 [H] [C] | 3 |  |  |  |
| Social Science [SB] POS 310 | 3 |  |  |  |
| General Studies [HU or SB] REL 379 [G] | 3 |  |  |  |
| (Suggested courses are tinted) Sub | 9 |  |  |  |

## B.A.S. Area Core (15 Hours)

| ASU |  |  |  |  |  |  |  |  | Transfer |  | Transfer From | Grade |
| :--- | :---: | :--- | :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| TMC 346 Management Dynamics | 3 |  |  |  |  |  |  |  |  |  |  |  |
| TMC 470 Project Management | 3 |  |  |  |  |  |  |  |  |  |  |  |
| TWC 400 Technical Communications [L] | 3 |  |  |  |  |  |  |  |  |  |  |  |
| APM 301 Introduction to Statistics [MA] | 3 |  |  |  |  |  |  |  |  |  |  |  |
| GIT 335 Computer Systems Technology | 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> Digital Publishing  <br> Assignable Credits  |

Total (120 Hours Minimum)

Advisor Comments

Sub Total 15 Hrs .

## Internet/Web Development (20 Hours)

| ASU |  | Transfer | Transfer From | Grade |
| :--- | :---: | :--- | :--- | :--- |
| GIT 334 Image Capture and Manipulation | 3 |  |  |  |
| GIT 337 Web Content Design | 3 |  |  |  |
| GIT 412 Multimedia Authoring,Scripting\&Prod | 3 |  |  |  |
| GIT 414 Web Site Design \& Internet Tech | 3 |  |  |  |
| GIT 417 Advanced Internet Programming | 3 |  |  |  |
| GIT 435 Web Management and E-commerce | 3 |  |  |  |
| GIT 494 Technical Project | 2 |  |  |  |

Sub Total 20 Hrs.

## Assignable Credits (6 Hours)

| ASU |  |  | Transfer | Transfer From |
| :--- | :---: | :---: | :---: | :---: |
| GIT 314 Multimedia Design, Planning\&Storybrd | 3 |  |  |  |
| GIT 415 Computer Graphics: Bus Plan and Mgt | 3 |  |  |  |

$$
\text { Sub Total } 6 \mathrm{Hrs} .
$$

Sul

## Total Upper Division Hours

$\qquad$

Total ASU Resident Hours $\qquad$

ID. Number $\qquad$ Date A.A.S. Degree Granted
$\qquad$
Advisor Expected Graduation Date $\qquad$ Institution of Transfer Course Work (Upper Division Only)

## Bachelor of Applied Science

2008-2009 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 2008-2009 |
| B.A.S. Academic Department | Advisor |
| Number of Upper Division Transfer Credits $\qquad$ Institution of Transfer Course Work (Upper Division Only | Expected Graduation Date |

## General Studies Sequence (19 Hours)

| ASU |  | Transfer |  | Transfer From |  | Grade |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Numeracy - ASC 315 |  |  |  |  |  |  |
| Science - ASC 325 |  |  |  |  |  |  |
| Literacy [L] |  |  |  |  |  |  |
| Humanities [HU] (C, H, or G) |  |  |  |  |  |  |
| Social Science [SB] (C, H, or G) |  |  |  |  |  |  |
| General Studies [HU or SB] (C, H, or G) |  |  |  |  |  |  |

## B.A.S. Area Core ( $\mathbf{1 5}$ Hours)

| ASU |  | Transfer |  | Transfer From | Grade |
| :--- | :--- | :--- | :--- | :--- | :--- |
| FSM 425 Fire Service Admin or IMC 346 Mgmt Dyn |  |  |  |  |  |
| FSM 304 Fire Pers Mgt or ITM 452 Ind. HR or IMC 470 Proj Mgt |  |  |  |  |  |
| TWC 400 Technical Communications [L] |  |  |  |  |  |
| PAF 401 stats or APM 301 Intro to Stats [MA] |  |  |  |  |  |
| FSM 363 Comp App in Emr Mgt or GIT 335 Comp Sys Tech |  |  |  |  |  |

Sub Total $\underline{\mathbf{0}}$

## Law Enforcement Management (20 Hours)

| BAS Degree Summary | Credit Hours |
| :---: | :---: |
| A.A.S. Degree Block Transfer | 0 |
| General Studies | 19 |
| B.A.S. Area Core | 15 |
| Law Enforcement Mgt | 20 |
| Assignable Credits | 6 |
| Total (120 Hours minimum) | 60 |
| Hrs Earned at ASU + Transfer | 0 |
| Additional Hours Req. | 60 |
| Total Upper Div Hours | 0 |
| Total ASU Res Hours | 0 |
| Advisor Comments |  |


| LEM 304 Law Enforcement Personnel Mgt (prop) |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| FSM 460 Incident Mgt Sys \& Emerg Oper Center |  |  |  |  |
| FSM 494 Fire Department Budgeting |  |  |  |  |
| LEM 305 Quality Law Enforcement Services(prop) |  |  |  |  |
| LEM 400 Human Behavior and Crime (proposed) |  |  |  |  |
| LEM 421 Political and Legal Consid LEM (proposed) |  |  |  |  |
| LEM 494 Technical Project or LEM UD Course |  |  |  |  |

Sub Total $\underline{\underline{0}}$

## Assignable Credits (6 Hours)

| ETM 461 Homeland Security | ASU | Transfer |  | Transfer From | Grade |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :---: | :---: | :---: | :---: | :---: |
| LEM UD Course or satisfy a deficiency |  |  |  |  |  |  |  |  |  |  |
| Sub Total |  |  |  |  |  |  | $\mathbf{0}$ |  |  |  |


| Student Signature | Date- | Date |
| :---: | :---: | :---: |
|  | Date | Date |
| 2008-09 Academic Catalog 1391 |  |  |

## Bachelor of Applied Science

2008-2009 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 2008-2009 |
| B.A.S. Academic Department | Advisor |
| Number of Upper Division Transfer Credits $\qquad$ Institution of Transfer Course Work (Upper Division Only) | Expected Graduation Date |

## General Studies Sequence (19 Hours)

| ASU |  |  |  |  |  |  |  | Transfer | Transfer From | Grade |
| :--- | :---: | :--- | :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Numeracy - ASC 315 | 3 |  |  |  |  |  |  |  |  |  |
| Science - ASC 325 | 4 |  |  |  |  |  |  |  |  |  |
| Literacy [L1] ENG 301 | 3 |  |  |  |  |  |  |  |  |  |
| Humanities [HU] REL 320 or 321 [H] [C] | 3 |  |  |  |  |  |  |  |  |  |
| Social Science [SB] POS 310 | 3 |  |  |  |  |  |  |  |  |  |
| General Studies [HU or SB] REL 379 [G] | 3 |  |  |  |  |  |  |  |  |  |

## B.A.S. Area Core (15 Hours)

| 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  <br> Total (120 Hours Minimum) $\quad$ _____ |


| 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 |  |  |  |  |  |  |  |  |  |

## Advisor Comments

Sub Total 15 Hrs.

## Manufacturing Technology (20 Hours)

|  | 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 $\qquad$

Total ASU Resident Hours $\qquad$

| Assignable Credits (6 Hours) |  |  |  |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ASU |  |  |  |  |  |  |  | Transfer | Transfer From Grade |
| APM 301 suggested 3   <br> MET 351 suggested 3   |  |  |  |  |  |  |  |  |  |

Sub Total 6 Hrs.


## Bachelor of Applied Science

| Student Name | ID. Number |
| :---: | :---: |
| A.A.S. Degree | Date A.A.S. Degree Granted |
| A.A.S. Degree Granting Institution | ASU Catalog Year 2008-2009 |
| B.A.S. Academic Department | Advisor |
| Number of Upper Division Transfer Credits $\qquad$ Institution of Transfer Course Work (Upper Division Only) | Expected Graduation Date |

## General Studies Sequence (19 Hours)

| ASU |  |  |  |  |  |  |  | Transfer | Transfer From | Grade |
| :--- | :---: | :--- | :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Numeracy - ASC 315 | 3 |  |  |  |  |  |  |  |  |  |
| Science - ASC 325 | 4 |  |  |  |  |  |  |  |  |  |
| Literacy [L1] ENG 301 | 3 |  |  |  |  |  |  |  |  |  |
| Humanities [HU] REL 320 or 321 [H] [C] | 3 |  |  |  |  |  |  |  |  |  |
| Social Science [SB] POS 310 | 3 |  |  |  |  |  |  |  |  |  |
| General Studies [HU or SB] REL 379 [G] | 3 |  |  |  |  |  |  |  |  |  |

## B.A.S. Area Core (15 Hours)

| ASU |  |  |  |  |  |  |  | Transfer |  | Transfer From | Grade |
| :--- | :---: | :--- | :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| MET 341 Manufacturing Analysis | 3 |  |  |  |  |  |  |  |  |  |  |
| TWC 400 Technical Communications | 3 |  |  |  |  |  |  |  |  |  |  |
| MET 401 Statistical Process Control | 3 |  |  |  |  |  |  |  |  |  |  |
| MET 416 Applied Computer Int. Mfg. | 3 |  |  |  |  |  |  |  |  |  |  |
| MET 345 Advanced Mfg. Processes | 3 |  |  |  |  |  |  |  |  |  |  |

Sub Total 15 Hrs .
Materials Joining \& Manufacturing Technology ( 20 Hours)

|  | ASU | Transfer | Transfer From | Grade |
| :---: | :---: | :---: | :---: | :---: |
| MET 300 Applied Material Science | 3 |  |  |  |
| MET 309 NDI and Measurement | 1 |  |  |  |
| MET 396 Mfg. Professional Orientation | 1 |  |  |  |
| MET 400 Materials and Joining Processes | 3 |  |  |  |
| MET 402 Advanced Material Joining | 3 |  |  |  |
| MET 409 Engineering Economics | 3 |  |  |  |
| MET 437 Design for Materials J oining | 3 |  |  |  |
| MET 451 Introduction to Automation | 3 |  |  |  |

Sub Total $\underline{20 \mathrm{Hrs} \text {. }}$
Assignable Credits (6 Hours)

|  | ASU | Transfer | Transfer From | Grade | Total ASU Resident Hours |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 3 |  |  |  |  |
|  | 3 |  |  |  |  |



Name $\qquad$
A.A.S. Degree $\qquad$
A.A.S. Degree Granting Institution $\qquad$
B.A.S. Academic Department $\qquad$
B.A.S. Degree Concentration: $\qquad$

ID. No.
Date A.A.S. Degree Granted $\qquad$
Catalog Year _ 2008-2009
Advisor:
Expected Grad. Date $\qquad$

| I. General Studies | $\begin{array}{r} \text { (19hrs) } \\ \text { ASU } \end{array}$ | $\begin{aligned} & \mathrm{Hrs} \\ & T_{r} \end{aligned}$ | $\begin{aligned} & \text { Trans } \\ & \text { From } \end{aligned}$ | Grade |
| :---: | :---: | :---: | :---: | :---: |
| ASC 315 Numeracy in Technology | 3 |  |  |  |
| ASC 325 Physical Sciences in Technology | - 4 |  |  |  |
| HU | 3 |  |  |  |
| SB | 3 |  |  |  |
| HU/SB | 3 |  |  |  |
| L | 3 |  |  |  |

Sub Total (I)

## II. B.A.S. Area Core (15hrs)

| TMC 346 Management Dynamics | 3 |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| APM 301 Introductory Statistics | 3 |  |  |  |
| TWC 400 Technical Communications | 3 |  |  |  |
| CST 383 Shell \& Script Prog. w/ Unix | 3 |  |  |  |
| CST 386 Operating Systems Principles | 3 |  |  |  |

Sub Total (II)

## III. Concentration (20 hrs)

| CST 350 HDL | 4 |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| CST 364 Computer Architecture | 3 |  |  |  |
| CST 456 Micro. Comp. Systems Interfacing | 4 |  |  |  |
| CST 452 Digital Logic Applications | 4 |  |  |  |
| CST 486 Embedded C Programming | 3 |  |  |  |
| CST3xx, or CST4xx Technical Elective | 2 |  |  |  |

Sub Total (III) $\qquad$
IV. Assignable Credits (Technical Electives) (6 hrs)

|  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |
|  |  |  |  |  |

Sub Total (IV)

Total Upper Division Hours (60hrs min.) $\qquad$

| B.A.S. Degree Requirement Summary | Cr. Hrs. |
| :--- | :---: |
| A.A.S. Degree Block Transfer |  |
| Normalization |  |
| B.A.S. Area Core |  |
| Specialization |  |
| Assignable Credits (Technical Electives) |  |

Total (120 hrs)

| Submitted by |  | Date |
| :---: | :---: | :---: |
|  | Student Signature |  |
| Approved |  |  |
|  | Advisor | Date |
| Approved |  |  |
|  | Chair | Date |
| Approved |  |  |
|  | Dean | Date |
| Approved |  |  |
|  | University | Date |

## Bachelor of Applied Science

2008-2009 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 2008-2009 |
| 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)

| ASU |  |  | Transfer |  |
| :--- | :---: | :---: | :---: | :---: |
| Numeracy - ASC 315 | 3 |  |  |  |
| Science - ASC 325 | 4 |  |  |  |
| Literacy [L] ENG 301 | 3 |  |  |  |
| Humanities [HU] REL 321 [H] [C] | 3 |  |  |  |
| Social Science [SB] POS 310 | 3 |  |  |  |
| General Studies [HU or SB] REL 379 [G] | 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 |  |  |  |
| ITM 452 Ind. Human Resource Management | 3 |  |  |  |
| TWC 400 Technical Communications [L] | 3 |  |  |  |
| APM 301 Introduction to Statistics [MA] | 3 |  |  |  |
| GIT 335 Computer Systems Technology | 3 |  |  |  |

## Advisor Comments

Sub Total 15 Hrs.

## Municipal Operations Management (20 Hours)

| ASU |  |  | Transfer | Transfer From |
| :--- | :---: | :---: | :---: | :---: |
| TMC 331 Quality Assurance | 3 |  |  |  |
| ITM 345 Public Sector Management | 3 |  |  |  |
| ITM 430 Ethical Issues in Technology | 3 |  |  |  |
| ITM 480 Organizational Effectiveness | 3 |  |  |  |
| ITM 461 Operations Management | 3 |  |  |  |
| TMC 470 Project Management | 3 |  |  |  |
| ITM 484 Professional Internship | 2 |  |  |  |

Sub Total 20 Hrs.

| BAS Degree |
| :--- |
| Summary |


| Credit <br> Hours |  |
| :--- | :---: |
| A.A.S. Degree Block Transfer | 60 |
| General Studies |  |
| B.A.S. Area Core |  |
| Municipal Operations Mgt |  |
| Assignable Credits |  |
| Total (120 Hours Minimum) |  |

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$\qquad$
$\qquad$
$\qquad$

## Total Upper Division Hours

$\qquad$

## Assignable Credits (6 Hours)



Total ASU Resident Hours $\qquad$

Sub Total 6 Hrs.

## Bachelor of Applied Science

2008-2009 Curriculum Check Sheet
College of Technology and Innovation


General Studies Sequence (19 Hours)

| ASU |  |  | Transfer | Transfer From |
| :--- | :---: | :---: | :---: | :---: |
| Numeracy - ASC 315 | 3 |  |  |  |
| Science - ASC 325 | 4 |  |  |  |
| Literacy [L] ENG 301 | 3 |  |  |  |
| Humanities [HU] REL 321 [H] [C] | 3 |  |  |  |
| Social Science [SB] POS 310 | 3 |  |  |  |
| General Studies [HU or SB] REL 379 [G] | 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 |  |  |  |  |  |  |  |  |  |  |  |
| OMT 452 Ind. Human Resource Management | 3 |  |  |  |  |  |  |  |  |  |  |  |
| TWC 400 Technical Communications [L] | 3 |  |  |  |  |  |  |  |  |  |  |  |
| APM 301 Introduction to Statistics [MA] | 3 |  |  |  |  |  |  |  |  |  |  |  |
| GIT 335 Computer Systems Technology | 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> Operations Management  <br> Assignable Credits  |

Total (120 Hours Minimum)

Sub Total 15 Hrs .

## Operations Management (20 Hours)

| ASU |  |  |  |  |  |  |  | Transfer |  | Transfer From | Grade |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| TMC 331 Quality Assurance | 3 |  |  |  |  |  |  |  |  |  |  |
| OMT 343 Occupational Safety and Ergonomics | 3 |  |  |  |  |  |  |  |  |  |  |
| OMT 344 Industrial Organization | 3 |  |  |  |  |  |  |  |  |  |  |
| OMT 430 Ethical Issues in Technology | 3 |  |  |  |  |  |  |  |  |  |  |
| OMT 461 Operations Management | 3 |  |  |  |  |  |  |  |  |  |  |
| TMC 470 Project Management | 3 |  |  |  |  |  |  |  |  |  |  |
| TMC 494 Senior Project | 2 |  |  |  |  |  |  |  |  |  |  |

Sub Total 20 Hrs .

## Advisor Comments

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$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$

## Total Upper Division Hours

$\qquad$

## Assignable Credits (6 Hours)

| ASU |  |  |  |  |  |  |  |  | Transfer |  | Transfer From |  | Grade |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| OMT 440 Intro to International Business | 3 |  |  |  |  |  |  |  |  |  |  |  |  |

Sub Total 6 Hrs.

Total ASU Resident Hours $\qquad$


## Bachelor of Applied Science

2008-2009 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 2008-2009 |
| 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)

| ASU |  |  | Transfer | Transfer From |
| :--- | :---: | :---: | :---: | :---: |
| Numeracy - ASC 315 | 3 |  |  |  |
| Science - ASC 325 | 4 |  |  |  |
| Literacy [L1] ENG 301 | 3 |  |  |  |
| Humanities [HU] REL 321 [H] [C] | 3 |  |  |  |
| Social Science [SB] POS 310 | 3 |  |  |  |
| General Studies [HU or SB] REL 379 [G] | 3 |  |  |  |

(Suggested courses are tinted)
Sub Total
19 Hrs.

| 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> Digital Media Management  <br> Assignable Credits  |

Total (120 Hours Minimum)

## B.A.S. Area Core (15 Hours)

| ASU |  |  |  |  |  |  |  | Transfer |  | Transfer From |  | Grade |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| TMC 346 Management Dynamics | 3 |  |  |  |  |  |  |  |  |  |  |  |
| GIT 352 Technical Presentations | 3 |  |  |  |  |  |  |  |  |  |  |  |
| TWC 400 Technical Communications [L2] | 3 |  |  |  |  |  |  |  |  |  |  |  |
| APM 301 Intro to Applied Statistics [N2] | 3 |  |  |  |  |  |  |  |  |  |  |  |
| EET 3XX OR 4XX | 3 |  |  |  |  |  |  |  |  |  |  |  |

Sub Total 15 Hrs.

## Concentration (20 Hours)

|  | ASU | Transfer | Transfer From | Grade |
| :---: | :---: | :---: | :---: | :---: |
| UET 305 Introduction to Microelectronics | 3 |  |  |  |
| UET 331 Electronic Materials | 3 |  |  |  |
| UET 411 Layer Deposition Technology | 3 |  |  |  |
| UET 416 Dopant Control Technology | 3 |  |  |  |
| UET 418 Systems on Silcon | 4 |  |  |  |
| UET 4xx or EET 4xx Technical Elective | 4 |  |  |  |

Sub Total 20 Hrs.

## Assignable Credits (6 Hours)

| ASU |  |  |  | Transfer |
| :--- | :---: | :---: | :---: | :---: |
|  | 3 |  | Transfer From |  |
|  | 3 |  |  |  |
|  | 3 |  |  |  |

Total Upper Division Hours $\qquad$

Total ASU Resident Hours $\qquad$

Sub Total 6 Hrs.

## Advisor Comments

$\qquad$
$\qquad$
$\qquad$
$\qquad$
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## Bachelor of Applied Science

## 2008-2009 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 2008-2009 |
| 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)

|  | ASU | Transfer | Transfer From | Grade |
| :---: | :---: | :---: | :---: | :---: |
| Numeracy - ASC 315 | 3 |  |  |  |
| Science - ASC 325 | 4 |  |  |  |
| Literacy [L] ENG 301 | 3 |  |  |  |
| Humanities [HU] REL 321 [H] [C] | 3 |  |  |  |
| Social Science [SB] ASB 353 | 3 |  |  |  |
| General Studies [HU or SB] REL 379 [G] | 3 |  |  |  |
| (Suggested courses are tinted) Sub | $9 \mathrm{Hrs}$. |  |  |  |

## B.A.S. Area Core (15 Hours)

| ASU | Transfer |  | Transfer From | Grade |
| :--- | :---: | :--- | :--- | :--- |
| TMC 346 Management Dynamics | 3 |  |  |  |
| TMC 470 Project Management | 3 |  |  |  |
| TWC 400 Technical Communications [L] | 3 |  |  |  |
| APM 301 Introduction to Statistics [MA] | 3 |  |  |  |
| GIT 335 Computer Systems Technology | 3 |  |  |  |


| BAS Degree |
| :--- |
| BA <br> Summary |
| Credit <br> Hours |
| A.A.S. Degree Block Transfer |
| General Studies |
| B.A.S. Area Core |
| Technical Graphics |
| Assignable Credits |

Total (120 Hours Minimum)

## Sub Total 15 Hrs.

## Technical Graphics (20 Hours)

| ASU |  |  |  |  |  |  |  | Transfer | Transfer From | Grade |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| GIT 312 3D Computer Graphics Model\&Repre | 3 |  |  |  |  |  |  |  |  |  |
| GIT 313 Tech Illustration\&Photoreal Render | 3 |  |  |  |  |  |  |  |  |  |
| GIT 314 Multimedia Design, Planning, \& Story Brds | 3 |  |  |  |  |  |  |  |  |  |
| GIT 337 Web Content Design | 3 |  |  |  |  |  |  |  |  |  |
| GIT 411 Computer Animation | 3 |  |  |  |  |  |  |  |  |  |
| GIT 413 Professional Portfolio Design \& Pres. | 3 |  |  |  |  |  |  |  |  |  |
| GIT 494 Technical Project | 2 |  |  |  |  |  |  |  |  |  |

Sub Total $\underline{20 \mathrm{Hrs} \text {. }}$

## Advisor Comments

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## Total Upper Division Hours

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## Assignable Credits (6 Hours)

| ASU |  |  |  | Transfer |
| :--- | :---: | :---: | :---: | :---: |
| GIT 415 ComputerGraphics: Bus Plan\&Mgt From | 3 |  |  |  |
| GIT 441 Graphic Information Systems | 3 |  |  |  |

Sub Total 6 Hrs.

Total ASU Resident Hours
$\qquad$

BAS- Aviation Maintenance Management Technology

## Bachelor of Applied Science

2008-2009 Curriculum Check Sheet
College of Technology and Innovation


## General Studies Sequence (19 Hours)

| ASU |  | Transfer |  | Transfer From |
| :--- | :---: | :---: | :---: | :---: |
| Numeracy in Technology - ASC 315 | 3 |  |  |  |
| Physical Science in Technology - ASC 325 | 4 |  |  |  |
| Literacy [L1] ENG 301 | 3 |  |  |  |
| Humanities [HU] REL 321 [H] [C] | 3 |  |  |  |
| Social Science [SB] POS 310 | 3 |  |  |  |
| General Studies [HU or SB] REL 379 [G] | 3 |  |  |  |

(Suggested courses are tinted)

> Sub Total

19 Hrs .
$\left.\begin{array}{l}\begin{array}{l}\text { BAS Degree } \\ \text { Bummary } \\ \text { Sum }\end{array} \\ \begin{array}{|l|c|}\hline \text { Credit } \\ \text { Hours }\end{array} \\ \hline \text { A.A.S. Degree Block }\end{array}\right] 60$

|  | ASU | Transfer | Transfer From | Grade |
| :---: | :---: | :---: | :---: | :---: |
| TMC 346 Management Dynamics OR OMT 344 Industrial Organizations OR OMT 452 Industrial Human Resource Mgt | 3 |  |  |  |
| TWC 400 Technical Communications | 3 |  |  |  |
| APM 301 Introductory Statistics | 3 |  |  |  |
| GIT 335 Computer Systems Technology | 3 |  |  |  |
| TMC 470 Project Management | 3 |  |  |  |

Sub Total 15 Hrs.
Aviation Maintenance Management Technology (20 Hours)

| ASU |  | Transfer | Transfer From | Grade |
| :--- | :---: | :---: | :---: | :---: |
| AMT 308 Air Transportation | 3 |  |  |  |
| AMT 350 Aircraft Design \& Logistical Management | 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.) | 1 |  |  |  |

## Advisor Comments

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$\qquad$
$\qquad$

$$
\text { Sub Total } 20 \mathrm{Hrs} .
$$

## Total Upper Division Hours

$\qquad$

## Assignable Credits (6 Hours)

| ASU |  |  |  | Transfer |
| :--- | :---: | :---: | :---: | :---: |
|  | 3 |  | Transfer From |  |
|  | 3 |  |  |  |
|  |  |  |  |  |

Total ASU Resident Hours $\qquad$

BAS- Aviation Management Technology

## Bachelor of Applied Science

| Student Name | ID. Number |
| :---: | :---: |
| A.A.S. Degree | Date A.A.S. Degree Granted |
| A.A.S. Degree Granting Institution | ASU Catalog Year 2008-2009 |
| 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)

| ASU |  |  |  |  |  |  |  | Transfer |  | Transfer From | Grade |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Numeracy in Technology - ASC 315 | 3 |  |  |  |  |  |  |  |  |  |  |
| Physical Science in Technology - ASC 325 | 4 |  |  |  |  |  |  |  |  |  |  |
| Literacy [L1] ENG 301 | 3 |  |  |  |  |  |  |  |  |  |  |
| Humanities [HU] REL 321 [H] [C] | 3 |  |  |  |  |  |  |  |  |  |  |
| Social Science [SB] POS 310 | 3 |  |  |  |  |  |  |  |  |  |  |
| General Studies [HU or SB] REL 379 [G] | 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 OR OMT 344 Industrial Organizations OR OMT 452 Industrial Human Resource Mgt | 3 |  |  |  |
| TWC 400 Technical Communications | 3 |  |  |  |
| STP 420 Introductory Applied Statistics | 3 |  |  |  |
| GIT 335 Computer Systems Technology | 3 |  |  |  |
| TMC 470 Project Management | 3 |  |  |  |


| BAS Degree | Credit |
| :--- | :--- |
| 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

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Sub Total 15 Hrs.

## Aviation Management Technology (20 Hours)

| 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 494 Air Transportation Research | 3 |  |  |  |
| AMT xxxTechnical Elective (Upper Div.) | 1 |  |  |  |

Sub Total 20 Hrs.

## Total Upper Division Hours

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Total ASU Resident Hours $\qquad$

Date

Date

## Assignable Credits (6 Hours)

|  | ASU | Transfer | Transfer From | Grade |
| :---: | :---: | :---: | :---: | :---: |
|  | 3 |  |  |  |
|  | 3 |  |  |  |



## Major Map: Computer Systems (Computer Hardware Technology) Bachelor of Science (B.S.)

College of Technology and Innovation, Polytechnic Campus
Catalog Year: 2008-2009


Major Map：Computer Systems （Computer Hardware Technology）－ Bachelor of Science（B．S．）
College of Technology and Innovation，Polytechnic Campus Catalog Year：2008－2009

| Course Subject and Title （courses in bold／shading are critical） | Hrs． | $\begin{aligned} & \hline \text { Upper } \\ & \text { Division } \end{aligned}$ | Transfer Course／Grade | $\begin{aligned} & \text { Minimum Grade if } \\ & \text { Required } \end{aligned}$ | Additional Critical Requirement Notes |
| :---: | :---: | :---: | :---: | :---: | :---: |
| TERM SIX： $76 \mathbf{9 0}$ 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： 91105 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） | $\begin{gathered} \hline 3 \text { or } \\ 4 \\ \hline \end{gathered}$ | ® |  |  |  |
| CST 496：Ethics and Professionalism in Computing | 1 | 区 |  |  |  |
| Lab Science | 4 | $\square$ |  |  |  |
| TERM EIGHT： $106 \mathbf{1 2 0}$ CREDIT HOURS |  |  |  |  |  |
| CST 416：Software Enterprise IV：Project \＆Process Management <br> $(\mathrm{L})^{* *}$ or <br> TWC 400：Technical Communications（L） | 3 | 区 |  |  | ＊＊Literacy（L）designation approval pending |
| UET 415：Electronic Manufacturing Engineering Principles | 3 | 囚 |  |  |  |
| 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：

Major Map: Computer Systems (Embedded Systems<br>Technology) - Bachelor of Science (B.S.)<br>College of Technology and Innovation, Polytechnic Campus<br>Catalog Year: 2008-2009



Major Map：Computer Systems（Embedded Systems
Technology）－Bachelor of Science（B．S．）
College of Technology and Innovation，Polytechnic Campus
Catalog Year：2008－2009

| 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 SIX： 7690 CREDIT HOURS |  |  |  |  |  |
| CST 383：Shell and Script Programming with UNIX | 3 | 区 |  |  |  |
| CST 359：Internet Networking Protocols OR CST 458：Digital Computer Networks | 3 | 区 |  |  |  |
| CST 486：Embedded C Programming | 3 | 区 |  |  |  |
| Social \＆Behavioral Science（SB）AND Cultural Diversity in the US （C），Global Awareness（G）or Historical Awareness（H） | 3 | $\square$ |  |  |  |
| Humanities，Fine Arts \＆Design（HU）AND Cultural Diversity in the US（C），Global Awareness（G）or Historical Awareness（H） | 3 | $\square$ |  |  |  |
| TERM SEVEN： 91105 CREDIT HOURS |  |  |  |  |  |
| CST 415：Software Enterprise III：Inception and Elaboration（L） | 3 | 区 |  |  |  |
| CST 456：Microcomputer Systems Interfacing | 4 | 区 |  |  |  |
| CST 496：Ethics and Professionalism in Computing | 1 | 区 |  |  |  |
| Lab Science | 4 | 囚 |  |  |  |
| Technical Elective | 3 | 区 |  |  |  |
| TERM EIGHT： $106 \mathbf{1 2 0}$ CREDIT HOURS |  |  |  |  |  |
| CST 416：Software Enterprise IV：Project \＆Process Management （L）＊＊OR TWC 400：Technical Communications（L） | 3 | 囚 |  |  | ＊＊Literacy（L）designation approval pending |
| CST 441：Software for Personal Digital Assistants or CST 494：Special Topics | 3 | 囚 |  |  |  |
| 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 | 囚 |  |  |  |
| Technical Elective | 3 | 区 |  |  |  |
| Technical Elective | 4 | 囚 |  |  |  |

## 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：

Major Map：Electronics Engineering Technology
Bachelor of Science（B．S．）
College of Technology and Innovation，Polytechnic Campus
Catalog Year：2008－2009

|  |  |  | Completed ATP：$\square$ Yes $\square$ No |  | Completed AGEC：$\square$ Yes $\square$ No |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 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： 015 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 |
| APM 265：Mathematics of Change I（MA＊） | 3 | $\square$ |  | Grade of C |  |
| EST 194 （160）：Introduction to Electronic Systems | 3 | $\square$ |  | Grade of C |  |
| CHM 113：General Chemistry I（SQ） | 4 | $\square$ |  |  |  |
| 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 |  |
| Social \＆Behavioral Science（SB）AND Cultural Awareness in the US （C），Global Awareness（G）or Historical Awareness（H） | 3 | $\square$ |  |  |  |
| TERM TWO： 1630 CREDIT HOURS |  |  |  |  |  |
| APM 266：Mathematics of Change II | 3 | $\square$ |  | Grade of C | －Complete First－Year Composition requirement by end of semester 3 |
| EST 194 （115）：Digital Systems I | 3 | $\square$ |  | Grade of C |  |
| PHY 111／113：General Physics／Laboratory（SQ） | 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： 3145 CREDIT HOURS |  |  |  |  |  |
| APM 294：Mathematics of Change III | 3 | $\square$ |  | Grade of C | －Complete First－Year Composition requirement by end of semester 3 |
| CST 256：C－Programming for Engineering Technology（or CST 220 Programming Languages for Technology with $\mathrm{C} / \mathrm{C}++$ and Scripting） | 3 | $\square$ |  | Grade of C |  |
| PHY 112／114：General Physics II／Laboratory（SQ） | 3／1 | $\square$ |  |  |  |
| Literacy and Critical Inquiry（L） | 3 | $\square$ |  |  |  |
| Humanities，Fine Arts \＆Design（HU）AND Cultural Diversity in the US（C），Global Awareness（G）or Historical Awareness（H） | 3 | $\square$ |  |  |  |
| TERM FOUR： $46 \mathbf{6 0}$ CREDIT HOURS |  |  |  |  |  |
| EST 200：Project Laboratory | 2 | $\square$ |  | Grade of C |  |
| EST 210：Circuit Analysis I | 3 | $\square$ |  | Grade of C |  |
| EST 394 （315）：Digital Systems II | 3 | 区 |  | Grade of C |  |
| 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） | 3 | $\square$ |  |  |  |
| TERM FIVE： 6175 CREDIT HOURS |  |  |  |  |  |
| ALT 360：Renewable Energy Technologies：Fundamentals \＆ Integration | 3 | ® |  | Grade of C |  |
| EST 310：Circuit Analysis II | 3 | 区 |  | Grade of C |  |
| EST 394 （350）：Advanced Microcontrollers | 3 | 囚 |  | Grade of C |  |
| UET 331：Electronic Materials | 3 | 区 |  | Grade of C |  |
| UET 305 Introduction to Microelectronics | 3 | 区 |  | Grade of C |  |
| TERM SIX： $76 \mathbf{9 0}$ CREDIT HOURS |  |  |  |  |  |
| EST 345：Planning \＆Delivering Engineering Projects | 3 | 囚 |  | Grade of C |  |
| EST 394 （360）：Wireless Systems | 3 | 囚 |  | Grade of C |  |
| EST 370：Sensors | 3 | 区 |  | Grade of C |  |
| EST 394 （380）：Electronic Devices | 3 | 囚 |  | Grade of C |  |
| EST 494 （410）：Electronics System Design | 3 | 囚 |  | Grade of C |  |
| Concentration Elective | 3 | 囚 |  | Grade of C |  |
| TERM SEVEN： 91105 CREDIT HOURS |  |  |  |  |  |
| EST 494 （465）Statistical Process Control | 3 | 区 |  | Grade of C |  |
| TWC 446 Technical \＆Scientific Reports（L） | 3 | 区 |  |  |  |
| EST 494 （470）Capstone Design I | 2 | 区 |  | Grade of C |  |
| Concentration Elective | 3 | 区 |  | Grade of C |  |
| Concentration Elective | 3 | 区 |  | Grade of C |  |
| Concentration Elective | 3 | 区 |  | Grade of C |  |
| TERM EIGHT： $106 \mathbf{1 2 0}$ CREDIT HOURS |  |  |  |  |  |
| Upper division Humanities，Fine Arts \＆Design（HU）or Social Behavioral Science（SB） | 3 | 区 |  |  |  |
| EST 494 （471）Capstone Design II | 3 | 区 |  | Grade of C |  |
| Upper division Technical Elective | 3 | ® |  | Grade of C |  |
| Concentration Elective | 3 | 区 |  | Grade of C |  |
| Concentration Elective | 3 | 区 |  | Grade of C |  |

## Bachelor of Science (B.S.)

College of Technology and Innovation, Polytechnic Campus
Catalog Year: 2008-2009

## Graduation Requirements Summary:

| Total Hours (125 <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 (50 <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:

Each Concentration is $\mathbf{1 8}$ hours

| Basic Electronics Option | Alternative Energy Concentration |
| :--- | :--- |
| EET 494 Digital Real Time Control | ALT 401: Hydrogen Generation, Storage \&Distribution |
| EET 406: Control System Technology | ALT 405: Power Conditioning |
| EET 430: Instrumentation Systems | ALT 410: Solar Cells \& Modules |
| EET 460: Power Electronics | ALT 435: Applied Photovoltaics |
| Upper division Technical Elective (6 hours) | ALT 445: Automotive \& Stationary FCS |
|  | MET 340 Thermo-Fluids I |
| Integrated Electronic Systems |  |
| UET 411: Layer Disposition Technology | Telecommunications |
| UET 416: Dopant Control Technology | EET 401: Digital Signal Proc for Multimedia |
| UET 417: Semiconductor Technology Practice | EET 494: Advanced Wireless Technologies |
| UET 418: Systems on Silicon | EET 494: RFID Technology |
| UET 424: Pattern Transfer Technology | EET 494: ST: Dig Filt HD |
| UET 432: Semiconductor Packaging \& Heat Transfer |  |

Major Map：Electronics Engineering Technology （Alternative Energy Technology）－ Bachelor of Science（B．S．）
College of Technology and Innovation，Polytechnic Campus
Catalog Year：2008－2009

|  |  |  | Completed ATP：$\square$ Yes $\quad \square$ No |  | Completed AGEC：$\square$ Yes $\square$ No |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 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： 015 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> －Minimum 2．25 ASU CUM GPA |
| MA course：（APM 265：Mathematics of Change I＊） | 3 | $\square$ |  | Grade of C |  |
| EST 194：Introduction to Electronic Systems | 3 | $\square$ |  | Grade of C |  |
| CHM 113：General Chemistry I（SQ） | 4 | $\square$ |  |  |  |
| 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 |  |
| Social \＆Behavioral Science（SB）AND Cultural Awareness in the US （C），Global Awareness（G）or Historical Awareness（H） | 3 | $\square$ |  |  |  |
| TERM TWO： 1630 CREDIT HOURS |  |  |  |  |  |
| APM 266：Mathematics of Change II | 3 | $\square$ |  | Grade of C | －Complete First Year Composition requirement by end of semester 3 <br> －Minimum 2．25 ASU CUM GPA |
| EST 194：Digital Systems I | 3 | $\square$ |  | Grade of C |  |
| PHY 111／113：General Physics／Laboratory（SQ） | 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： 3145 CREDIT HOURS |  |  |  |  |  |
| APM 294：Mathematics of Change III | 3 | $\square$ |  | Grade of C | －Complete First Year Composition requirement by end of semester 3 <br> －Minimum 2．25 ASU CUM GPA |
| CST 256：C－Programming | 3 | $\square$ |  | Grade of C |  |
| PHY 112／114：General Physics II／Laboratory（SQ） | 3／1 |  |  |  |  |
| Literacy and Critical Inquiry（L） | 3 | $\square$ |  |  |  |
| Humanities，Fine Arts \＆Design（HU）AND Cultural Diversity in the US（C），Global Awareness（G）or Historical Awareness（H） | 3 | $\square$ |  |  |  |
| TERM FOUR： $46 \mathbf{6 0}$ CREDIT HOURS |  |  |  |  |  |
| EST 294：Project Laboratory | 2 | $\square$ |  | Grade of C | －Minimum 2．25 ASU CUM GPA |
| EST 210：Circuit Analysis I | 3 | $\square$ |  | Grade of C |  |
| EST 394：Digital Systems II | 3 | 区 |  | Grade of C |  |
| 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） | 3 | $\square$ |  |  |  |
| TERM FIVE： 6175 CREDIT HOURS |  |  |  |  |  |
| ALT 360：Renewable Energy Technologies：Fundamentals \＆ Integration | 3 | 囚 |  | Grade of C | －Minimum 2．25 ASU CUM GPA |
| EST 310：Circuit Analysis II | 3 | 区 |  | Grade of C |  |
| EST 394：Control MCU | 3 | 区 |  | Grade of C |  |
| UET 331：Electronic Materials | 3 | 区 |  | Grade of C |  |
| Business Processes（see advisor for course prefix \＆number） | 3 | 区 |  | Grade of C |  |
| TERM SIX： $76 \mathbf{9 0}$ CREDIT HOURS |  |  |  |  |  |
| EST 394：Project Plan and Deliver | 3 | 区 |  | Grade of C | －Minimum 2．25 ASU CUM GPA |
| EST 394：Wireless Systems | 3 | 区 |  | Grade of C |  |
| EST 394：Sensors | 3 | 囚 |  | Grade of C |  |
| EST 394：Electronic Devices | 3 | 区 |  | Grade of C |  |
| System Design（see advisor for course prefix \＆number） | 3 | 区 |  | Grade of C |  |
| Complete 1 Concentration Core course from： <br> ALT 494 －AP <br> ALT 494 －Auto <br> ALT 494 －Appl．Sci． <br> ALT 494 －H <br> ALT 494 －Power <br> ALT 494 －Sr．Project <br> ALT 494 －Solar | 3 | 囚 |  | Grade of C |  |

Major Map：Electronics Engineering Technology
（Alternative Energy Technology）－
Bachelor of Science（B．S．）
College of Technology and Innovation，Polytechnic Campus
Catalog Year：2008－2009

| 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： 91105 CREDIT HOURS |  |  |  |  |  |
| SPC Math | 3 | 区 |  | Grade of C | －Minimum 2．25 ASU CUM GPA |
| TWC 400：Technical Communications（L） | 3 | 区 |  |  |  |
| Complete 3 additional Concentration Core courses from： <br> ALT 494 －AP <br> ALT 494 －Auto <br> ALT 494 －Appl．Sci． <br> ALT 494 －H <br> ALT 494 －Power <br> ALT 494 －Sr．Project <br> ALT 494 －Solar | 3 3 3 | 区 <br> 区 <br> 区 |  | Grade of C <br> Grade of C <br> Grade of C |  |
| Upper division Technical Elective | 2 | 区 |  |  |  |
| TERM EIGHT： $106 \mathbf{1 2 0}$ CREDIT HOURS |  |  |  |  |  |
| Upper division Humanities，Fine Arts \＆Design（HU）or Social Behavioral Science（SB） | 3 | 区 |  |  | －Minimum 2．25 ASU CUM GPA |
| Complete remaining Concentration Core courses from： <br> ALT 494 －AP <br> ALT 494 －Auto <br> ALT 494 －Appl．Sci． <br> ALT 494 －H <br> ALT 494 －Power <br> ALT 494 －Sr．Project <br> ALT 494 －Solar | 3 3 3 | 区 <br> 区 <br> 区 |  | Grade of C <br> Grade of C <br> Grade of C |  |
| Upper division Technical Elective | 3 | 区 |  |  |  |

## Graduation Requirements Summary：

| Total Hours（124 <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（50 <br> minimum） | Total Comm．College <br> Hrs．（64 maximum） |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |

## 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） |
| $\circ$ | Natural Science－General（SG） |
| ral | Studies Awareness Requirements |
| $\circ$ | Cultural Diversity in the US（C） |
| $\circ$ | Global Awareness（G） |
| $\circ$ | Historical Awareness（H） |

－First Year Composition
Additional Notes：

Major Map：Electronics Engineering Technology
（Electronic Systems）－
Bachelor of Science（B．S．）
College of Technology and Innovation，Polytechnic Campus
Catalog Year：2008－2009

| 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： 91105 CREDIT HOURS |  |  |  |  |  |
| SPC Math | 3 | 区 |  | Grade of C | －Minimum 2．25 ASU CUM GPA |
| TWC 400：Technical Communications（L） | 3 | 区 |  |  |  |
| Complete 1 Concentration Core course from： <br> DSP and Control（see advisor for course prefix \＆number） <br> EET 406：Control System Technology <br> UET 415：Electronic Manufacturing Engineering Principles <br> EET 430：Instrumentation Systems <br> EET 460：Power Electronics <br> Upper division Technical Elective | 3 3 3 3 | 区 <br> 区 <br> 区 |  | Grade of C <br> Grade of C <br> Grade of C |  |
| Upper division Technical Elective | 2 | 囚 |  |  |  |
| TERM EIGHT： $106 \mathbf{1 2 0}$ CREDIT HOURS |  |  |  |  |  |
| Upper division Humanities，Fine Arts \＆Design（HU）or Social Behavioral Science（SB） | 3 | 区 |  |  | －Minimum 2．25 ASU CUM GPA |
| Complete 1 Concentration Core course from： <br> DSP and Control（see advisor for course prefix \＆number） <br> EET 406：Control System Technology <br> UET 415：Electronic Manufacturing Engineering Principles <br> EET 430：Instrumentation Systems <br> EET 460：Power Electronics <br> Upper division Technical Elective | 3 3 3 3 | 区 <br> 区 <br> 区 |  | Grade of C <br> Grade of C <br> Grade of C |  |
| Upper division Technical Elective | 3 | 区 |  |  |  |

## Graduation Requirements Summary：

| Total Hours（124 <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（50 <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：

Major Map：Electronics Engineering Technology （Integrated Electronic Systems）－ Bachelor of Science（B．S．）
College of Technology and Innovation，Polytechnic Campus
Catalog Year：2008－2009

|  |  |  | Completed ATP：$\square$ Yes $\quad \square$ No |  | Completed AGEC：$\square$ Yes $\square$ No |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 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： 015 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> －Minimum 2．25 ASU CUM GPA |
| MA course：（APM 265：Mathematics of Change I＊） | 3 | $\square$ |  | Grade of C |  |
| EST 194：Introduction to Electronic Systems | 3 | $\square$ |  | Grade of C |  |
| CHM 113：General Chemistry I（SQ） | 4 | $\square$ |  |  |  |
| 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 |  |
| Social \＆Behavioral Science（SB）AND Cultural Awareness in the US （C），Global Awareness（G）or Historical Awareness（H） | 3 | $\square$ |  |  |  |
| TERM TWO： 1630 CREDIT HOURS |  |  |  |  |  |
| APM 266：Mathematics of Change II | 3 | $\square$ |  | Grade of C | －Complete First Year Composition requirement by end of semester 3 <br> －Minimum 2．25 ASU CUM GPA |
| EST 194：Digital Systems I | 3 | $\square$ |  | Grade of C |  |
| PHY 111／113：General Physics／Laboratory（SQ） | 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： 3145 CREDIT HOURS |  |  |  |  |  |
| APM 294：Mathematics of Change III | 3 | $\square$ |  | Grade of C | －Complete First Year Composition requirement by end of semester 3 <br> －Minimum 2．25 ASU CUM GPA |
| CST 256：C－Programming | 3 | $\square$ |  | Grade of C |  |
| PHY 112／114：General Physics II／Laboratory（SQ） | 3／1 | $\square$ |  |  |  |
| Literacy and Critical Inquiry（L） | 3 | $\square$ |  |  |  |
| Humanities，Fine Arts \＆Design（HU）AND Cultural Diversity in the US（C），Global Awareness（G）or Historical Awareness（H） | 3 | $\square$ |  |  |  |
| TERM FOUR： $46 \mathbf{6 0}$ CREDIT HOURS |  |  |  |  |  |
| EST 294：Project Laboratory | 2 | $\square$ |  | Grade of C | －Minimum 2．25 ASU CUM GPA |
| EST 210：Circuit Analysis I | 3 | $\square$ |  | Grade of C |  |
| EST 394：Digital Systems II | 3 | 区 |  | Grade of C |  |
| 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） | 3 | $\square$ |  |  |  |
| TERM FIVE： 6175 CREDIT HOURS |  |  |  |  |  |
| ALT 360：Renewable Energy Technologies：Fundamentals \＆ Integration | 3 | 囚 |  | Grade of C | －Minimum 2．25 ASU CUM GPA |
| EST 310：Circuit Analysis II | 3 | 区 |  | Grade of C |  |
| EST 394：Control MCU | 3 | 区 |  | Grade of C |  |
| UET 331：Electronic Materials | 3 | 区 |  | Grade of C |  |
| Business Processes（see advisor for course prefix \＆number） | 3 | 区 |  | Grade of C |  |
| TERM SIX： $76 \mathbf{9 0}$ CREDIT HOURS |  |  |  |  |  |
| EST 394：Project Plan and Deliver | 3 | 区 |  | Grade of C | －Minimum 2．25 ASU CUM GPA |
| EST 394：Wireless Systems | 3 | 区 |  | Grade of C |  |
| EST 394：Sensors | 3 | 囚 |  | Grade of C |  |
| EST 394：Electronic Devices | 3 | 区 |  | Grade of C |  |
| System Design（see advisor for course prefix \＆number） | 3 | 区 |  | Grade of C |  |
| Complete 1 Concentration Core course from： <br> UET 411：Layer Disposition Technology <br> UET 416：Dopant Control Technology <br> UET 417：Semiconductor Technology Practice <br> UET 418：Systems on Silicon <br> UET 424：Pattern Transfer Technology <br> UET 432：Semiconductor Packaging \＆Heat Transfer UET 494：Special Topics | 3 | 囚 |  | Grade of C |  |

Major Map: Electronics Engineering Technology
(Integrated Electronic Systems) -
Bachelor of Science (B.S.)
College of Technology and Innovation, Polytechnic Campus
Catalog Year: 2008-2009


## Graduation Requirements Summary:

| Total Hours (124 <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 (50 <br> minimum) | Total Comm. College <br> Hrs. (64 maximum) |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |

## 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) |
| $\circ$ | Natural Science-General (SG) |
| ral | Studies Awareness Requirements |
| $\circ$ | Cultural Diversity in the US (C) |
| $\circ$ | Global Awareness (G) |
| $\circ$ | Historical Awareness (H) |

- First Year Composition

Additional Notes:

Major Map：Electronics Engineering Technology （Telecommunications）－Bachelor of Science（B．S．） College of Technology and Innovation，Polytechnic Campus Catalog Year：2008－2009

| 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： 91105 CREDIT HOURS |  |  |  |  |  |
| SPC Math | 3 | 区 |  | Grade of C | －Minimum 2．25 ASU CUM GPA |
| TWC 400：Technical Communications（L） | 3 | 区 |  |  |  |
| Complete 3 additional Concentration Core courses from： EET 494，Advanced Wireless Technologies <br> EET 401：Digital Signal Processing for Multimedia <br> EET 494；RFID Technology <br> EET 494：ST：Dig Filt HD <br> EET 494：ST：Senior Project <br> Upper division technical elective（ 5 hrs ） | 3 $3 / 5$ | 区 <br> 区 <br> 区 |  | Grade of C <br> Grade of C <br> Grade of C |  |
| Upper division Technical Elective | 2 | 区 |  |  |  |
| TERM EIGHT： $106 \mathbf{1 2 0}$ CREDIT HOURS |  |  |  |  |  |
| Upper division Humanities，Fine Arts \＆Design（HU）or Social Behavioral Science（SB） | 3 | 囚 |  |  | －Minimum 2．25 ASU CUM GPA |
| Complete remaining Concentration Core courses from： EET 494，Advanced Wireless Technologies <br> EET 401：Digital Signal Processing for Multimedia <br> EET 494；RFID Technology <br> EET 494：ST：Dig Filt HD <br> EET 494：ST：Senior Project <br> Upper division technical elective（ 5 hrs ） | 3／5 | 区 <br> 区 <br> 区 |  | Grade of C <br> Grade of C <br> Grade of C |  |
| Upper division Technical Elective | 3 | 区 |  |  |  |

## Graduation Requirements Summary：

| Total Hours（124 <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（50 <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：

## 1 1 Arizona State UNIVERSITY

Major Map：Engineering－
Bachelor of Science in Engineering（B．S．E）
College of Technology \＆Innovation，Polytechnic Campus
Catalog Year：2008－2009

|  |  |  | Completed ATP： | $\square$ Yes $\square$ No | Completed AGEC：$\square$ Yes $\square$ No |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Course Subject and Title （courses in bold／shading are critical） | Hrs． | $\begin{aligned} & \hline \text { Upper } \\ & \text { Division } \\ & \hline \end{aligned}$ | Transfer Course／Grade | Minimum Grade if Required | Additional Critical Requirement Notes |
| TERM ONE： 015 CREDIT HOURS |  |  |  |  |  |
| ASU 101：The ASU Experience | 1 | $\square$ |  |  | －ASU 101 is for ASU freshman students only not |
| APM 265：Mathematics of Change I（MA）or Pre－req MAT 170：Precalculus | 3 | $\square$ |  | Grade of C | required of transfer students <br> －APM 265 must be completed by the end of term 2 ． |
| Complete 1 course from： <br> EGR 101：Introduction to Engineering Design I or <br> EGR 102：Introduction to Engineering Design II | $\begin{gathered} 3 \text { or } \\ 4 \\ \hline \end{gathered}$ | $\square$ |  | Grade of C | －An SAT，ACT，Accuplacer，or TOEFL score determines placement into first－year composition courses |
| CHM 113：General Chemistry I（SQ） | 4 | $\square$ |  |  | 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 | －PHY 121 must be completed by end of term 3 <br> －Maintain minimum cumulative GPA of 2.0 |
| TERM TWO： 1630 CREDIT HOURS |  |  |  |  |  |
| PHY 121：University Physics I：Mechanics（if APM 265 （or equivalent）is completed otherwise take Elective | 3 | $\square$ |  | Grade of C in PHY $121$ | －PHY 121 must be completed by end of term 3 <br> －Maintain minimum cumulative GPA of 2.0 <br> －APM 267 must be completed by the end of term 4 |
| Complete remaining course from： <br> EGR 101：Introduction to Engineering Design I or <br> EGR 102：Introduction to Engineering Design II | $\begin{gathered} 3 \text { or } \\ 4 \\ \hline \end{gathered}$ | $\square$ |  | Grade of C |  |
| APM 266：Mathematics of Change II Or APM 265：Mathematics of Change 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 | $\square$ |  | Grade of C |  |
| EGR 104 （currently EGR 194）：Critical Inquiry in Engineering | 3 | $\square$ |  |  |  |
| TERM THREE： 3145 CREDIT HOURS |  |  |  |  |  |
| PHY 121：University Physics I or if already completed，take Elective | 3 | $\square$ |  | Grade of C in PHY $121$ | －Completed First－Year Composition Requirement （ENG 101／107 and ENG 102／108 or ENG 105） <br> －PHY 121 must be completed by end of term 3 <br> －APM 267 must be completed by the end of term 4 <br> －Maintain minimum cumulative GPA of 2.0 |
| EGR 201：Fall Multidisciplinary Project | 3 | $\square$ |  | Grade of C |  |
| EGR 2＊＊Engineering Fundamentals（five hours of EGR 2xx modules at 1 hour each） | 5 | $\square$ |  |  |  |
| EGR 280：Engineering Statistics（CS） | 3 | $\square$ |  |  |  |
| APM 267：Mathematics of Change III Or APM 266：Mathematics of Change II | 3 | $\square$ |  | Grade of C |  |
| TERM FOUR： $46 \mathbf{6 0}$ CREDIT HOURS |  |  |  |  |  |
| EGR 202：Spring Multidisciplinary Project <br> EGR 2＊＊Engineering Fundamentals（five hours of EGR 2xx modules at 1 hour each） | 3 | $\square$ |  | Grade of C | －APM 267 must be completed by the end of term 4 <br> －Maintain minimum cumulative GPA of 2.0 |
|  | 5 | $\square$ |  |  |  |
| APM 267：Mathematics of Change III or if completed take Humanities，Fine Arts \＆Design（HU） | 3 | $\square$ |  |  |  |
| MAT 275：Modern Differential Equations（or MAT 274：Elementary Differential Equations） | 3 | $\square$ |  |  |  |
| HTY 316：History of Engineering（SB \＆G） | 3 | 区 |  |  |  |
| TERM FIVE： 6175 CREDIT HOURS |  |  |  |  |  |
| EGR 301：Fall Concentration Project | 3 | 区 |  |  | Consult with advisor for choice of Primary Focus area courses from： <br> －Civil Infrastructure Focus Area <br> －Electrical Engineering Systems Focus Area <br> －Mechanical Engineering Systems Focus Area <br> －Robotics Focus Area |
| EGR 3＊＊Module | 1 | 区 |  |  |  |
| UD Primary Focus Area | 3 | 区 |  |  |  |
| Science Elective：complete once course from： <br> BIO 187：General Biology I（SG） <br> CHM 116：General Chemistry II（SQ） <br> GLG 101／103：Intro to Geology I（Physical）\＆Lab（SQ，G） <br> PHY 122：University Physics I Lab <br> PHY 131／132：University Physics II（SQ） | 4 | $\square$ |  |  |  |
| Social \＆Behavioral Science（SB） | 3 | $\square$ |  |  |  |
| Secondary Focus Area（choose with advisor consultation） | 3 | $\square$ |  |  |  |
| TERM SIX： $76 \mathbf{9 0}$ CREDIT HOURS |  |  |  |  |  |
| EGR 302：Spring Concentration Project（L＊＊） | 3 | 区 |  |  | ＊＊Literacy \＆Critical Inquiry（L）designation approval pending <br> Consult with advisor for choice of Primary Focus area courses from： <br> －Civil Infrastructure Focus Area <br> －Electrical Engineering Systems Focus Area <br> －Mechanical Engineering Systems Focus Area <br> －Robotics |
| EGR 3＊＊Module | 1 | 区 |  |  |  |
| Upper division Primary Focus Area | 3 | 区 |  |  |  |
| MAT 343：Applied Linear Algebra | 3 | 区 |  |  |  |
| Humanities，Fine Arts \＆Design（HU） | 3 | $\square$ |  |  |  |
| Secondary Focus Area（choose w／advisor consultation） | 3 | $\square$ |  |  |  |
| TERM SEVEN： 91105 CREDIT HOURS |  |  |  |  |  |
| EGR 401：Engineering Capstone Project I | 4 | 区 |  |  | Consult with advisor for choice of Primary Focus area courses from： <br> －Civil Infrastructure Focus Area <br> －Electrical Engineering Systems Focus Area <br> －Mechanical Engineering Systems Focus Area <br> －Robotics |
| Upper division Primary Focus Area | 3 | 区 |  |  |  |
| Math or Science（PHY 321 or 331 or ABS 485） | 3 | $\square$ |  |  |  |
| Upper division Secondary Focus Area（choose w／advisor consultation） | 3 | 区 |  |  |  |
| Elective | 3 | $\square$ |  |  |  |

Major Map：Engineering－
Bachelor of Science in Engineering（B．S．E）
College of Technology \＆Innovation，Polytechnic Campus
Catalog Year：2008－2009

| 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 EIGHT： $106 \mathbf{1 2 0}$ CREDIT HOURS |  |  |  |  |  |
| EGR 402：Engineering Capstone Project II | 4 | 区 |  |  | Consult with advisor for choice of Primary focus area courses from： <br> －Civil Infrastructure Focus Area <br> －Electrical Engineering Systems Focus Area <br> －Mechanical Engineering Systems Focus Area <br> －Robotics |
| Upper division Primary Focus Area | 3 | 区 |  |  |  |
| Upper division Humanities，Fine Arts \＆Design（HU）or Social \＆Behavioral Science（SB）AND Cultural Awareness in the US（C），Global Awareness（G）or Historical Awareness（H） | 3 | 区 |  |  |  |
| Upper division Secondary Focus Area（choose w／advisor consultation） | 3 | 囚 |  |  |  |
| Elective | 3 | $\square$ |  |  |  |

## Graduation Requirements Summary：

| Total Hours <br> $(128$ 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：

## Major Map: Environmental Technology Management - <br> Bachelor of Science (BS) <br> College of Technology \& Innovation, Polytechnic Campus <br> Catalog Year: 2008-2009



Major Map：Environmental Technology Management－ Bachelor of Science（BS）<br>College of Technology \＆Innovation，Polytechnic Campus<br>Catalog Year：2008－2009

| 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 SIX： $76 \mathbf{9 0}$ CREDIT HOURS |  |  |  |  |  |
| TMC 470：Project Management | 3 | 区 |  |  |  |
| ETM 303：Environmental Regulations | 3 | 囚 |  |  |  |
| ETM 402：Unit Treatment Technologies | 3 | 区 |  |  |  |
| Science－Math－CS Elective | 3 | $\square$ |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| TERM SEVEN： 91105 CREDIT HOURS |  |  |  |  |  |
| TMC 396：Professional Orientation | 1 | 区 |  |  |  |
| TWC 400：Technical Communications（L） | 3 | 区 |  |  |  |
| ETM 407：Occupational Hygiene | 3 | 区 |  |  |  |
| Technical Elective | 3 | $\square$ |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| TERM EIGHT： 106120 CREDIT HOURS |  |  |  |  |  |
| ETM 428：International Environmental Management | 3 | 区 |  |  |  |
| TMC 480：Senior Project | 3 | 区 |  |  |  |
| Technical Elective | 3 | $\square$ |  |  |  |
| Technical Elective | 3 | $\square$ |  |  |  |
| 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：

Students must complete a minimum of 50 hours of upper division coursework．Please consult with an academic advisor when choosing technical and general electives to make sure that this requirement is met．

# Major Map：Graphic Information Technology－ <br> Bachelor of Science（B．S．） 

College of Technology \＆Innovation，Polytechnic Campus Catalog Year：2008－2009

| 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： 91105 CREDIT HOURS |  |  |  |  |  |
| GIT 450：Digital Workflow in Graphic Industries | 3 | 囚 |  |  | －Concentration Selectives－Recommend 3 from <br> －GIT 411：Computer Animation <br> －GIT 412：Multimedia Authoring，Scripting and Production <br> －GIT 414：Web Site Design and Internet／Web Technologies <br> －OMT 440：Introduction to International Business <br> －TWC 401：Principles of Technical Communication |
| GIT 415：Computer Graphics：Business Planning and Management | 3 | 囚 |  |  |  |
| GIT 432：Graphic industry Business Practices | 3 | 区 |  |  |  |
| Concentration Selective | 3 | 区 |  |  |  |
| Concentration Selective | 2 | 区 |  |  |  |
| Upper Division Humanities，Fine Arts \＆Design（HU）OR Social \＆ Behavioral Science（SB）AND Cultural Awareness in the US（C）， Global Awareness（G）or Historical Awareness（H）or SB \＆C，G or H | 3 | 区 |  |  |  |
| TERM EIGHT： 106120 CREDIT HOURS |  |  |  |  |  |
| TWC 400：Technical Communications（L） | 3 | 囚 |  |  |  |
| GIT 4＊＊ | 3 | 囚 |  |  |  |
| GIT 4＊＊ | 3 | 区 |  |  |  |
| TMC 480：Senior Project | 3 | 区 |  |  |  |
| GIT 4＊＊ | 3 | 囚 |  |  |  |

## 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：

Major Map：Manufacturing Engineering Technology－ Bachelor of Science（B．S．）

College of Technology and Innovation，Polytechnic Campus，
Catalog Year：2008－2009

|  |  |  | Completed ATP：$\quad \square$ Yes $\quad \square$ No |  | Completed AGEC：$\square$ Yes $\square$ No |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \begin{array}{l} \text { Course Subject and Title } \\ \text { (courses in bold/shading are critical) } \end{array} \end{aligned}$ | Hrs． | Upper Division | Transfer Course／Grade | Minimum Grade if Required | Additional Critical Requirement Notes |
| TERM ONE： 015 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> －Students complete either MAT 170，APM／MAT 265，APM／MAT 266 and APM 301 or APM／MAT 265，APM／MAT 266，MAT 274／275 and APM 301 depending on math placement score <br> －Complete either a MAT or APM and a PHY or a CHM course（recommend both a math class and a science course．Completion of College Algebra and College Trig is equivalent to Precalculus．） <br> －Complete MET course（recommend MET 150， MET 160）． |
| Complete 1 course（depending on math placement score）from： <br> MAT 170：Precalculus or <br> APM 265：Mathematics of Change I（or MAT 265） | 3 | $\square$ |  |  |  |
| Complete one course from： <br> MET 150：Introduction to Engineering Technology <br> MET 160：CADD and Solid Modeling | $\begin{gathered} 1 \text { or } \\ 2 \\ \hline \end{gathered}$ | $\square$ |  |  |  |
| CHM 113：General Chemistry（SQ） | 4 | $\square$ |  |  |  |
| Humanities，Fine Arts \＆Design（HU）AND Cultural Diversity in the US（C）Global Awareness（G）or Historical Awareness（H） | 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 |  |
| TERM TWO： 1630 CREDIT HOURS |  |  |  |  |  |
| Complete 1 course from： <br> APM 265：Mathematics of Change I（or MAT 265）or <br> APM 266：Mathematics of Change II（or MAT 266）（if APM／MAT <br> 265 completed） | 3 | $\square$ |  |  | －Complete a MAT or APM or PHY or CHM course （recommend both a math class，ideally Calc I and a science course．Do Physics as soon as its math prerequisite is met） <br> －Complete MET or AET course（recommend MET 160 and MET 230） |
| If not completed in Term One，complete 2 courses from： <br> CHM 113：General Chemistry（SQ）or <br> PHY 111：General Physics／PHY 113：General Physics Lab（SQ） <br> PHY 112：General Physics／PHY 114：General Physics Lab（if PHY <br> 111 \＆ 113 completed） | 4 | $\square$ |  |  |  |
| If not completed in Term One： <br> MET 160：CADD and Solid Modeling | 2 | $\square$ |  |  |  |
| MET 230：Introduction to Engineering Materials | 2 | $\square$ |  |  |  |
| 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： 3145 CREDIT HOURS |  |  |  |  |  |
| APM 266：Mathematics of Change II（or MAT 266）or MAT 274：Differential Equations（MA）（only required for students who did not complete MAT 170） | 3 | $\square$ |  |  | －Complete MET 211 （or MET 231 if prerequisites for MET 211 not met） <br> －Complete an APM or MAT or PHY course <br> －First－Year Composition Requirement Completed （ENG 101／107 AND ENG 102／108 or ENG 105） |
| Complete remaining courses from： <br> CHM 113：General Chemistry（SQ）or <br> PHY 112：General Physics／PHY 114：General Physics Lab（if PHY <br> 111 \＆ 113 completed） | 3／1 | $\square$ |  |  |  |
| MET 211：Statics | 3 | $\square$ |  |  |  |
| MET 231：Manufacturing Processes | 3 | $\square$ |  |  |  |
| MET 302：Welding Survey | 3 | 区 |  |  |  |
| TERM FOUR： 4560 CREDIT HOURS |  |  |  |  |  |
| APM 301：Introductory Statistics（CS） | 3 | 囚 |  |  | －Complete MET 231，MET 313 <br> －Complete an APM or MAT course |
| MET 313：Applied Mechanics of Materials | 3 | 区 |  |  |  |
| MET 314：Applied Mechanics of Materials Lab | 1 | 区 |  |  |  |
| ESD 210，Circuit Analysis I | 3 | $\square$ |  |  |  |
| Literacy \＆Critical Inquiry（ENG 301 recommended）（L） | 3 | $\square$ |  |  |  |
| Social \＆Behavioral Science（SB）AND Cultural Diversity in the US （C）Global Awareness（G）or Historical Awareness（H） | 3 | $\square$ |  |  |  |
| TERM FIVE： 6177 CREDIT HOURS |  |  |  |  |  |
| MET 300：Applied Material Science | 3 | 区 |  |  |  |
| MET 309：Nondestructive Testing and Quality Assurance | 1 | 囚 |  |  |  |
| MET 331：Machine Design I | 3 | 区 |  |  |  |
| MET 396：Professional Orientation | 1 | 区 |  |  |  |
| MET 340：Thermo－Fluids I | 3 | 区 |  |  |  |
| Social \＆Behavioral Sciences（SB） | 3 | $\square$ |  |  |  |
| Humanities，Fine Arts \＆Design（HU）AND Cultural Diversity in the US（C）Global Awareness（G）or Historical Awareness（H） | 3 | $\square$ |  |  |  |

# Major Map：Manufacturing Engineering Technology－ Bachelor of Science（B．S．） 

College of Technology and Innovation，Polytechnic Campus， Catalog Year：2008－2009

| 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 SIX： 7895 CREDIT HOURS |  |  |  |  |  |
| MET 341：Manufacturing Analysis | 3 | 区 |  |  |  |
| MET 345：Advanced Manufacturing Processes | 3 | 区 |  |  |  |
| MET 344：Casting and Forming Processes | 3 | 区 |  |  |  |
| MET 351：Introduction to Automation | 3 | 区 |  |  |  |
| Concentration Elective | 3 | 区 |  |  |  |
| Upper division Social \＆Behavioral Science（SB）OR Humanities，Fine Arts \＆Design（HU） | 3 | $\square$ |  |  |  |
| TERM SEVEN： 96113 CREDIT HOURS |  |  |  |  |  |
| TWC 446：Technical and Scientific Reports（L） | 3 | 区 |  |  |  |
| MET 443：CNC Computer Programming | 3 | 区 |  |  |  |
| MET 416：Applied Computer－Integrated Manufacturing | 3 | 区 |  |  |  |
| MET 460：Capstone Project I | 3 | 区 |  |  |  |
| Concentration Elective | 6 | 区 |  |  |  |
| TERM EIGHT： 114128 CREDIT HOURS |  |  |  |  |  |
| MET 401：Quality Assurance | 3 | 区 |  |  |  |
| MET 444：Production Tooling | 3 | 区 |  |  |  |
| MET 461：Capstone Project II | 3 | 区 |  |  |  |
| Concentration Elective | 3 | 区 |  |  |  |
| Concentration Elective | 3 | 区 |  |  |  |

## Graduation Requirements Summary：

| Total Hours（128） | Total Hrs at ASU <br> $(30)$ | Hrs Resident Credit for <br> Academic Recognition（56） | Overall GPA | Total UD Hrs（45） | Total Comm．College <br> Hrs．（64 Max） |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |

## 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：

Mfg Concentration（ 15 credits）
MET 409 （3）Applied Engineering Economics
MET 410 （3）Manufacturing Resources Management
MET 442 （3）Specialized Production Processes
Elective（6）
Mechanical Concentration（ 15 credits）
MET 409 （3）Applied Engineering Economics
MET 410 （3）Manufacturing Resources Management
MET 434 （3）Engineering Thermofulids III
MET 438 （3）Machine Design II
Elective（3）

Major Map: Mechanical Engineering Technology -
Bachelor of Science (B.S.)
College of Technology and Innovation, Polytechnic Campus, Catalog Year: 2008-2009


Major Map：Mechanical Engineering Technology－ Bachelor of Science（B．S．）<br>College of Technology and Innovation，Polytechnic Campus， Catalog Year：2008－2009

| Course Subject and Title （courses in bold／shading are critical） | Hrs． | $\begin{aligned} & \hline \text { Upper } \\ & \text { Division } \\ & \hline \end{aligned}$ | Transfer Course／Grade | Minimum Grade if Required | Additional Critical Requirement Notes |
| :---: | :---: | :---: | :---: | :---: | :---: |
| TERM SIX： $78 \mathbf{9 5}$ CREDIT HOURS |  |  |  |  |  |
| MET 409：Applied Engineering Economics | 3 | 囚 |  |  | －See additional notes below for concentration courses |
| MET 432：Thermo－Fluids II | 3 | 区 |  |  |  |
| Technical Elective | 3 | 区 |  |  |  |
| Concentration Elective： | 3 | 区 |  |  |  |
| Concentration Elective： | 3 | 囚 |  |  |  |
| Social Behavior（SB）course（awareness areas of C，G，or H as needed） | 3 | $\square$ |  |  |  |
| TERM SEVEN： 96113 CREDIT HOURS |  |  |  |  |  |
| MET 460：Capstone Project I | 3 | 区 |  |  | －See additional notes below for concentration courses |
| TWC 446：Technical and Scientific Reports（L） | 3 | 囚 |  |  |  |
| Concentration Elective： | 3 | 囚 |  |  |  |
| Concentration Elective： | 3 | 区 |  |  |  |
| Technical Elective： | 3 | 区 |  |  |  |
| Social Behavior（SB）course（awareness areas of C，G，or H as needed） | 3 | $\square$ |  |  |  |
| TERM EIGHT： 114128 CREDIT HOURS |  |  |  |  |  |
| MET 401：Quality Assurance | 3 | 区 |  |  | －See additional notes below for concentration courses |
| MET 461：Capstone Project II | 3 | 囚 |  |  |  |
| Concentration Elective | 3 | 区 |  |  |  |
| Concentration Elective | 3 | 囚 |  |  |  |
| Upper division Humanities，Fine Arts \＆Design（HU）or Social \＆ Behavioral Science（SB） | 3 | 囚 |  |  |  |

## Graduation Requirements Summary：

| Total Hours（128） | Total Hrs at ASU <br> $(30)$ | Hrs Resident Credit for <br> Academic Recognition（56） | Overall GPA（2．00 <br> $\mathrm{min})$ | Total UD Hrs（45） | Total Comm．College <br> Hrs．（64 Max） |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |

## 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） |
| $\circ$ | Natural Science－General（SG） |
| eral | Studies Awareness Requirements |
| $\circ$ | Cultural Diversity in the US（C） |
| $\circ$ | Global Awareness（G） |
| $\circ$ | Historical Awareness（H） |

－First－Year Composition

Additional Notes：All Concentrations are 18 credits

Base Mechanical Option
MET 434 （3）Thermo Fluids III
MET 351 （3）Intro to Automation
MET 418 （3）Composites Mtls Mfg
MET 438 （3）Machine Design II
MET 440 （3）Finite Element Analysis
Tech Elec（3）

Aeronautical Concentration
AET 215 （2）Aircraft Systems（take in $1^{\text {st }}$ two years of program）
AET 300 （3）Aircraft Design I
AET 417 （3）Aerospace Structures
AET 415 （3）Gas Dyn \＆Propul
AET 420 （1）Wind Tunnel Test
MET 434 （3）Thermo Fluids III
MET 418 （3）Composites Mtls Mfg

Automation Concentration
MET 341 （3）Mfg Analysis
MET 351 （3）Intro to Automation
MET 416 （3）Applied CIM
MET 438 （3）Machine Design II
MET 455 （3）Auto Sys Integration
Tech Elec（3）

## Automotive Concentration

MET 321 （3）Intro to Automotive（take in fall of junior year）
MET 421 （3）Vehicle Powertrains
MET 423 （3）Vehicle Chassis Design
MET 424 （3）Vehicle Elec \＆Control sys
MET 426 （3）Vehicle Thermal Design
MET 427 （3）System Integration \＆Test

## ASI <br> ARIZONA STATE UNIVERSITY

Major Map：Operations Management Technology－ Bachelor of Science（B．S．）
College of Technology \＆Innovation，Polytechnic Campus
Catalog Year：2008－2009

\begin{tabular}{|c|c|c|c|c|c|}
\hline \& \& \& \multicolumn{2}{|l|}{Completed ATP：\(\square\) Yes \(\square\) No} \& Completed AGEC：\(\square\) Yes \(\square\) No \\
\hline \[
\begin{aligned}
\& \begin{array}{l}
\text { Course Subject and Title } \\
\text { (courses in bold/shading are critical) }
\end{array}
\end{aligned}
\] \& Hrs． \& Upper Division \& Transfer Course／Grade \& Minimum Grade if Required \& Additional Critical Requirement Notes \\
\hline \multicolumn{6}{|l|}{TERM ONE： 015 CREDIT HOURS} \\
\hline ASU 101：The ASU Experience \& 1 \& \(\square\) \& \& \& \multirow[t]{5}{*}{\begin{tabular}{l}
－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 determines placement in Mathematics course \\
－Complete 1 critical course．Suggested course for term 1：GIT 110 \\
－Maintain 2．0 ASU－GPA
\end{tabular}} \\
\hline \begin{tabular}{l}
Complete 1 course from： \\
－GIT 110：Technical Graphics \\
－GIT 135：Graphic Communications \\
－ECN 211：Macroeconomic Principles（SB）or ECN 212： Macroeconomic Principles（SB） \\
－TMC 331：Quality Assurance \\
－TMC 346：Management Dynamics
\end{tabular} \& \& \(\square\) \& \& \& \\
\hline CHM 101：General Chemistry for Engineers（SQ） \& 4 \& \(\square\) \& \& \& \\
\hline 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 \& \\
\hline Social \＆Behavioral Sciences（PGS 101：Intro to Psychology recommended）（S） \& 3 \& \(\square\) \& \& \& \\
\hline \multicolumn{6}{|l|}{TERM TWO： 1630 CREDIT HOURS} \\
\hline \begin{tabular}{l}
Complete 2 additional courses from： \\
－GIT 110：Technical Graphics \\
－GIT 135：Graphic Communications \\
－ECN 211：Macroeconomic Principles（SB）or ECN 212： Macroeconomic Principles（SB） \\
－TMC 331：Quality Assurance \\
－TMC 346：Management Dynamics
\end{tabular} \& 3 \&  \& \& \& \begin{tabular}{l}
－Complete 2 additional critical course．Suggested course for term 2：ECN 211 or 212，GIT 135 \\
－Maintain 2．0 ASU－GPA
\end{tabular} \\
\hline PHY 101：Introduction to Physics（SQ） \& 4 \& \(\square\) \& \& \& \\
\hline MAT 170：Precalculus（MA） \& 3 \& \(\square\) \& \& \& \\
\hline 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 \& \\
\hline \multicolumn{6}{|l|}{TERM THREE： 3145 CREDIT HOURS} \\
\hline OMT 343：Occupational Safety and Ergonomics \& 3 \& \(\square\) \& \& \& \multirow[t]{5}{*}{\begin{tabular}{l}
－First－year composition completed \\
－Maintain 2．0 ASU－GPA
\end{tabular}} \\
\hline ETM 301：Environmental Management \& 3 \& \(\square\) \& \& \& \\
\hline OMT 344：Industrial Organization \& 3 \& \(\square\) \& \& \& \\
\hline Literacy \＆Critical Inquiry（L） （Recommend：ENG 301：Writing for Professionals or TWC 301：General Principles of Multimedia Writing） \& 3 \& \(\square\) \& \& \& \\
\hline Humanities，Fine Arts \＆Design（HU）AND Cultural Awareness in the US（C），Global Awareness（G）or Historical Awareness（H） \& 3 \& \(\square\) \& \& \& \\
\hline \multicolumn{6}{|l|}{TERM FOUR： \(46 \mathbf{6 0}\) CREDIT HOURS} \\
\hline \begin{tabular}{l}
Complete remaining 2 courses from： \\
－GIT 110：Technical Graphics \\
－GIT 135：Graphic Communications \\
－ECN 211：Macroeconomic Principles（SB）or ECN 212： Macroeconomic Principles（SB） \\
－TMC 331：Quality Assurance \\
－TMC 346：Management Dynamics
\end{tabular} \& 3

3 \&  \& \& \& | －Complete remaining critical courses．Suggested course for term 4：TMC 331 and 346 |
| :--- |
| －Maintain 2．0 ASU－GPA | <br>

\hline APM 301：Introductory Statistics（CS） \& 3 \& 区 \& \& \& <br>
\hline Humanities，Fine Arts \＆Design（HU） \& 3 \& $\square$ \& \& \& <br>
\hline OMT＊＊＊ \& 3 \& 区 \& \& \& <br>
\hline \multicolumn{6}{|l|}{TERM FIVE： 6175 CREDIT HOURS} <br>
\hline Humanities（HU）or Social Behavioral Science（SB） \& 3 \& 囚 \& \& \& <br>
\hline GIT 352：Technical Presentations \& 3 \& 区 \& \& \& <br>
\hline OMT＊＊＊ \& 3 \& 区 \& \& \& <br>
\hline OMT＊＊＊ \& 3 \& 区 \& \& \& <br>
\hline OMT＊＊＊ \& 3 \& 囚 \& \& \& <br>
\hline \multicolumn{6}{|l|}{TERM SIX： $76 \mathbf{9 0}$ CREDIT HOURS} <br>
\hline TMC 396：Professional Orientation \& 1 \& 区 \& \& \& <br>
\hline OMT 452：Industrial Human Resource Management \& 3 \& 区 \& \& \& <br>
\hline OMT 430：Ethical Issues in Technology \& 3 \& 区 \& \& \& <br>
\hline Technical Elective \& 3 \& $\square$ \& \& \& <br>
\hline Technical Elective \& 3 \& $\square$ \& \& \& <br>
\hline Upper division Humanities，Fine Arts \＆Design（HU）OR Social \＆Behavioral Science（SB）AND Cultural Awareness in the US （C），Global Awareness（G）or Historical Awareness（H） \& 3 \& 区 \& \& \& <br>
\hline
\end{tabular}

| Course Subject and Title （courses in bold／shading are critical） | Hrs． | $\begin{aligned} & \hline \text { Upper } \\ & \text { Division } \end{aligned}$ | Transfer Course／Grade | Minimum Grade if Required | Additional Critical Requirement Notes |
| :---: | :---: | :---: | :---: | :---: | :---: |
| TERM SEVEN： 91105 CREDIT HOURS |  |  |  |  |  |
| TWC 400：Technical Communications（L） | 3 | 囚 |  |  |  |
| OMT 461：Operations Management | 3 | 区 |  |  |  |
| OMT 480：Organizational Effectiveness | 3 | 区 |  |  |  |
| OMT 445：Industrial Internship | 3 | 区 |  |  |  |
| Technical Elective | 3 | $\square$ |  |  |  |
| TERM EIGHT： $106 \mathbf{1 2 0}$ CREDIT HOURS |  |  |  |  |  |
| OMT 402：Legal Issues for Technologists | 3 | 区 |  |  |  |
| OMT 440：Introduction to International Business | 3 | 区 |  |  |  |
| TMC 470：Project Management | 3 | 区 |  |  |  |
| 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：

Major Map : Exploratory Health \& Life Sciences
University College, All Campuses
Catalog Year: 2008-2009


## Graduation Requirements Summary:

| Total Hours (120) | Total Hrs at ASU <br> (minimum 30) | Resident Credit for Academic <br> Recognition (minimum 56) | Major GPA <br> $(2.00$ Min.) | Total UD Hrs <br> (minimum 45) | Total Comm. College <br> Hrs. (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:

Major Map : Exploratory Humanities, Fine Arts \& Design University College, All Campuses
Catalog Year: 2008-2009


## Graduation Requirements Summary:

| Total Hours (120) | Total Hrs at ASU <br> (minimum 30) | Resident Credit for Academic <br> Recognition (minimum 56) | Major GPA <br> (2.00 Min.) | Total UD Hrs <br> (minimum 45) | Total Comm. College <br> Hrs. (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) |
| $\circ$ | 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:

## Major Map : Exploratory Math, Physical Sciences, Engineering \& Technology <br> University College, All Campuses <br> Catalog Year: 2008-2009



## Graduation Requirements Summary:

| Total Hours (120) | Total Hrs at ASU <br> (minimum 30) | Resident Credit for Academic <br> Recognition (minimum 56) | Major GPA <br> (2.00 Min.) | Total UD Hrs <br> (minimum 45) | Total Comm. College <br> Hrs. (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) |
| $\circ$ | Natural Science-General (SG) |

- General Studies Awareness Requirement
- Cultural Diversity in the US (C)
- Global Awareness (G)
- Historical Awareness (H)
- First Year Composition


## Additional Notes:

Major Map : Exploratory Social and Behavioral Sciences
University College, All Campuses
Catalog Year: 2008-2009


## Graduation Requirements Summary:

| Total Hours (120) | Total Hrs at ASU <br> (minimum 30) | Resident Credit for Academic <br> Recognition (minimum 56) | Major GPA <br> $(2.00$ Min.) | Total UD Hrs <br> (minimum 45) | Total Comm. College <br> Hrs. (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) |
| $\circ$ | 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:


[^0]:    Source URL: http://catalog.asu.edu/policies/design

[^1]:    Source URL: http://catalog.asu.edu/policies/sustainability

[^2]:    JHR 500 Research Design (3 Hours)
    JHR 501 Proseminar in Social Justice and Human Rights (3 Hours)
    JHR 506 Grant Writing and Development for Social Justice and Human Rights (3 Hours)
    JHR 510 Problem-Based Seminar in Social Justice and Human Rights (3 Hours)
    JHR 511 Community-Embedded Seminar in Social Justice and Human Rights (3 Hours)
    JHR 584 Internship (3 Hours)
    JHR 599 Thesis or JHR 593 Applied Project (3 Hours)

[^3]:    Language Requirement: $\mathrm{N} \mid$ Program Fee: N

[^4]:    Language Requirement: Y | Program Fee: N

[^5]:    Language Requirement: $\mathrm{N} \mid$ Program Fee: N

[^6]:    ${ }^{1}$ Course offered only in the fall semester
    ${ }^{2}$ Course offered only in the spring semester
    ${ }^{3}$ Both PHY 111 and 113 must be taken to secure SQ credit．
    ${ }^{4}$ Summer Internship：conducted between years 3 \＆4．Do not register for the class（IND 484）until the following Fall semester．
    ${ }^{5}$ Transfer credits：evaluated by the college for applicability to this curriculum and must be equivalent in both content and level．
    Submit samples of studio work for evaluation to the college＇s Academic Advising Office，CDS 115.
    Most studio and some lecture courses are sequential，must be taken in，and may be offered only during the semester noted．

[^7]:    ${ }^{1}$ Grades of "C" or better are required for all courses within these categories.
    ${ }^{2}$ 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.

[^8]:    * Please consult an SCI advisor about alternative statistics courses
    ** Certain departments may offer courses which satisfy this elective requirement. Please consult with an SCI advisor for approvals.

[^9]:    ${ }^{1}$ Grades of "C" or better are required for all courses within these categories.
    ${ }^{2}$ There is no specific elective or minor requirement for the BLS degree.

[^10]:    Minors offered at ASU at the West campus include: American Studies, Communication Studies, English, Ethnic Studies, Film and Video Studies, Gerontology, History, Interdisciplinary Arts \& Performance, Interdisciplinary Organizational Studies, Life Sciences, Mathematics, Philosophy, Political Science, Prelaw, Psychology, Public Relations \& Strategic Communication, Religious Studies, Social \& Behavioral Sciences, Sociocultural Anthropology, Sociology, Spanish, Special Events Management, Tourism Management, Women's Studies, and Youth Services Leadership. See catalog for more information. * Must be met by the $24^{\text {th }}$ hour or student will be blocked from registering.

