Minors, Certificates, and Interdisciplinary Studies

Interdisciplinary studies are available to students through an interdisciplinary degree, such as the Bachelor of Interdisciplinary Studies, or an extensive choice of minors or certificates that may be taken in conjunction with other majors. Since interdisciplinary studies provide skills that support employment in a rapidly changing workplace, students are encouraged to consider these options. Consult the academic advisor in the appropriate major about the impact of enrolling in a minor or certificate program.

MINORS

A minor is an approved, coherent concentration of academic study in a single discipline, involving substantially fewer hours of credit than a corresponding major. Most ASU colleges offer undergraduate minors in addition to majors; see the "ASU Minors" table, page 118.

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.

CERTIFICATES

Students may pursue some certificate programs along with a major and other certificate programs independently. Graduate certificates and postbaccalaureate certificates are available to students who already hold a bachelor's degree. For more information, see the "ASU Undergraduate Certificates" table, page 120; "ASU Postbaccalaureate Certificates" table, page 122; and "ASU Graduate Certificates" table, page 122. Graduate certificates constitute graduate work; postbaccalaureate certificates are distinct from graduate certificates and are an extension of the undergraduate curriculum.

INTERDISCIPLINARY STUDIES

Bachelor of Interdisciplinary Studies. For information about the Bachelor of Interdisciplinary Studies, see "School of Interdisciplinary Studies," page 124, or "Interdisciplinary Studies—BIS," page 540.

Energy Studies. An opportunity for instructional and research involvement in energy matters exists through at least two curricular paths: (1) general studies, which emphasize energy as an elective beyond the scope of a chosen major (for more information, call the coordinator of interdisciplinary studies in energy, at 480/965-4548); and (2) specific studies in the College of Architecture and Environmental Design, for those pursuing the Master of Architecture degree or the Master of Science degree in Building Design.

Environmental Studies. The International Institute for Sustainability, established originally in 1974 as the Center for Environmental Studies, encourages and coordinates interdisciplinary environment-related activities in the natural and social sciences within the university. The institute sponsors special courses, conferences, and workshops on environmental topics. Drawing from faculty and students throughout the university, the center participates in research and community programs relating to environmental problem areas. It does not formally offer courses or a degree program. For more information, see "International Institute for Sustainability," page 44.

Film Studies. The Film Studies Program exists not only to provide information and experience but also to serve as a means of creative expression for the student and as a useful subject and tool in teaching. The program is not designed to produce professional filmmakers, but it may provide practical preparation for students desiring further film study at other institutions.

For more information, call the Film Studies coordinator at 480/965-7644.

Gerontology. The university-wide Gerontology Program brings together faculty from three campuses and several disciplines to teach courses related to adult development and aging, to collaborate on gerontological research, and to participate in projects of service to older adults. Courses related to aging are taught throughout the university by faculty who are active contributors to research, theory, and public policy and practice. For more information, see "Gerontology," page 690, call 602/543-6642, or access www.west.asu.edu/chs/grn on the Web. See also "Gerontology," page 705.

A graduate certificate and an undergraduate minor are available in Gerontology. The certificate consists of 21 semester hours—nine hours of required course work and 12

ASU Minors

Minor	Administered By	Campus	Page
African and African American Studies	African and African American Studies Program	Tempe	346
American Indian Studies	American Indian Studies Program	Tempe	348
American Studies	Department of Language, Cultures, and History	West	688
Anthropology	Department of Anthropology	Tempe	351
Applied Biological Sciences	East College	East	541
Applied Psychology	East College	East	548
Architectural Studies	School of Architecture and Landscape Architecture	Tempe	143
Art History	School of Art	Tempe	279
Asian Languages (Chinese/Japanese)	Department of Languages and Literatures	Tempe	407
Astronomy	Department of Physics and Astronomy	Tempe	449
Biochemistry	Department of Chemistry and Biochemistry	Tempe	360
Biological Sciences	School of Life Sciences	Tempe	426
Business ¹	W. P. Carey School of Business	Tempe	167
Chemistry	Department of Chemistry and Biochemistry	Tempe	359
Chicana and Chicano Studies	Department of Chicana and Chicano Studies	Tempe	364
Communication	Hugh Downs School of Human Communication	Tempe	394
Communication Studies	Department of Communication Studies	West	688
Computational Mathematical Sciences	Department of Mathematics and Statistics	Tempe	439
Dance	Department of Dance	Tempe	296
Design Studies	School of Design	Tempe	149
Early Childhood Education	Division of Curriculum and Instruction	Tempe	206
Economics for Students Planning a Career in Law	Department of Economics	Tempe	366
English	Department of Language, Cultures, and History	West	688
English with a Concentration in Linguistics	Department of English	Tempe	368
English with a Concentration in Literature	Department of English	Tempe	368
Ethnic Studies	New College of Interdisciplinary Arts and Sciences	West	688
Family and Human Development	Department of Family and Human Development	Tempe	375
Film and Video Studies	Department of Interdisciplinary Arts and Performance	West	688
Food and Nutrition Management	Department of Nutrition	East	564
French	Department of Languages and Literatures	Tempe	407
General Economics	Department of Economics	Tempe	366
Geography	Department of Geography	Tempe	379
Geological Sciences	Department of Geological Sciences	Tempe	384
German	Department of Languages and Literatures	Tempe	407
Gerontology ²	Gerontology Program	West	688
History	Department of History	Tempe	387
,	Department of Language, Cultures, and History	West	688
Human Nutrition	Department of Nutrition	East	564
Interdisciplinary Arts and Performance	Department of Interdisciplinary Arts and Performance	West	688
Interdisciplinary Organizational Studies	Department of Social and Behavioral Sciences	West	688
Interior Design History	School of Design	Tempe	149
Italian	Department of Languages and Literatures	Tempe	407
Justice Studies	School of Justice and Social Inquiry	Tempe	397
Kinesiology	Department of Kinesiology	Tempe	402

 $[\]overline{\ }^{1}$ This minor is for nonbusiness majors only.

² This university-wide minor is administered by West campus.

ASU Minors (continued)

Minor	Administered By	Campus	Page
Landscape Studies	School of Architecture and Landscape Architecture	Tempe	143
Life Sciences	Department of Integrated Natural Sciences	West	688
Mass Communication	Walter Cronkite School of Journalism and Mass Communication	Tempe	320
Mathematics	Department of Integrative Studies Department of Mathematics and Statistics	West Tempe	688 439
Music	School of Music	Tempe	307
Philosophy	Department of Integrative Studies Department of Philosophy	West Tempe	688 446
Physics	Department of Physics and Astronomy	Tempe	450
Political Science	Department of Political Science Department of Social and Behavioral Sciences	Tempe West	454 688
Prelaw	College of Human Services	West	688
Psychology	Department of Psychology Department of Social and Behavioral Sciences	Tempe West	459 688
Public Relations and Strategic Communications	Department of Communication Studies	West	688
Recreation Management	School of Community Resources and Development	Tempe	489
Religious Studies	Department of Religious Studies New College of Interdisciplinary Arts and Sciences	Tempe West	462 688
Russian	Department of Languages and Literatures	Tempe	407
Small Business	East College	East	549
Social and Behavioral Sciences	Department of Social and Behavioral Sciences	West	688
Social Welfare	School of Social Work	Tempe	494
Sociocultural Anthropology	Department of Social and Behavioral Sciences	West	688
Sociology	Department of Social and Behavioral Sciences Department of Sociology	West Tempe	688 466
Spanish	Department of Language, Cultures, and History Department of Languages and Literatures	West Tempe	688 408
Special Events Management	Department of Recreation and Tourism Management	West	688
Speech and Hearing Science	Department of Speech and Hearing Science	Tempe	469
Statistics	Department of Mathematics and Statistics	Tempe	439
Theatre	Department of Theatre	Tempe	314
Tourism	School of Community Resources and Development	Tempe	489
Tourism Management	Department of Recreation and Tourism Management	West	688
Urban Planning	School of Planning	Tempe	159
Wellness Foundations	Department of Exercise and Wellness	East	556
Women and Gender Studies	Women and Gender Studies Program	Tempe	472
Women's Studies	Women's Studies Program	West	688

¹ This minor is for nonbusiness majors only.

hours of electives. The minor consists of 18 semester hours—six hours of required course work and 12 hours of electives. In addition, gerontology provides students with opportunities to gain practical experience in working with elderly people. The program helps students find rewarding internships in community programs for older adults. *BIS Concentration*. A concentration in gerontology is available under the Bachelor of Interdisciplinary Studies (BIS)

degree, a program intended for the student who has academic interests that might not be satisfied with existing majors. Building on two academic concentrations (or one double concentration) and an interdisciplinary core, students in the BIS program take active roles in creating their educational plans and defining their career goals. For more information, see "School of Interdisciplinary Studies," page 124.

² This university-wide minor is administered by West campus.

ASU Undergraduate Certificates

Certificate	Administered By	Campus	Page
African and African American Studies Certificate	African and African American Studies Program	Tempe	346
American Indian Studies Certificate	American Indian Studies Program	Tempe	348
Asian Pacific American Studies Certificate	Asian Pacific American Studies Program	Tempe	355
Asian Studies Certificate	Center for Asian Studies	Tempe	337
Business English Certificate ¹	College of Extended Education	_	706
Civic Education Certificate	Department of Political Science	Tempe	453
College of Liberal Arts and Sciences Enriched Certificate	College of Liberal Arts and Sciences	Tempe	336
Dealership Management, Certificate in ²	W. P. Carey School of Business	Tempe	172
Early Intervention Certificate	Department of Family and Human Development and School of Social Work	Tempe	494
East Asian Studies Certificate	Center for Asian Studies	Tempe	337
Ethics Certificate	Department of Philosophy	Tempe	446
Ethnic Studies, Certificate in	New College of Interdisciplinary Arts and Sciences	West	688
Film and Video Studies, Certificate in	Department of Interdisciplinary Arts and Performance	West	688
Fire Service Management Certificate ³	Department of Information and Management Technology	East	705
Geographic Information Science Certificate	Department of Geography	Tempe	339
Hazardous Materials and Waste Management Certificate	Department of Information and Management Technology	East	582
Healthcare Organizations and Society	School of Life Sciences and the W. P. Carey School of Business	Tempe	339
Health Physics Certificate	Pre-Health Professions Office	Tempe	339
History and Philosophy of Science Certificate	School of Life Sciences	Tempe	340
Human Performance Improvement Certificate ¹	College of Extended Education and the American Society of Training and Development	_	706
International Business Studies, Certificate in	W. P. Carey School of Business	Tempe	178
International Studies Certificate	Department of Political Science	Tempe	454
Islamic Studies Certificate	Department of Religious Studies	Tempe	462
Jewish Studies Certificate	Jewish Studies Committee	Tempe	340
Latin American Studies Certificate	Latin American Studies Center	Tempe	340
Lesbian, Gay, Bisexual, and Transgender Studies	College of Public Program	Tempe	487
Maintenance Management Certificate ¹	College of Extended Education	_	706
Medieval and Renaissance Studies Certificate	Arizona Center for Medieval and Renaissance Studies	Tempe	341
Multimedia Writing and Technical Communication Certificate	East College	East	561
Nonprofit Youth and Human Service Leadership and Management: American Humanics Certificate	School of Community Resources and Development	Tempe	490
Professional Purchasing Certificate ¹	College of Extended Education	_	706
Public Administration and Public Management Certificate	School of Public Affairs	Tempe	491
Quality Analysis Certificate	W. P. Carey School of Business	Tempe	172
Russian and East European Studies Certificate	Russian and East European Studies Center	Tempe	341
Scandinavian Studies Certificate	Department of Languages and Literatures	Tempe	341
Small Business and Entrepreneurship Certificate ²	W. P. Carey School of Business	Tempe	172

¹ This certificate is not for academic credit.

² This certificate is only for students in the WPCSB.

³ This program is also offered through the College of Extended Education.

ASU Undergraduate Certificates (continued)	ASU	Undergr	aduate	Certificates	(continued))
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Certificate	Administered By	Campus	Page
Southeast Asian Studies Certificate	Program for Southeast Asian Studies	Tempe	342
Spa Management	Department of Exercise and Wellness	East	557
Supervisory and Management Skills Certificate ¹	College of Extended Education	_	707
Symbolic Systems, Certificate in	Department of Philosophy	Tempe	342
Translation Certificate	Department of Languages and Literatures	Tempe	408
Women and Gender Studies, Certificate in	Women and Gender Studies Program	Tempe	472
Women's Studies, Certificate in	Women's Studies Program	West	688
Writing, Certificate in	Department of Language, Cultures, and History Department of English	West Tempe	688 369

¹ This certificate is not for academic credit.

MILITARY OFFICER TRAINING

U.S. Air Force and U.S. Army ROTC units are active on the ASU campus. See "Department of Aerospace Studies," page 343, and "Department of Military Science," page 444, for more information.

Defense Activity for Nontraditional Education Support. ASU is a participating institution with Defense Activity for Nontraditional Education Support (DANTES) and is listed in the DANTES Directory of Independent Study. DANTES is an executive agency of the Department of Defense that provides educational support for the voluntary education programs of all services. The primary missions of DANTES are (1) to provide nationally recognized examination and certification programs as part of the voluntary education programs of the military services and (2) to facilitate the accessibility of high-quality independent institutions to service men and women.

WESTERN INTERSTATE COMMISSION FOR HIGHER EDUCATION

Professional Student Exchange Program. Arizona residents who wish to attend professional schools of dentistry, occupational therapy, optometry, osteopathy, physician assistance, and veterinary medicine may enroll in professional programs in other states or at in-state private institutions since these programs are not available at Arizona's public universities. Through the exchange, the student receives preference in admission and pays only the resident tuition fee at a public institution, or the difference between the Western Interstate Commission for Higher Education (WICHE) support fee and standard tuition at a private

school. Applicants must be legal residents of Arizona for a minimum of five years before the commencement of training, and be U.S. citizens, and must have maintained at least average grades to be eligible to be certified for support through the WICHE program. Recipients are required to practice in Arizona one year for each year of support or repay 50 percent of the funds expended on their behalf plus interest.

For an application and more information, call the Arizona Board of Regents at 602/229-2500, or access the WICHE Web site at www.wiche.edu.

Western Undergraduate Exchange. Arizona residents may enroll in designated two-year and four-year public institutions and programs in other participating states at a reduced tuition level. Tuition for Western Undergraduate Exchange (WUE) studies is the regular in-state tuition plus 50 percent of that amount.

In all programs, the cost to WUE students is substantially less than nonresident tuition. Students do not need to demonstrate financial need to receive the WUE tuition benefit. WUE participating states are Alaska, Arizona, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, North Dakota, Oregon, South Dakota, Utah, Washington, and Wyoming.

Check the WICHE Web site at www.wiche.edu for a list of participating institutions and programs.

Concurrent and Dual Degrees. Graduate students have the opportunity to pursue more than one degree at the same time as part of an organized program. For more information, see the "Concurrent and Dual Degrees" table, page 515, and the *Graduate Catalog*.

² This certificate is only for students in the WPCSB.

³ This program is also offered through the College of Extended Education.

ASU Postbaccalaureate Certificates

Certificate	Administered By	Campus	Page
Accountancy, Postbaccalaureate Certificate in ¹	Department of Accounting and Information Systems Management	West	688
Communication and Human Relations, Postbaccalaureate Certificate in ¹	Department of Communication Studies	West	688
Multimedia Writing and Technical Communication, Postbaccalaureate Certificate in ²	East College	East	561
Professional Accountancy, Postbaccalaureate Certificate in ¹	Department of Accounting and Information Systems Management	West	688

ASU Graduate Certificates

Certificate	Administered By	Campus	Page
African and African Diaspora Studies, Graduate Certificate in ¹	African and African American Studies Program	Tempe	_
Asian Studies, Graduate Certificate in ^{1, 2}	Center for Asian Studies	Tempe	_
Atmospheric Science, Graduate Certificate in ¹	College of Liberal Arts and Sciences and Ira A. Fulton School of Engineering	Tempe	_
Geographic Information Science, Interdisciplinary Certificate in ¹	College of Liberal Arts and Sciences and the Division of Graduate Studies	Tempe	_
Gerontology, Certificate in ^{2, 3}	Gerontology Program	West	690
Health Industry Leadership Graduate Certificate ¹	W. P. Carey School of Business	Tempe	_
Indian Law Certificate ¹	College of Law	Tempe	_
Institutional Research, Graduate Certificate in ¹	College of Education	Tempe	_
Law, Science, and Technology, Certificate in ¹	College of Law	Tempe	_
Linguistics, Graduate Certificate in ¹	Committee on Linguistics	Tempe	_
Medieval Studies Certificate ¹	Arizona Center for Medieval and Renaissance Studies (ACMRS)	Tempe	_
Museum Studies Certificate ¹	Department of Anthropology	Tempe	_
Nonprofit Leadership and Management Certificate	College of Public Programs	Tempe	487
Post-Bachelor's Artist Diploma ¹	School of Music	Tempe	_
Public Art, Graduate Certificate in ¹	Katherine K. Herberger College of Fine Arts	Tempe	_
Renaissance Studies Certificate ¹	ACMRS	Tempe	_
Scholarly Publishing Certificate ¹	Department of History	Tempe	_
Statistics, Certificate in ¹	Committee on Statistics and the Division of Graduate Studies	Tempe	_
Transportation Systems, Interdisciplinary Graduate Certificate in ²	Committee on the Interdisciplinary Graduate Certificate in Transportation Systems and the Division of Graduate Studies	Tempe	509

For more information, see the West Campus Catalog.
 This program is also offered through the College of Extended Education.

For more information, see the *Graduate Catalog*.
 This program is also offered through the College of Extended Education.
 This university-wide certificate program is administered by the West campus.