
College of Architecture and Environmental Design

www.asu.edu/caed

School of Architecture	127
School of Design	135
School of Planning and Landscape Architecture	145

PURPOSE

The practice of architecture and environmental design is the culturally responsible shaping of our environment—from the scale of the cities in which we live to the buildings and interiors we inhabit and the artifacts and products we use. What we design must be durable, useful, beautiful, appropriate to its context, and not a waste of resources, energy, or materials. Designing our environment is an art, a technology, and a social science that has a history as long as human culture. The goals of the faculty include offering students an education that becomes the basis for life-long growth and improvement as professionals, advancing the discipline in both theory and practice, and improving the quality of the environment by making the expertise and knowledge of the faculty available to other professionals and to the public.

ORGANIZATION

Academic Organization. The college is composed of three academic units:

- School of Architecture
- School of Design
- School of Planning and Landscape Architecture

Administration of the college is the responsibility of the dean, who in turn is responsible to the president of the university through the senior vice president and provost.

College Facilities. All of the College of Architecture and Environmental Design's programs are housed in a single complex. Facilities include the Architecture and Environmental Design Library; computer laboratories; design studios; the Gallery of Design; lecture and seminar rooms; the Media Center; offices for faculty, the administration, and student organizations; the shop; the slide collection; Materials Resource Center; and technology laboratories. The bridge between the original building and the expansion places the college's review and display space at the heart of the complex.

Architecture and Environmental Design Library. As a branch of the University Libraries, the Architecture and

Environmental Design Library provides easy access to more than 30,000 books, periodicals, and reference materials for students, faculty, and the professional community. The library's special collections include archives of Blaine Drake, Victor Olgyay, Calvin Straub, Will Bruder, and others, as well as research materials on Paolo Soleri and Frank Lloyd Wright. The Alternative Energy Collection and the Materials Resource Center provide additional sources for research.

Gallery of Design. The Gallery of Design is one of eight university galleries and museums. It provides space for traveling exhibits and exhibitions of student and faculty work.

Special Facilities. College programs are supplemented by several special laboratories, including the computer-aided design and graphics lab; the high-bay research lab; the lighting lab; the solar research lab; the solar roofdeck work area; an extensive shop equipped to handle wood, plastic, and metal; the Herberger Center for Design Excellence; and the Joint Urban Design Program, which also has a studio at the ASU Downtown Center. The Media Center includes traditional graphics and audiovisual equipment as well as portable gear. The slide collection, with more than 100,000 images, is available for instructional use, and the college maintains an array of materials testing equipment.

ADMISSION

Lower-Division Programs. A new or transfer student who has been admitted to the university and has selected a college major is admitted to the lower-division program of his or her choice. A separate application procedure is required for entry to upper-division programs and graduate programs. Acceptance into lower-division programs does not guarantee acceptance to upper-division programs. Acceptance into lower-division programs requires a TOEFL score of 500 or higher for international students whose native language is not English.

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. Students who change majors to transfer into the college or one of its program areas must have a minimum cumulative GPA of 2.50.

College of Architecture and Environmental Design Baccalaureate Degrees and Majors

Major	Degree	Concentration	Administered By
Architectural Studies	B.S.D.	—	School of Architecture
Design Science ¹	B.S.D.	—	School of Design
Graphic Design	B.S.D.	—	School of Design
Housing and Urban Development	B.S.D.	—	School of Planning and Landscape Architecture
Industrial Design	B.S.D.	—	School of Design
Interior Design ²	B.S.D.	—	School of Design
Landscape Architecture	B.S.L.A.	—	School of Planning and Landscape Architecture
Urban Planning	B.S.P.	—	School of Planning and Landscape Architecture

¹ Applications for this program are not being accepted at this time.

² This major requires more than 120 semester hours to complete.

Upper-Division Programs. Admission to upper-division programs is competitive. Consult requirements of each major for details. Students applying to more than one program must make a separate application to each and must submit separate portfolios. Students not enrolled at ASU when they apply to upper-division programs must also make a separate application to the university. Students not admitted to the upper division are not dismissed from the university and may reapply or transfer to other programs. Students who plan to reapply should contact a college academic advisor. Transfers into upper-division programs are considered only if vacancies occur, and such transfers are limited to students with equivalent course work who are competitive with continuing students. Acceptance into some upper-division programs requires a TOEFL score of 500 or higher for international students whose native language is not English.

ADVISING

While the college and its academic units provide academic advising, *it is ultimately the responsibility of each student to fulfill academic and program requirements.* Advising and record keeping for lower-division programs are the responsibility of a college academic advisor (located in ARCH 141). Records for upper-division program students are kept in the appropriate academic units, and advising is by the faculty and the head of the academic unit. 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 first to the student’s advisor and then, if necessary, to the head of the appropriate academic unit, the Governance and Grievance 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.

DEGREES

Undergraduate. The college offers curricula for four- or five-year degree programs: the Bachelor of Science in Design (B.S.D.) degree in Architectural Studies, Graphic Design, Housing and Urban Development, Industrial Design, and Interior Design; the Bachelor of Science in

Landscape Architecture (B.S.L.A.) degree; and the Bachelor of Science in Planning (B.S.P.) degree in Urban Planning. Applications for the B.S.D. degree in Design Science are not being accepted at this time. For more information, see the “College of Architecture and Environmental Design Baccalaureate Degrees and Majors” table, on this page.

Each undergraduate program is divided into lower-division and upper-division programs. Completion of a lower-division program does not guarantee advancement to an upper-division program.

MINORS

The faculty in the School of Architecture offer a minor in Architectural Studies, see “Architectural Studies Minor,” page 130. The faculty in the School of Planning and Landscape Architecture offer two minors: Landscape Studies and Urban Planning. See “Minors,” page 145, for more information. The faculty in the School of Design offer minors in Design Studies and Interior Design History, see “Minor,” pages 139 and 141, respectively.

GRADUATE PROGRAMS

The faculty in the College of Architecture and Environmental Design offer the National Architectural Accrediting Board-accredited Master of Architecture (M.Arch.) professional degree; Planning Accreditation Board-accredited Master of Environmental Planning (M.E.P.) professional degree; M.S. degree in Building Design; Master of Science in Design (M.S.D.) degree; and Ph.D. degree in Environmental Design and Planning. For more information, see the “College of Architecture and Environmental Design Graduate Degrees and Majors” table, page 124, and the *Graduate Catalog*.

ASU EXTENDED CAMPUS

The College of Extended Education was created in 1990 to extend the resources of ASU throughout Maricopa County, the state, and the region. The College of Extended Education is a university-wide college that oversees the ASU Extended Campus and forms partnerships with other

L literacy and critical inquiry / MA mathematics / CS computer/statistics/ quantitative applications / HU humanities and fine arts / SB social and behavioral sciences / SG natural science—general core courses / SQ natural science—quantitative / C cultural diversity in the United States / G global / H historical / See “General Studies,” page 83.

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College of Architecture and Environmental Design Graduate Degrees and Majors

Major	Degree	Concentration	Administered By
Architecture	M.Arch.	—	School of Architecture
Building Design	M.S.	Design knowledge and computing, energy performance and climate-responsive architecture, facilities development and management	School of Architecture
Design	M.S.D.	Graphic design, industrial design, interior design	School of Design
Environmental Design and Planning*	Ph.D.	Design; history, theory, and criticism; planning	College of Architecture and Environmental Design
Environmental Planning	M.E.P.	Landscape ecological planning, urban and regional development, urban design	School of Planning and Landscape Architecture

* Doctoral courses for these interdisciplinary programs administered by ASU Main are also offered at ASU East.

ASU colleges, including the College of Architecture and Environmental Design, to meet the instructional and informational needs of a diverse community.

The ASU Extended Campus goes beyond the boundaries of the university's three physical campuses to provide access to quality academic credit and degree programs for working adults through flexible schedules; a vast network of off-campus sites; classes scheduled days, evenings, and weekends; and innovative delivery technologies including television, the Internet, and Independent Learning. The Extended Campus also offers a variety of professional continuing education and community outreach programs.

For more information, see "ASU Extended Campus," page 703, or access the Web site at www.asu.edu/xed.

UNIVERSITY GRADUATION REQUIREMENTS

In addition to fulfilling college and major requirements, students seeking a bachelor's degree must meet all university graduation requirements. See "University Graduation Requirements," page 79.

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 in General Studies, as described under "General Studies," page 83. Note that all three General Studies awareness areas are required. Consult your advisor for an approved list of courses. General Studies courses are listed in the "General Studies Courses" table, page 86, in the course descriptions, in the *Schedule of Classes*, and in the *Summer Sessions Bulletin*.

COLLEGE DEGREE REQUIREMENTS

College of Architecture and Environmental Design degree requirements supplement the General Studies requirement. Each curriculum offered by the college includes sufficient approved course work to fulfill the General Studies requirement.

To be eligible for the Bachelor of Science in Design (B.S.D.), Bachelor of Science in Landscape Architecture (B.S.L.A.), or Bachelor of Science in Planning (B.S.P.) degrees in the college of Architecture and Environmental Design, a student must have

1. attained a cumulative GPA of 2.00 or higher for all course work taken at ASU;
2. earned a "C" or higher in each studio course; and
3. met all university degree requirements.

MAJOR REQUIREMENTS

Students seeking the Bachelor of Science in Design degree must satisfactorily complete a curriculum of 120 or 150 semester hours, depending on the major. The Bachelor of Science in Planning degree requires 120 semester hours. The Bachelor of Science in Landscape Architecture degree requires 120 semester hours. Students majoring in Interior Design must take 150 semester hours. All other majors require 120 hours.



Patio courtyard in the College of Architecture and Environmental Design/North building

Tim Trumble photo

Special Honors at Graduation. At the time of graduation, students with academic distinction are awarded the respective designation *cum laude*, *magna cum laude*, or *summa cum laude*. For more information, see “Graduation with Academic Recognition,” page 82.

ACADEMIC STANDARDS

Lower-Division Retention Standards. A student in one of the college’s lower-division 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. Appeals may be made to the college Governance and Grievance Committee. For more information, see “Retention and Academic Standards,” page 75.

Upper-Division Retention Standards. Students in upper-division programs are placed on probation when *any* of the following occur:

1. failure, incomplete, or withdrawal from any required course;
2. a semester GPA below 3.00;
3. a grade of “D” or “E” in a design studio, a design laboratory, or a design lecture; or
4. violation of the college *Code of Student Responsibilities* 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,” page 75.

Incompletes. It is the student’s responsibility to contact 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 an official “Request for Grade of Incomplete” form from their academic units. 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 program head (for upper-division students) or a college academic advisor (for lower-division students). An incomplete in an upper-division course that is a prerequisite for sequential courses automatically places the student on probation and denies enrollment in subsequent courses. For more information, see “Incomplete,” page 72.

Withdrawals. University withdrawal regulations apply to lower-division courses. In addition, because the college’s upper-division 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 upper-division course automatically places a student on probation. Withdrawal from a required upper-division course in a required sequence automatically removes the student from the program beginning the subsequent semester. For more information, see “Grading System,” page 72.

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

Foreign Study. The College of Architecture and Environmental Design maintains active communications with several foreign institutions offering professional course work similar to the programs of the college. This opportunity is available for students who wish to pursue professional studies at a foreign institution in lieu of resident course work for up to one academic year. Any interested student is encouraged to inform the head of his or her academic unit at the earliest possible date of any intentions for foreign study.

Exchange programs currently exist with the Stuttgart University, Germany; Wageningen Agricultural University, the Netherlands; the University of Valladolid, Spain; the University of British Columbia, Canada; and the Autonomous University of Guadalajara, Mexico. Foreign study programs in France, Italy, and Spain and summer off-campus courses are offered by the School of Architecture. The School of Planning and Landscape Architecture offers a summer landscape planning course in Europe.

Students are also encouraged to consider foreign travel for either a semester or an entire academic year. A leave of absence must be requested for foreign study and foreign travel. Each academic unit reserves the right to evaluate the content and the student’s competency in each of the courses completed at foreign institutions.

Internship. Upper-division students in the college are required to complete an internship program during the summer, normally between the third and fourth years of study.

Attendance. Attendance is expected at all classes, laboratories, and seminars and is a criterion for evaluating

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performance. Absences and missing work due to absences may result in failure of a course or academic probation. A student may not be excused from attending a class except for medical reasons or other serious personal conditions beyond his or her control. Requests for special consideration must be submitted in writing to the instructor. If accepted, a student may be allowed to take a late or special examination or to submit missing work. Tardiness in contacting the instructor is cause for denying acceptance. For university policy regarding religious holidays, see "Equal Opportunity and Affirmative Action," page 21.

Employment. It is difficult for students in professional programs to carry part-time employment while in school. Acceptance to any of the college's upper-division programs presumes a commitment of a minimum of eight hours a day for professional studies. Prior work experience is not a requirement for admission to upper-division programs.

Retention of Student Work. The college reserves the right to retain any or all projects or work submitted to meet course requirements for the college's future use in instruction, publication, and exhibition.

Student Leave of Absence. Upper-division students who withdraw from classes or do not continue sequentially in enrollment must request both a leave of absence and readmission in writing from the head of the appropriate academic unit. Leaves of absence are for one-year increments and may be approved for personal reasons, travel, work, or additional study in other disciplines. A student on leave must make the written request for readmission before May 1 for the fall semester of the year of return or before November 1 for the spring semester so that a space may be reserved. Failure to request a leave of absence may result in removal from the program.

STUDENT RESPONSIBILITY

The purpose of this code is to promulgate standards of conduct for students of the College of Architecture and Environmental Design and to establish procedures for reviewing violations. Students are expected to support and maintain the highest professional standards with regard to their individual conduct and their personal and common environments in the college. Copies of the *Code of Student Responsibilities* are available from the Office of the Dean and a college academic advisor.

SPECIAL PROGRAMS

The college and its academic units regularly sponsor lecture series, symposia, and exhibits. In addition, faculty and students attend regional and national meetings of educators and professionals. Academic units sponsor student awards programs and regularly invite professionals and critics to reviews of student projects. The college also participates with the Barrett Honors College, offering courses accepted in that college.

GENERAL INFORMATION

Accreditation. Most states require that an individual intending to become an architect hold an accredited degree.

There are two types of degrees that are accredited by the National Architectural Accrediting Board (NAAB): (1) the Bachelor of Architecture, which requires a minimum of five years of study, and (2) the Master of Architecture, which requires a minimum of three years of study following an unrelated bachelor's degree or two years following a related preprofessional bachelor's degree. These professional degrees are structured to educate those who aspire to registration/licensure as architects.

The four-year preprofessional degree, where offered, is not accredited by NAAB. The preprofessional degree is useful for those wishing a foundation in the field of architecture, as preparation for either continued education in a professional degree program or for employment options in architecturally related areas. For more information, see "Accreditation and Affiliation," page 715.

Dean's List. Undergraduate students who earn 12 or more graded semester hours ("A," "B," "C," "D," or "E") during a semester in residence at ASU with a GPA of 3.50 or higher are eligible for the Dean's List. A notation of achieving the distinction of being listed on the Dean's List appears on the final grade report for that semester.

College of Architecture and Environmental Design

Alumni Association. The College of Architecture and Environmental Design Alumni Association encourages graduates to contribute to the college by acting as liaisons among the college community, students, and practicing professionals. The college also calls on the members of the Architecture Guild of Arizona State, the Arizona Design Institute, the Council for Design Excellence, and the Planning Advisory Committee for advice and to promote the goals of the college.

Council for Design Excellence. The Council for Design Excellence has been created to consolidate a partnership between the College of Architecture and Environmental Design and key community leaders who share a vital interest in the development of high quality in the built environment of the Phoenix metropolitan area. By joining together professionals, business and civic leaders, students, and faculty in a common pursuit of design excellence, the council seeks to make a profound difference in the quality of life.

Affiliations. For information on affiliations maintained by the college, see "Accreditation and Affiliation," page 715.

Student Professional Associations. The purpose of the student associations is to assist students with the transition into professional life and to acquaint them with the profession relating to their program of study. These include the following associations:

- American Institute of Architecture Students
- College of Architecture and Environmental Design Pre-Studies Organization
- Sigma Phi Zeta
- Student Association of the College of Architecture and Environmental Design
- Student Association of Interior Designers (ASID, IALD, IFDA, IFMA, IIDA)

Student Chapter/American Center for Design
 Student Chapter/American Planning Association
 Student Chapter/American Society of Landscape Architects
 Student Chapter/Industrial Designers Society of America
 Student Chapter/Society of Environmental Graphic Designers
 Student Chapter/Society for Range Management
 Student Chapter/Soil and Water Conservation Society

School of Architecture

www.asu.edu/caed/architecture

480/965-3536

AED 162D

Ron McCoy, Director

Regents' Professor: Cook

Professors: Hoffman, McCoy, Meunier, Ozel, Rotondi, Underhill, Underwood

Associate Professors: Bryan, Ellin, Hartman, Kroloff, Kupper, Loope, Spellman, Van Duzer, Zygas

Assistant Professors: Burnette, Caicco, Hahn, Hejduk, Innes, Kobayashi, Lerum, Murff, Petrucci, Soroka

PURPOSE

The architecture program at ASU offers an integrated curriculum of professional courses and focuses on the design laboratory. The program reflects an awareness of the complex factors affecting the quality of the built environment. The program seeks through scholarship, teaching, research, design, and community service to develop the discipline and the knowledge necessary to address the important environmental and design issues faced by society.

In addition to developing knowledge and skills in architectural design, building technology, 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.

ORGANIZATION

The School of Architecture's program is organized by the faculty under the direction and administration of the director and standing committees of the faculty.

DEGREES

The faculty in the School of Architecture offer the Bachelor of Science in Design degree with a major in Architectural Studies.

The program in architecture culminates with the professional degree Master of Architecture, which is accredited by the National Architectural Accrediting Board (NAAB). Completion of the program is intended to take six years.

In the United States, most state registration boards require a degree from an accredited professional degree program as a prerequisite for licensure. The NAAB, which is the sole agency authorized to accredit U.S. professional degree programs in architecture, recognizes two types of degrees: the Bachelor of Architecture and the Master of Architecture. A program may be granted a five-year, three-year, or two-year term of accreditation, depending on its degree of conformance with established educational standards.

Master's degree programs may consist of a preprofessional undergraduate degree and a professional graduate degree, which, when earned sequentially, compose an accredited professional education. However, the preprofessional degree is not, by itself, recognized as an accredited degree.

Admission to the professional program in architecture is competitive and begins after completion of lower-division requirements, as described in "Admission," on this page and "Degree Requirements," page 129. The professional program includes two years of upper-division study leading to the Bachelor of Science in Design (B.S.D.) and two years of graduate study leading to the Master of Architecture, as described in "Upper-Division Professional Program," page 128.

Applicants who already hold a bachelor's degree in another field should apply to the 3+ year Master of Architecture degree program. See the *Graduate Catalog* for more information.

In cooperation with the Barrett Honors College, the school offers a special honors curriculum for students with Barrett Honors College standing. Consult the advising officers in the school for information.

ADMISSION

Lower-Division Program. New and transfer students who have been admitted to the university and who have selected Architectural Studies as their major are admitted to the lower-division architecture program without separate application to the School of Architecture. Completion of lower-division requirements does not ensure acceptance to the upper-division professional program.

Transfer credits for the lower-division program are reviewed by the college faculty. To be admissible to this curriculum, transfer courses must be equivalent in both content and level of offering. A review of samples of work is required for studio classes. Consult a college academic advisor for an appointment.

Entering lower-division students who are not prepared to enroll in some of the required courses are required to complete additional university course work. These additional

L literacy and critical inquiry / MA mathematics / CS computer/statistics/ quantitative applications / HU humanities and fine arts / SB social and behavioral sciences / SG natural science—general core courses / SQ natural science—quantitative / C cultural diversity in the United States / G global / H historical / See "General Studies," page 83.

prerequisite courses do not apply to the Bachelor of Science in Design degree requirements.

Upper-Division Professional Program. Admission to the upper-division professional program is competitive and limited by available resources. Admission is awarded to those applicants demonstrating the highest promise for professional success.

Transfer students who have completed the equivalent required lower-division course work may apply to the upper-division program. Prior attendance at ASU is not required for application to the upper-division program.

To be eligible for admission to the upper-division program, the following requirements must be met:

1. admission to ASU (note that application and admission to ASU are separate from application and admission to the upper-division program);
2. completion of lower-division requirements or equivalents as approved by a college academic advisor and the faculty of the school;
3. a minimum university cumulative GPA of 3.00 as well as a 3.00 GPA based only on the required lower-division courses or equivalents; and
4. submission of a portfolio (for detailed information about this requirement, see "Portfolio Format Requirements," on this page).

In an unusual circumstance, when the admission standard deficiency is slight, written evidence of extenuating circumstances is convincing, and promise for success is evident, a student may be granted admission to the upper division on a *provisional* basis.

Students not admitted to the upper-division program are not dismissed from the school and may reapply or may transfer to other programs. Students who intend to reapply should meet with a college academic advisor.

Applications for transfer into the upper-division professional program are considered only if vacancies occur. Transfer applicants must demonstrate that equivalent course work has been completed, and applicants must be academically competitive with continuing students.

Students who successfully complete the upper-division requirements receive the Bachelor of Science in Design degree in Architectural Studies. This is not a professional degree. To complete the professional architecture program, students must attain the NAAB-accredited Master of Architecture degree. Students who receive the B.S.D. are eligible to apply for the graduate program and should see the *Graduate Catalog* for proper application procedures. This application process is competitive and based on a thorough review of a student's undergraduate preparation and performance.

Students with the four-year Bachelor of Science in Design degree (with a major in Architectural Studies or an equivalent degree from another school that offers an accredited professional degree in architecture) should apply directly to the graduate program.

APPLICATION TO UPPER-DIVISION PROGRAMS

Upper-Division Application Procedures. Students should write to a college academic advisor for the application form well in advance of the application deadline. The following dates and procedures are for students applying to 2003–2004 upper-division programs.

Upper-Division Application Deadlines. *April 25, 2003.* Portfolio and application documents are due in the school office by 5 P.M.

June 3, 2003. If the spring 2003 semester includes transfer course work (i.e., course work taken at an institution other than ASU), a student must submit his or her transcripts to the school no later than June 3. These transcripts may be unofficial copies. A second set of official transcripts must be sent to the university Undergraduate Admissions office. Application is not complete until the university receives official transcripts for transfer course work. For those transfer students whose academic term ends in June rather than May, this deadline may be extended upon the written request of the applicant.

July 1, 2003. Acceptance notices are mailed no later than July 1.

Return of Letter of Acceptance. A signed receipt of acceptance of admission must be received by the school by the date indicated on the Notice of Acceptance. Alternates may be accepted at a later date if space becomes available.

Matriculation. An accepted student is expected to begin his or her upper-division professional program at the beginning of the immediate fall term. There is no spring admission to the upper division.

Portfolio Format Requirements. Each applicant is responsible for obtaining the following documents and including them in the portfolio. Application materials are submitted at one time in a presentation binder (portfolio) with plastic sleeves (8.5" x 11" format only). Items must appear in the following order:

Page 1. The application form should be completely filled out with the first page visible. Application forms are available from the college Academic Advising Office.

Page 2. The second page of the application should be visible.

Page 3. Application Essay. The student's name should not appear on the essay.

Page 4. All college transcripts for both ASU and transfer work should be included through the fall 2002 semester. Copies are acceptable. An academic advisor forwards 2003 ASU transcripts. (Applicants wishing to transfer work are responsible for submitting these transcripts by June 3 so that they may be added to their portfolios. The student is also responsible for getting an official transfer transcript sent directly to the Office of the Registrar.)

Page 5. A certificate of admission is necessary only for those students who have been newly admitted for fall 2003 and who are applying directly into an upper-division program. The certificate is not required for students currently attending ASU.

Following Pages (Usually from 10 to 20 Sheets). Students should present work sufficient to demonstrate the depth and breadth of their creative activity. This work should include (but is not limited to) examples of two- and three-dimensional design and graphics. Each project should be clearly identified (course, length of project, etc.), with a concise accompanying description of the assignment.

Students should obtain a portfolio requirements addendum for their major from the college's Academic Advising Office, ARCH 141, at the beginning of the academic year in which they intend to apply to the upper-division program. Requirements or instructions indicated in the addendum for that academic year take precedence over any other printed material.

Students are encouraged to include additional materials, written or pictorial, that provide additional evidence of skills and abilities and of the aptitude and commitment to the major. When any work submitted is not completely original, the source must be given. When work is of a team nature, the applicant's role should be clearly indicated. Original examples or slides must not be submitted. All examples must be photographs or other reproduction graphic media.

Return of Portfolios. Application documents (pages 1–5) remain the property of the College of Architecture and Environmental Design. However, the remaining portfolio is returned after the admissions review, provided the applicant encloses a self-addressed return mailer with sufficient prepaid postage. Portfolios may be claimed in person after July 1, 2003. If the applicant provides written permission, another person may claim the portfolio. After one year, unclaimed portfolios are discarded. While care is taken in handling the portfolios, no liability for lost or damaged materials is assumed by the college or school.

ADVISING

Advising for the lower-division curriculum is through the college Academic Advising Office. Advising for upper-division students is by assigned faculty advisors and administrative personnel from the School of Architecture.

DEGREE REQUIREMENTS

The Bachelor of Science in Design degree in Architectural Studies requires a minimum of 120 hours of course work. Most lower-division students pursue option A; however, those who intend eventually to seek an advanced degree in either engineering or building science are encouraged to fulfill the requirements outlined in option B. See an advisor in the Academic Advising/Student Services Office (ARCH 141) for further information about option B.

Option B students who intend to pursue graduate degrees in an engineering discipline should also consult with the College of Engineering and Applied Sciences advising office for any additional requirements.

GENERAL STUDIES REQUIREMENT

The following curriculum includes sufficient approved course work to fulfill the General Studies requirement. See "General Studies," page 83, for requirements and a list of approved courses. Note that all three General Studies awareness areas are required. Consult an advisor for an approved list of courses.

GRADUATION REQUIREMENTS

In addition to fulfilling college and major requirements, students must meet all university graduation and college degree requirements. See "University Graduation Requirements," page 79, and "College Degree Requirements," page 124.

The accredited professional degree Master of Architecture requires an additional 56 hours of approved graduate-level course work. For more information, see the *Graduate Catalog*.

**Architectural Studies—B.S.D.
Lower-Division Requirements
Option A¹
First Year**

Fall	
APH 100 Introduction to Environmental Design <i>HU, G, H</i> .....3	or ADE 120 Design Fundamentals I ² (3)
ENG 101 First-Year Composition .....3	Elective.....3
Elective (MAT 170 Precalculus may be needed) .....3	SB elective .....3
Total .....15	
Spring	
ADE 120 Design Fundamentals I ² .....3	or APH 100 Introduction to Environmental Design <i>HU, G, H</i> (3)
ENG 102 First-Year Composition .....3	MAT 210 Brief Calculus <i>MA</i>.....3
Elective.....3	C elective.....3
Total .....15	

Second Year

Fall	
ADE 221 Design Fundamentals II ² .....3	ADE 223 Design Fundamentals II Lecture .....1
APH 200 Introduction to Architecture <i>HU, G</i> .....3	PHY 111 General Physics <i>SQ</i> ³ .....3
PHY 113 General Physics Laboratory <i>SQ</i> ³ .....1	L elective.....3
Total .....14	
Spring	
ADE 222 Design Fundamentals III ² .....3	ADE 224 Design Fundamentals III Lecture.....1
ANP 236 Introduction to Computer Modeling <i>CS</i> .....3	SB elective .....3

¹ L literacy and critical inquiry / **MA** mathematics / **CS** computer/statistics/quantitative applications / **HU** humanities and fine arts / **SB** social and behavioral sciences / **SG** natural science—general core courses / **SQ** natural science—quantitative / **C** cultural diversity in the United States / **G** global / **H** historical / See "General Studies," page 83.

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SG or SQ elective.....	4
Total	14
Option A lower-division total.....	58

- ¹ Transfer credits are reviewed by the college and evaluated for applicability to this curriculum. To be applicable, transfer courses must be equivalent in both content and level of offering.
- ² Portfolio review is required for transfer studio work. Submit the portfolio to the Academic Advising Office, ARCH 141.
- ³ Both PHY 111 and 113 must be taken to secure SQ credit.

**Architectural Studies—B.S.D.
Upper-Division Requirements
Option A**

Third Year

Fall	
ADE 321 Architectural Studio I.....	5
APH 313 History of Western Architecture I <i>L/HU*</i>	3
ATE 353 Architectural Construction.....	3
Elective*.....	3
Total	14

Spring	
ADE 322 Architectural Studio II.....	5
ANP 331 Programming for Design.....	3
APH 314 History of Western Architecture II <i>L/HU*</i>	3
ATE 361 Building Structures I.....	3
Total	14

Summer	
ARP 484 Clinical Internship.....	3
Total	3

Fourth Year

Fall	
ADE 421 Architectural Studio III.....	5
ATE 451 Building Systems I.....	3
ATE 462 Building Structures II.....	3
Elective*.....	3
Professional elective*.....	3
Total	17

Spring	
ADE 422 Architectural Studio IV.....	5
ATE 452 Building Systems II.....	3
Architectural history elective.....	3
Elective*.....	3
Total	14
Option A upper-division total	62
B.S.D. option A minimum total	120

* These courses may be completed before admission into the upper division.

**Master of Architecture
Graduate-Level Professional Program Requirements**

Fifth Year

Fall	
ADE 521 Advanced Architectural Studio I.....	5
APH 505 Foundation Theory Seminar.....	3
ATE 553 Building Systems III.....	3
ATE 563 Building Structures III.....	3
Total	14

Spring	
ADE 522 Advanced Architectural Studio II.....	5
APH 515 Current Issues and Topics.....	3
ATE 556 Building Development.....	3
Professional elective*.....	3
Total	14

Sixth Year

Fall	
AAD 551 Architectural Management I.....	3
ADE 621 Advanced Architectural Studio III.....	5
ANP 681 Project Development.....	3
Professional elective*.....	3
Total	14

Spring	
AAD 552 Architectural Management II.....	3
ADE 622 Advanced Architectural Studio IV.....	5
Approved elective.....	3
Professional elective*.....	3
Total	14
Graduate division total.....	56

* At least one professional elective must be a CAD course.

ARCHITECTURAL STUDIES MINOR

The Architectural Studies minor is available to non-architecture majors interested in this field, but who are pursuing another major. A minimum of 18 semester hours are required for the minor. 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.

Required Courses

APH 200 Introduction to Architecture <i>HU, G</i>	3
APH 300 World Architecture I/Western Cultures <i>HU, G, H</i>	3
APH 313 History of Architecture I <i>L/HU, G</i>	3
APH 314 History of Architecture II <i>L/HU, G</i>	3
Total	12

Six additional semester hours of electives in the architectural history and theory concentration, with a course prefix of APH or approved PUP/PLA prefix, must be selected from the following list for a total of 18 semester hours:

ANP 331 Programming for Design*.....	3
APH 394 Special Topics.....	3
APH 411 History of Landscape Architecture <i>H</i>	3
APH 414 History of the City <i>H</i>	3
APH 446 20th-Century Architecture I <i>HU</i>	3
APH 447 20th-Century Architecture II <i>HU</i>	3
APH 494 Special Topics.....	3
APH 499 Individualized Instruction*.....	3
APH 511 Energy Environmental Theory.....	3
PLA 420 Theory of Urban Design <i>HU</i>	3
or PUP 420 Theory of Urban Design <i>HU</i> (3)	
Total	30

* These courses require a petition to the School of Architecture.

A minimum GPA of 3.00 is required to pursue the minor in Architectural Studies.

COURSES

Subject matter within the school is categorized in the following instructional areas.

Architectural Administration and Management. AAD courses focus on the organizational and management aspects of architectural practice, including management coordination, administrative procedures, ethics, legal constraints, and the economics of practice.

Architectural Design and Technology Studios. ADE courses require the synthesis of knowledge and understanding gained from other course work and develop an understanding of design theory and design skill through a series of comprehensive design projects. Students apply analytical methods, compare alternative solutions, and develop sophisticated technical and conceptual results.

Environmental Analysis and Programming. ANP courses develop the ability to analyze and program environmental and human factors as preconditions for architectural design using existing and emerging methods of evaluation and analysis.

Architectural Philosophy and History. APH courses develop an understanding of architecture as both a determinant and a consequence of culture, technology, needs, and behavior in the past and present. Studies are concerned with the theory as well as the rationale behind methods and results of design and construction. Case studies are both domestic and international.

Architecture Professional Studies. ARP courses provide students with off-campus opportunities, educational experience in group and individual studies relative to specific student interests, and faculty expertise, including summer internships and field trips.

Architectural Technology. ATE courses develop knowledge of the technical determinants, resources, and processes of architecture. These studies focus on the science and technology of design and construction, including materials, building systems, acoustics, lighting, structural systems, environmental control systems, computer applications to design and technology, and both passive and active solar systems. Emphasis is on measurable and quantifiable aspects.

Architectural Communication. AVC courses develop the student's understanding of communication theory as it applies to architectural design and practice as well as skills in drawing, graphics, photography, presentation design, and the design process.

The courses required in the upper-division and graduate levels of the professional program are not open to nonmajors and students not admitted to the upper-division program.

GRADUATE PROGRAMS

The faculty of the School of Architecture offer a Master of Architecture and a M.S. degree in Building Design. Concurrent application to both degree programs is possible, and each application is evaluated by the respective admission

committees separately. Also, a dual career program, Master of Architecture/Master of Business Administration, has been established in cooperation with the College of Business. Also offered is a collegewide, interdisciplinary Ph.D. degree in Environmental Design and Planning with concentrations in design; history, theory, and criticism; and planning. For more information, see the *Graduate Catalog*.

ARCHITECTURAL ADMINISTRATION AND MANAGEMENT (AAD)

AAD 494 Special Topics. (1–4)
selected semesters

AAD 551 Architectural Management I. (3)
fall

Design delivery, coordination of construction documents, cost estimating, bidding and negotiations, construction observation, and post-construction services. Lecture, discussion, case studies. Prerequisite: graduate-level standing. Corequisites: ADE 621; ANP 681.

AAD 552 Architectural Management II. (3)
spring

Organizational, human performance, and market influences on architecture firms and projects. Readings, case studies, and analysis of managerial problems and solutions. Lecture, discussion. Prerequisite with a grade of "C" or higher: AAD 551. Corequisite: ADE 622.

AAD 555 Architect as Developer. (3)
once a year

Development building, real estate, construction funding, land acquisition, and the sources for capital. Prerequisite: instructor approval.

AAD 598 Special Topics. (1–4)
selected semesters

AAD 599 Thesis. (1–12)
fall or spring
Fee.

AAD 681 Professional Seminar: Capstone. (3)
selected semesters

Examines ethical, political, social, economic, ecological, and cultural issues confronting the practice of architecture. Seminar, readings, case studies.

Omnibus Courses. For an explanation of courses offered but not specifically listed in this catalog, see "Omnibus Courses," page 56.

ARCHITECTURAL DESIGN AND TECHNOLOGY STUDIOS (ADE)

ADE 120 Design Fundamentals I. (3)
fall, spring, summer

Development of visual literacy. Introduces drawing and graphic representation as methods of seeing and problem solving. Studio. Prerequisite: major in College of Architecture and Environmental Design.

ADE 221 Design Fundamentals II. (3)
fall

Exercises in basic design, stressing creative problem-solving methods, principles of composition, and aesthetic evaluation. Development of vocabulary for environmental design. Lecture, studio. Prerequisite with a grade of "C" or higher: ADE 120. Corequisite: ADE 223.

ADE 222 Design Fundamentals III. (3)
spring

Applies design fundamentals with an emphasis on architectural issues. Lecture, studio. Prerequisite: APH 200. Prerequisite with a grade of "C" or higher: ADE 221. Corequisite: ADE 224.

ADE 223 Design Fundamentals II Lecture. (1)
fall

Theory and applications of basic design principles, history and theory of how architecture design is impacted by basic design. Lecture, discussion. Corequisite: ADE 221.

L literacy and critical inquiry / MA mathematics / CS computer/statistics/ quantitative applications / HU humanities and fine arts / SB social and behavioral sciences / SG natural science—general core courses / SQ natural science—quantitative / C cultural diversity in the United States / G global / H historical / See "General Studies," page 83.

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ADE 224 Design Fundamentals III Lecture. (1)

spring

History and theory of design fundamentals with an emphasis on architectural issues. Lecture, discussion. Corequisite: ADE 222.

ADE 321 Architectural Studio I. (5)

fall

Introductory building design problems. Emphasizes design process, communication methods, aesthetics, construction, and technology. Lecture, studio, field trips. Fee. Prerequisite: admission to upper division. Corequisite: ATE 353.

ADE 322 Architectural Studio II. (5)

spring

Site and building design problems. Emphasizes programmatic and environmental determinants and building in natural and urban contexts. Lecture, studio, field trips. Fee. Prerequisite with a grade of "C" or higher: ADE 321. Corequisite: ANP 331.

ADE 421 Architectural Studio III. (5)

fall

Topical design problems of intermediate complexity, including interdisciplinary problems. Lecture, studio, field trips. Fee. Prerequisite with a grade of "C" or higher: ADE 322. Corequisite: ARP 484.

ADE 422 Architectural Studio IV. (5)

spring

Topical design problems of advanced complexity, including interdisciplinary problems. Lecture, studio, field trips. Fee. Prerequisite with a grade of "C" or higher: ADE 421.

ADE 510 Foundation Architectural Studio. (6)

summer

Fundamentals of architectural design, methodology, visualization, and representation. Lecture, studio, field trips. Fee. Prerequisite: admission to Master of Architecture degree program. Corequisite: APH 509.

ADE 511 Core Architectural Studio I. (6)

fall

Applies design fundamentals in architectural problems, including construction, technology, programmatic and environmental determinants. Lecture, studio, field trips. Fee. Prerequisite with a grade of "C" or higher: ADE 510. Corequisite: ATE 353.

ADE 512 Core Architectural Studio II. (6)

spring

Applies architectural design fundamentals to increasingly complex problems, including specific sites and activities. Lecture, studio, field trips. Fee. Prerequisite with a grade of "C" or higher: ADE 511.

ADE 521 Advanced Architectural Studio I. (5)

fall

Design problems emphasizing theory, aesthetics, and tectonics as influences on architectural form. Lecture, studio, field trips. Fee. Prerequisite: admission to Master of Architecture degree program. Corequisite: APH 505.

ADE 522 Advanced Architectural Studio II. (5)

spring

Design problems emphasizing the comprehensive integration of building systems and technologies as influences on architectural form. Lecture, studio, field trips. Fee. Prerequisite with a grade of "C" or higher: ADE 521. Corequisites: APH 515; ATE 556.

ADE 621 Advanced Architectural Studio III. (5)

fall

Design problems emphasizing the urban context, planning issues, and urban design theory as influences on architectural form. Lecture, studio, field trips. Fee. Prerequisite with a grade of "C" or higher: ADE 522. Corequisites: AAD 551; ANP 681.

ADE 622 Advanced Architectural Studio IV. (5)

spring

Individual, student-initiated project reflecting a culminating synthesis of architectural ideas. Studio. Fee. Prerequisites with a grade of "C" or higher: ADE 621; ANP 681. Corequisite: AAD 552.

ADE 631 Building Systems Simulation Studio. (5)

fall

Design of energy-efficient medium and large commercial complexes; synthesis to optimize performance using new and advanced algorithms. Lecture, lab, studio. Prerequisite: admission to graduate program.

ADE 661 Bioclimatic Design Studio. (6)

once a year

Sustainable architectural and site synthesis at a variety of scales emphasizing bioclimatic criteria and the use of passive and low-energy systems. Prerequisite: admission to graduate program.

Omnibus Courses. For an explanation of courses offered but not specifically listed in this catalog, see "Omnibus Courses," page 56.

ENVIRONMENTAL ANALYSIS AND PROGRAMMING (ANP)

ANP 236 Introduction to Computer Modeling. (3)

fall and spring

Fundamentals of computer operation, geographic information systems, geometric modeling of three-dimensional forms and rendering of light, mathematical modeling of processes using spreadsheets. Lab. Prerequisite: major in the School of Architecture. *General Studies: CS*

ANP 331 Programming for Design. (3)

spring

Theory and methods for refracting "constraints" into opportunities for design excellence. Corequisite: ADE 322.

ANP 475 Computer Programming in Architecture. (3)

fall and spring

Computer programming for architectural problems and applications. Lecture, lab. Prerequisite: CSE 183 (or its equivalent).

ANP 477 Computer Applications to Design Problems. (3)

fall

Examines generic microcomputer software in solving architectural design problems. Emphasizes the logic of problem formulation. Lecture, lab. Prerequisite: instructor approval.

ANP 494 Special Topics. (1–4)

fall, spring, summer

ANP 500 Research Methods. (1–12)

fall

Fee. Prerequisite: admission to graduate program. Corequisite: ANP 561.

ANP 530 Computer Graphics in Architecture. (3)

spring

Fundamentals of computer graphics programming in architecture, including graphics hardware, device-independent packages, 2- and 3-dimensional transformations, and data structures. 2 hours lecture, 3 hours lab. Prerequisite: instructor approval. Corequisite: ANP 563.

ANP 561 Architectural Information Processing Systems. (3)

fall

Applies information processing systems to architectural problems. Analyzes computing tools with respect to assumptions and theories. Lecture, lab. Prerequisite: admission to graduate program. Corequisite: ANP 500.

ANP 563 Methods in Architectural Design Computation. (3)

spring

Concepts and models for research in computer-aided architectural design with an emphasis on computational methods and a system framework. Discussion, lab. Prerequisite: ANP 500 or instructor approval. Corequisite: ANP 530.

ANP 590 RC: Computer Programming and Architecture. (1–12)

fall

ANP 598 Special Topics. (1–4)

fall or spring

ANP 599 Thesis. (1–12)

fall or spring

Fee.

ANP 681 Project Development. (3)

fall

Defines and elaborates on major ideas for implementation in ADE 622 in relation to contemporary theory and practice. Seminar. Prerequisite with a grade of "C" or higher: ADE 522. Corequisites: AAD 551; ADE 621.

Omnibus Courses. For an explanation of courses offered but not specifically listed in this catalog, see "Omnibus Courses," page 56.

ARCHITECTURAL PHILOSOPHY AND HISTORY (APH)

APH 100 Introduction to Environmental Design. (3)

fall and spring

Survey of environmental design: includes historic examples and the theoretical, social, technical, and environmental forces that shape them. Cross-listed as DSC100/PUP 100. Credit is allowed for only APH 100 or DSC 100 or PUP 100.

General Studies: HU, G, H

APH 200 Introduction to Architecture. (3)

fall and summer

Survey of issues and polemics affecting current architectural theory and practice. Lecture, discussion.

General Studies: HU, G

APH 300 World Architecture I/Western Cultures. (3)

fall

Historical and contemporary built environments of Western civilizations: Mediterranean, Europe, and the Americas as manifestations of cultural history and responses to environmental determinants. Prerequisite: nonmajor.

General Studies: HU, G, H

APH 304 American Architecture. (3)

selected semesters

Architecture in the United States from earliest colonial times to present. Prerequisite: nonmajor.

General Studies: HU

APH 305 Contemporary Architecture. (3)

selected semesters

Europe and America from the foundations of the modern movement to the present. Prerequisite: nonmajor.

General Studies: HU

APH 313 History of Architecture I. (3)

fall

Survey of the monuments, buildings, and cities of Europe and Africa from the earliest human settlements to the present day. Prerequisite: junior standing or instructor approval.

General Studies: L/HU, G

APH 314 History of Architecture II. (3)

spring

Survey of the monuments, buildings, and cities of Asia and the Americas from the earliest human settlements to the present day. Prerequisite: APH 313.

General Studies: L/HU, G

APH 394 Special Topics. (1–4)

selected semesters

APH 411 History of Landscape Architecture. (3)

fall

Physical record of human attitudes toward the land. Ancient through contemporary landscape planning and design. Cross-listed as PLA 310. Credit is allowed for only APH 411 or PLA 310.

General Studies: H

APH 414 History of the City. (3)

fall

The city from its ancient origins to the present day. Emphasizes European and American cities during the last five centuries. Cross-listed as PUP 412. Credit is allowed for only APH 414 or PUP 412.

General Studies: H

APH 441 Ancient Architecture. (3)

selected semesters

Architecture of the ancient Mediterranean world with selective emphasis on major historical complexes and monumental sites. Prerequisite: APH 313.

General Studies: HU

APH 442 Preservation Planning. (3)

selected semesters

Principles and practices in planning for preservation, conservation and neighborhood redevelopment. Emphasizes evaluation of historic resources. Requires off-campus field practicum. Prerequisite: instructor approval.

APH 444 Baroque Architecture. (3)

selected semesters

Selected examples of Baroque architecture and urbanism with emphasis on relationships between architecture and other arts. Prerequisite: APH 314.

General Studies: HU

APH 446 20th-Century Architecture I. (3)

fall

Architecture in Europe and America from the foundations of the modern movement to the culmination of the international style. Prerequisite: instructor approval.

General Studies: HU

APH 447 20th-Century Architecture II. (3)

spring

Developments in architecture since the international style. Prerequisite: APH 446.

General Studies: HU

APH 494 Special Topics. (1–4)

once a year

APH 499 Individualized Instruction. (1–3)

selected semesters

APH 505 Foundation Theory Seminar. (3)

fall

Foundation of conceptual architectural inquiry, stressing the reciprocal and interdependent relationship between design and theory. Lecture, seminar. Corequisite: ADE 521.

APH 509 Foundation Seminar. (3)

summer

Historical, technical, theoretical, environmental, and professional issues in architecture. Lecture, seminar, field trips. Corequisite: ADE 510.

APH 511 Energy Environment Theory. (3)

fall

Solar and other energy sources in designed and natural environments; architectural, urban, and regional implications of strategies using other renewable resources.

APH 515 Current Issues and Topics. (3)

spring

Critical examination of current architectural issues, topics, and discourse. Prerequisite with a grade of "C" or higher: APH 505. Corequisites: ADE 522; ATE 556.

APH 581 Contemporary Urban Design. (3)

spring

Explores contemporary city and urban design issues related to contemporary cities. Seminar, lecture, discussion.

APH 598 Special Topics. (1–4)

fall or spring

APH 681 Architectural Theory. (3)

selected semesters

Examines architectural theory. Emphasizes application of theory to practice. Seminar. Prerequisite: instructor approval.

APH 683 Critical Regionalism. (3)

spring

Critical inquiry in cultural grounding; the definition of place in architectural theory and practice. Lecture, field studies.

Omnibus Courses. For an explanation of courses offered but not specifically listed in this catalog, see "Omnibus Courses," page 56.

ARCHITECTURE PROFESSIONAL STUDIES (ARP)

ARP 451 Architecture Field Studies. (1–6)

selected semesters

Organized field study of architecture in specified national and international locations. Credit/no credit. May be repeated with approval of director.

L literacy and critical inquiry / MA mathematics / CS computer/statistics/ quantitative applications / HU humanities and fine arts / SB social and behavioral sciences / SG natural science—general core courses / SQ natural science—quantitative / C cultural diversity in the United States / G global / H historical / See "General Studies," page 83.

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ARP 484 Clinical Internship. (1–3)

fall

Full-time internship under the supervision of practitioners in the Phoenix area or other locales. Credit/no credit. Corequisite: ADE 421.

ARP 584 Clinical Internship. (1)

fall

Structured practical experience following a contract or plan, supervised by faculty and practitioners. Prerequisite: admission to graduate program.

ARP 684 Professional Internship. (2–6)

fall

Field experience in an architectural firm specializing in an area directly related to the student's advanced study. Integrates theory and state-of-the-art practices. Credit/no credit. Prerequisite: admission to graduate program.

Omnibus Courses. For an explanation of courses offered but not specifically listed in this catalog, see "Omnibus Courses," page 56.

ARCHITECTURAL TECHNOLOGY (ATE)

ATE 353 Architectural Construction. (3)

fall

Materials and methods of construction. Aesthetic, code, and cost considerations. Lecture, lab. Corequisite: ADE 321 or 511.

ATE 361 Building Structures I. (3)

spring

Introduces load distribution on structures. Static analysis of determinant beams, trusses, arches, and rigid frames. Computer applications. Lecture, lab. Prerequisite: admission to upper division or Master of Architecture program.

ATE 451 Building Systems I. (3)

fall

Principles of solar radiation, heat and moisture transfer, and environmental control systems as form influences. Energy-conscious design. Lecture, lab. Prerequisite: admission to upper division or Master of Architecture program.

ATE 452 Building Systems II. (3)

spring

Architectural design implications of heating, ventilation, and air conditioning systems. Principles of lighting, daylighting, and acoustics, and their applications. Lecture, lab. Prerequisite: ATE 451.

ATE 462 Building Structures II. (3)

fall

Strength of materials. Stresses in beams and columns. Thermal effects on structures. Analysis, design, and detailing of wood structural systems. Lecture, lab. Prerequisite: ATE 361.

ATE 494 Special Topics. (1–4)

selected semesters

ATE 521 Building Environmental Science. (3)

fall

Scientific principles relating to comfort and environmental control. Heat and moisture transfer. Solar/natural energies for heating, cooling, and lighting. Lecture, lab. Prerequisite: admission to graduate program. Corequisite: ATE 562.

ATE 530 Daylighting Design. (3)

selected semesters

Daylight analysis, availability, design sky measurements, modeling and simulation. Integration with passive heating, cooling, building design, and energy considerations. Lecture, lab.

ATE 550 Passive Cooling and Heating I. (3)

spring

Theory, analysis, and application of passive and low-energy systems for thermal comfort in buildings emphasizing heating. Prerequisite: instructor approval.

ATE 551 Passive Cooling and Heating II. (3)

fall

Theory, analysis, and application of passive and low-energy heating systems for thermal comfort in buildings emphasizing cooling. Prerequisite: ATE 550.

ATE 553 Building Systems III. (3)

fall

Design and integration of building systems, including mechanical, electrical, plumbing, security, communications, fire protection, and transportation. Prerequisite: admission to Master of Architecture program.

ATE 554 Building Energy Efficiency. (3)

selected semesters

Impact of building design on energy performance. Climate responsiveness, operations dynamics, and subsystems integration in thermal comfort and efficiency. Prerequisite: instructor approval.

ATE 556 Building Development. (3)

spring

Comprehensive design development through the understanding and integration of building materials and systems. Lecture, seminar. Prerequisite: admission to graduate program. Corequisites: ADE 522; APH 515.

ATE 557 Construction Documents. (3)

selected semesters

Production of architectural working drawings; legal status, organization, layout, site survey plans, sections, elevations, details, schedules, and coordination. Lecture, lab. Prerequisite: admission to upper division or graduate program.

ATE 560 Building Energy Analysis. (3)

selected semesters

Computer simulation of building thermal behavior. Software review. Detailed study of selected simulation models using case study projects. Lab. Prerequisites: ANP 475 (or 477); ATE 582.

ATE 562 Experimental Evaluation. (3)

selected semesters

Instrumentation, measurement and computational techniques for analysis of building components, and assessment of thermal and luminous performance. Fee. Corequisite: ATE 521.

ATE 563 Building Structures III. (3)

fall

Analysis, design, and detailing of steel buildings and frames. Lateral analysis of small rigid and braced frame systems. Lecture, lab. Prerequisites: ATE 462 (or its equivalent); admission to graduate program.

ATE 564 Advanced Structures: Concrete. (3)

selected semesters

Analysis, design, and detailing of concrete systems, considering continuity, multistory frames and shear walls, and lateral analysis. Computer application. Prerequisite: ATE 563 or instructor approval.

ATE 565 Advanced Structures: High Rise. (3)

selected semesters

Developments in high-rise construction. Effects of wind and seismic forces. Preliminary analysis, design, and detailing considering code requirements. Lecture, lab. Prerequisite: ATE 563 or instructor approval.

ATE 582 Environmental Control Systems. (3)

spring

Heating, ventilation, and air-conditioning systems. Loads, psychometrics, refrigeration cycle, air/water distribution, controls, energy performance standards, and utility rates. 2 hours lecture, 3 hours lab, field trips. Prerequisite: ATE 451 or 521.

ATE 599 Thesis. (1–12)

fall or spring

Fee.

ARCHITECTURAL COMMUNICATION (AVC)

AVC 161 Advanced Freehand Perspective Drawing. (2)

selected semesters

Introduces color media and analytical and design drawing exercises. 4 hours studio. Prerequisite: major in the College of Architecture and Environmental Design.

AVC 494 Special Topics. (1–4)

once a year

AVC 598 Special Topics. (1–4)

fall or spring

ENVIRONMENTAL DESIGN AND PLANNING (EPD)

See the *Graduate Catalog* for the EPD courses.

School of Design

www.asu.edu/caed/design

480/965-4135

AED 154B

Jacques Giard, Director

Professors: Brandt, Giard, Kroelinger

Associate Professors: Bernardi, Cutler, Johnson, McDermott, Patel, Ratner, Sanft, Witt

Assistant Professors: Boradkar, Herring, McCoy, Niederhelman, Rothstein, Thibeau Catsis, Weed

Faculty Associates: Fife, Johannes, Kelly, Kroeger, Montgomery, Sentinery, Sneed, Sola, Verch, White

PURPOSE

The School of Design educates individuals for the professional worlds of graphic design, industrial design, and interior design. The curricula focuses on the skills and knowledge that are necessary in these design professions and are undertaken in a learning environment that bridges the academic milieu to the professional world. This direction is further conditioned by the belief that designers have a responsibility to the public and communities they serve. Consequently, students are exposed to a full breadth of learning experiences, from courses in design history, human factors, and the theories of the profession, to the rigors and demands of the design studio. Students learn to integrate aesthetic values into their designs while considering contextual issues. The goal of the school's academic program is to graduate designers who are accomplished and visually sophisticated and who will continue to evolve in their chosen profession. To this end, the school provides an environment that is conducive to design excellence. It has a faculty of active professionals, excellent facilities and resources, and a network that is international in scope.

More information about the School of Design may be obtained via the Web address provided or by sending electronic mail to caed.advising@asu.edu.

ORGANIZATION

Programs in the School of Design are organized by the faculty of the school under the direction and administration of the director, and standing committees of the faculty.

DEGREES

The faculty in the School of Design offer the Bachelor of Science in Design degree with three majors: Graphic

Design, Industrial Design, and Interior Design. Applications are not being accepted to the major in Design Science.

Graphic Design. The Graphic Design program not only prepares individuals for the graphic design profession, but also for graduate work as well. The goal of the faculty is to offer the best graphic design education, allowing the graduating student every option available. Studio classroom projects are planned to strengthen and refine students' proficiency in the language, process, and technical aspects of the profession. Projects are intended to help students think critically, both as individuals and as members of a group. Students opting for the profession can expect to work in the areas of advertising design, brand identity, broadcast graphics, corporate identity, environmental graphics, informational graphics, in-house corporate design, museum informational design, publication design, and Web site design. Students pursuing graduate studies can expect to be equally well prepared with critical and analytical thinking skills coupled with a diversified portfolio. The program is dedicated to a comprehensive education in graphic design as it relates to the changing communication standards of today and in the future.

Industrial Design. The program in Industrial Design prepares creative individuals to design manufactured objects used by people on a daily basis. The industrial design profession serves the needs of consumers and manufacturers by developing products that are attractive, useful, safe, convenient, and comfortable to use. The designer's special talents and skills include a sense of the aesthetic, knowledge of materials and processes, and an understanding of the physical and psychological needs of the user. Industrial designers often serve as a catalyst among management, marketing, and engineering.

By way of studio projects, students learn to visualize ideas, to communicate them to others, and to refine their skills in freehand sketching, computer-aided design, and model making. Assignments are a balance of conceptual aspects and practical techniques. Typical projects include electronics, toys, furniture, sports equipment, and packaging. Focus is placed on the role of the industrial designer as a member of a team. Third-year students perform internships in a large corporation or in a consulting design agency.

Interior Design. The program in Interior Design is accredited by the Foundation for Interior Design Education Research, the national accrediting agency. The five-year curriculum emphasizes design process, technical skill development, problem solving, and the management skills needed to work in collaboration with the allied design professions. The goal of interior design is to create high-quality environments for human use.

Significant changes in the interior design profession over the last two decades are reflected in the program. The school is committed to integrating computer technology into each level of the curriculum. In doing so, the program offers an

L literacy and critical inquiry / MA mathematics / CS computer/statistics/ quantitative applications / HU humanities and fine arts / SB social and behavioral sciences / SG natural science—general core courses / SQ natural science—quantitative / C cultural diversity in the United States / G global / H historical / See "General Studies," page 83.

excellent environment for experimenting with and testing innovative applications of computer-aided design and simulation to interior design.

ADMISSION

Lower-Division Program. New and transfer students who have been admitted to the university and who have selected Graphic Design, Industrial Design, or Interior Design as a major are admitted to the appropriate lower-division program. Transfer credits for the lower-division program are reviewed by the college and evaluated for applicability to this curriculum. To be applicable, transfer courses must be equivalent in both content and level of offering. A review of samples of work is required for studio classes; consult a college academic advisor for further information.

Lower-division students entering the program who are not prepared for certain courses in the curriculum (for example, algebra and trigonometry or a second course in computer programming) are required to take additional courses that do not apply to the Bachelor of Science in Design degree. If such courses are required, an additional year of study may be necessary to complete the lower-division program.

Completion of lower-division requirements does not ensure acceptance to an upper-division professional program.

Upper-Division Program. When students have completed the lower-division curriculum requirements, they may apply for acceptance to upper-division programs in Graphic Design, Industrial Design, or Interior Design. The limited spaces available each year are awarded to applicants with the highest promise for professional success, as determined by each program. The faculty of the School of Design retain the right to admit any meritorious student who may be deficient in a published school criterion. Such admission requires an extraordinary review of the applicant by the school's admissions committee. Should the faculty choose to admit such an applicant, the student is placed automatically on a provisional admission status with stipulations as to what is required to be removed from probation. See "Application to Upper-Division Programs," below.

Students not admitted to upper-division programs are not dismissed from the university and may reapply or transfer to other programs. Students who intend to reapply should meet with a college academic advisor.

GRADUATE PROGRAMS

The School of Design offers a Master of Science in Design (M.S.D.) degree with concentrations in graphic design, industrial design, and interior design. Additionally, a distance learning M.S.D. degree with an area of study in design analysis is offered. The faculty also participates in a collegewide, interdisciplinary Ph.D. degree in Environmental Design and Planning with concentrations in design; history, theory, and criticism; and planning. For more information, see the *Graduate Catalog*.

APPLICATION TO UPPER-DIVISION PROGRAMS

Upper-Division Application Procedures. Students should write to a college academic advisor for the application form well in advance of the application deadline. For more information on portfolios, ask for a copy of the *Portfolio Seminar* brochure from a college academic advisor. The following dates and procedures are for students applying to 2003–2004 upper-division programs.

Upper-Division Application Deadlines. The following dates and procedures apply to Industrial and Interior Design portfolio submission only. Information regarding portfolio submission for Graphic Design is listed separately.

April 15, 2003. Portfolio and application documents are due in the school office by 5 P.M.

June 3, 2003. If the spring 2003 semester includes transfer course work (i.e., course work taken at an institution other than ASU), a student must submit his or her transcripts to the school no later than June 3. These transcripts may be unofficial copies. A second set of official transcripts must be sent to the university Undergraduate Admissions office. Application is not complete until the university receives official transcripts for transfer course work. For those transfer students whose academic term ends in June rather than May, this deadline may be extended upon the written request of the applicant.

July 1, 2003. Acceptance notices are mailed no later than July 1.

March 17, 2003. The application deadline for Graphic Design is March 17, 2003. In addition to the portfolio submission, Graphic Design requires an aptitude test, which is part of the application packet. Application packets can be obtained from the Academic Advising Office one month before the due date. Students may obtain their application results by contacting the academic coordinator for Graphic Design at the end of the first week of April. Acceptance notices are mailed to admitted students.

Return of Letter of Acceptance. A signed receipt of acceptance of admission must be received by the school by the date indicated on the Notice of Acceptance. Alternates may be accepted at a later date if space becomes available.

Matriculation. An accepted student is expected to begin his or her upper-division professional program at the beginning of the immediate fall term. There is no spring admission to the upper division.

Graphic Design Application Requirements. Individual applicants are responsible for obtaining the Graphic Design Application Packet by visiting the College of Architecture and Environmental Design Academic Advising Office in ARCH 141. Application materials are submitted in a portfolio organized by the individual applicant. The student's name must be affixed to the outside, with completed materials appearing in the following order:

1. application to the Graphic Design upper-division program;
2. "Commonly Asked Questions" form; and
3. the Graphic Design Aptitude Test.

The packet contains complete instructions for completing the standard test. This test requires the completion of five problems that are reviewed by the faculty and that become the portfolio of materials considered for admission to the upper-division program.

Industrial and Interior Design Portfolio Format

Requirements. Each applicant is responsible for obtaining the following documents and including them in the portfolio. Application materials are submitted at one time in a presentation binder (portfolio) with plastic sleeves (8.5" x 11" format only). The student's name must be affixed to the outside. Items must appear in the following order:

Page 1. The application form should be completely filled out with the first page visible. Application forms are available from the college Academic Advising Office.

Page 2. The second page of the application should be visible.

Page 3. Application Essay or Letter of Intent.

Page 4. All college transcripts for both ASU and transfer work should be included through the fall 2002 semester. Copies are acceptable. An academic advisor forwards 2003 ASU transcripts. (Applicants wishing to transfer spring semester 2003 work are responsible for submitting these transcripts by June 3 so that they may be added to their portfolios. The student is also responsible for getting an official transfer transcript sent directly to the Office of the Registrar.)

Page 5. A certificate of admission to ASU is necessary only for those students who have been newly admitted for fall 2003 and who are applying directly into an upper-division program. The certificate is not required for students currently attending ASU.

Following Pages (Usually from 10 to 20 Sheets). Students should present work sufficient to demonstrate the depth and breadth of their creative activity. This work should include (but is not limited to) examples of two- and three-dimensional design and graphics. Each project should be clearly identified (course, length of project, etc.), with a concise accompanying description of the assignment.

Students should obtain a portfolio requirements addendum for their major from the college's Academic Advising Office, ARCH 141, at the beginning of the academic year in which they intend to apply to the upper-division program. Requirements or instructions indicated in the addendum for that academic year take precedence over any other printed material.

Students are encouraged to include additional materials, written or pictorial, that provide further evidence of skills and abilities and of the aptitude and commitment to the major. When any work submitted is not completely original, the source must be given. When work is of a team nature, the applicant's role should be clearly indicated. Original examples or slides must not be submitted. All examples must be photographs or other reproduction graphic media.

Return of Portfolios. Application documents (pages 1–5) remain the property of the College of Architecture and Environmental Design. However, the remainder of the portfolio is returned after the admissions review, provided the appli-

cant encloses a self-addressed return mailer with sufficient prepaid postage. Portfolios may be claimed in person after July 2, 2003. If the applicant provides written permission, another person may claim the portfolio. After one year, unclaimed portfolios are discarded. While care is taken in handling the portfolios, no liability for lost or damaged materials is assumed by the college or school.

ADVISING

Advising for the lower- and upper-division curricula is through a college academic advisor (ARCH 141).

DEGREE REQUIREMENTS

The Bachelor of Science in Design degree requires a minimum of 120 semester hours for a major in Graphic Design and Industrial Design and a minimum of 150 semester hours for a major in Interior Design. The program includes required field trips. Students are responsible for these additional costs. Foreign study opportunities are available for students. An internship is a required part of the program.

Graphic Design

The curriculum in Graphic Design is divided into a pre-professional (first year) and a professional program (second, third, and fourth years):

Preprofessional program	30
Professional program	90
Total	120

The lower-division curriculum balances a foundation in academic subjects such as English, numeracy, and computer technology with design courses that include history and theory, as well as studio courses in drawing and design fundamentals as they relate to conceptual design. Students apply for entry into the professional program after fulfilling the first year School of Design core foundation courses. The upper-division curriculum includes studio work in graphic design and its relationship to problem solving at multiple scales. Projects are intended to educate students to think critically as individuals and as team participants in small and large corporate facilities. A formal eight-week summer internship is required in the professional program. The internship is coordinated by the faculty. Students intern in a variety of settings, including in-house corporate design, publication design, and advertising design agencies.

General Studies Requirement. The following curriculum includes sufficient approved course work to fulfill the General Studies requirement. See "General Studies," page 83, for requirements and a list of approved courses. Note that all three General Studies awareness areas are required. Consult an advisor for an approved list of courses.

Graduation Requirements. In addition to fulfilling college and major requirements for this professional degree, students must meet all university graduation and college degree

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requirements. See “University Graduation Requirements,” page 79, and “College Degree Requirements,” page 124.

Graphic Design—B.S.D. Preprofessional Program Requirements¹

First Year

Fall

DSC 101 Design Awareness <i>HU, G</i>	3
DSC 121 Design Principles I ¹	3
ENG 101 First-Year Composition.....	3
or ENG 105 Advanced First-Year Composition (3) if qualified	
Elective ²	3
MA elective ²	3
Total	15

Spring

ARS 102 Art of the Western World II <i>HU, H</i>	3
DSC 120 Design Drawing ¹	3
DSC 122 Design Principles II ¹	3
ENG 102 First-Year Composition.....	3
or elective if ENG 105 is taken (3)	
PGS 101 Introduction to Psychology <i>SB</i>	3
Total	15
Preprofessional program total	30

¹ Transfer credits for the lower-division program must be equivalent in both content and level of offering. Samples of studio work to be accepted for credit must be submitted for evaluation through the college’s Academic Advising Office, ARCH 141. Most studio courses and some lecture courses are sequential. They must be taken in, and may be offered only during, the semester noted.

² A list of courses that fulfill design electives, general studies, and other electives is available from the college academic advisor.

Graphic Design—B.S.D. Professional Program Requirements

Second Year

Fall

DSC 494 ST: Finding Purpose: Survival in Design.....	3
GRA 283 Letterform I ¹	3
GRA 284 Visual Communication I ¹	3
L elective ²	3
SB elective ²	3
Total	15

Spring

GRA 286 Visual Communication II ¹	3
GRA 287 Letterform II ¹	3
Design elective ²	3
CS elective ²	3
SQ, SG elective with laboratory I ²	4
Total	16

Third Year

Fall

GRA 345 Design Rhetoric <i>L</i>	3
GRA 383 Typography I.....	3
GRA 386 Visual Communication III ¹	3

Electives ²	6
Total	15

Spring

DSC 483 Preinternship Seminar.....	1
GRA 318 History of Graphic Design <i>HU</i>	3
GRA 385 Typography II ¹	3
GRA 387 Visual Communication IV ¹	3
C elective ²	3
Upper-division design elective ²	3
Total	16

Summer

DSC 484 Internship ¹	3
Total	3

Fourth Year

Fall

GRA 481 Visual Communication V ¹	3
GRA 494 ST: Graphic Design.....	3
SQ, SG elective with laboratory II ²	4
Upper-division design elective ²	3
Total	13

Spring

GRA 482 Visual Communication VI ¹	3
GRA 494 ST: Graphic Design.....	3
Elective ²	3
Upper-division elective ²	3
Total	12
Professional program total	90
B.S.D. minimum total	120

¹ Transfer credits for the lower-division program must be equivalent in both content and level of offering. Samples of studio work to be accepted for credit must be submitted for evaluation through the college’s Academic Advising Office, ARCH 141. Most studio courses and some lecture courses are sequential. They must be taken in, and may be offered only during, the semester noted.

² A list of courses that fulfill design electives, general studies, and other electives is available from the college academic advisor.

Industrial Design

The curriculum in Industrial Design is divided into a pre-professional (first and second years) and a professional program (third and fourth years):

Preprofessional program.....	61
Professional program.....	59
Total	120

The preprofessional curriculum balances a foundation in academic subjects such as English, algebra and trigonometry, computing, and physics with departmental courses that include history as well as studio courses in drawing, design fundamentals, human factors, and materials and processes.

The professional curriculum includes studio and laboratory work in industrial design, graphics, project development, and professional practice. Students also take a number of approved program electives. A supervised summer internship is part of the curriculum.

Upper-division studios emphasize projects that promote an interdisciplinary approach to solving problems and that

develop the student’s intellectual understanding of the philosophy, methodology, and theories related to industrial design. Problems proceed from small consumer products with simple task functions to larger and more complex problems and systems. Studio projects also emphasize the design processes: problem resolution through concept ideation, dialogue with specialists in related areas, and product development, presentation, and marketing.

Graduates of the program accept positions in industry and with firms involved in industrial design. Designers may focus on consumer products, transportation, electronics, medical devices, health products, or recreational products, among others. Designers may also choose to continue their education with graduate studies to enrich their design knowledge, to specialize, or to prepare for college-level teaching.

General Studies Requirement. The following curriculum includes sufficient approved course work to fulfill the General Studies requirement. See “General Studies,” page 83, for requirements and a list of approved courses. Note that all three General Studies awareness areas are required. Consult an advisor for an approved list of courses.

Graduation Requirements. In addition to fulfilling college and major requirements, students must meet all university graduation and college degree requirements. See “University Graduation Requirements” page 79, and “College Degree Requirements,” page 124.

**Industrial Design—B.S.D.
Preprofessional Program Requirements¹**

First Year

Fall

DSC 101 Design Awareness <i>HU, G</i>	3
DSC 121 Design Principles I ¹	3
ENG 101 First-Year Composition.....	3
or ENG 105 Advanced First-Year Composition (3) if qualified	
MAT 170 Precalculus <i>MA</i>	3
Elective.....	3
Total	15

Spring

DSC 120 Design Drawing ¹	3
DSC 122 Design Principles II ¹	3
ENG 102 First-Year Composition.....	3
or elective if ENG 105 is taken (3)	
PGS 101 Introduction to Psychology <i>SB</i>	3
PHY 111 General Physics <i>SQ</i> ²	3
PHY 113 General Physics Laboratory <i>SQ</i> ²	1
Total	16

Second Year

Fall

DSC 236 Introduction to Computer Modeling <i>CS</i>	3
IND 227 Visual Methods for Problem Solving.....	3
IND 242 Materials and Design	3
IND 260 Industrial Design I.....	3
IND 316 20th-Century Design I <i>HU, H</i>	3
Total	15

Spring

ECN 112 Microeconomic Principles <i>SB</i>	3
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IND 228 Imaging and Visualization.....	3
IND 243 Process and Design	3
IND 261 Industrial Design II	3
IND 317 20th-Century Design II <i>HU, H</i>	3
Total	15
Preprofessional program total	61

¹ Transfer credits for the lower-division program must be equivalent in both content and level of offering. Samples of studio work must be provided for evaluation. See a college academic advisor for an appointment.

² Both PHY 111 and 113 must be taken to secure SQ credit.

**Industrial Design—B.S.D.
Professional Program Requirements**

Third Year

Fall

DSC 344 Human Factors in Design.....	3
IND 327 Presentation Graphics	3
IND 354 Principles of Product Design	3
IND 360 Industrial Design III.....	5
Total	14

Spring

IND 328 Graphics for Industrial Design.....	3
IND 361 Industrial Design IV.....	5
MKT 300 Principles of Marketing.....	3
Elective.....	3
Total	14

Summer

DSC 484 Internship	2
Total	2

Fourth Year

Fall

ENG 301 Writing for the Professions <i>L</i>	3
IND 460 Design Project I.....	5
IND 470 Professional Practice for Industrial Design <i>L</i>	3
Elective.....	3
Total	14

Spring

IND 461 Design Project II	5
Elective.....	3
C elective.....	3
SQ, SG elective with approved laboratory.....	4
Total	15
Professional program total	59
B.S.D. minimum total	120

MINOR

Design Studies

The minor in Design Studies is available to students interested in design courses but who do not wish to major in graphic, industrial, or interior design. The courses are designed to appeal especially to students who have not been accepted to the upper-division of graphic, industrial, or

L literacy and critical inquiry / *MA* mathematics / *CS* computer/statistics/quantitative applications / *HU* humanities and fine arts / *SB* social and behavioral sciences / *SG* natural science—general core courses / *SQ* natural science—quantitative / *C* cultural diversity in the United States / *G* global / *H* historical / See “General Studies,” page 83.

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interior design but who wish to pursue the study of design within the Bachelor of Interdisciplinary Studies degree.

The selected courses satisfy the minimum requirement (18 semester hours) for the minor. Furthermore, 12 semester hours must be taken in upper-division course work. To enhance understanding of the subject matter, some of the selected courses are sequential in nature and require certain prerequisites; consequently, students should carefully note the semester in which these particular courses are offered. All courses are non-studio courses.

Designated Courses for the Minor

Graphic Design

DSC 344	Human Factors in Design	.....3
GRA 318	History of Graphic Design <i>HU</i>	.....3

Industrial Design

IND 242	Materials and Design	.....3
IND 243	Process and Design	.....3
IND 316	20th-Century Design I <i>HU, H</i>	.....3
IND 317	20th-Century Design II <i>HU, H</i>	.....3
IND 354	Principles of Product Design	.....3
IND 470	Professional Practice for Industrial Design <i>L</i>	.....3
IND 474	Design Seminar	.....3

Interior Design

INT 223	Interior Design Issues and Theories <i>HU</i>	.....3
INT 235	User Needs and Behavior in Interior Design	.....3
INT 310	History of Interior Design I <i>HU, H</i>	.....3
INT 311	History of Interior Design II <i>HU, H</i>	.....3
INT 341	Interior Materials and Finishes	.....3
INT 366	Construction Methods in Interior Design	.....3
INT 412	History of Decorative Arts in Interiors <i>HU</i>	.....3
INT 413	History of Textiles in Interior Design	.....3
INT 442	Specifications and Documents for Interiors <i>L</i>	.....3
INT 455	Environmental Control Systems	.....3
INT 457	Acoustics for Interior Design	.....3
INT 458	Lighting for Interior Design	.....3
INT 472	Professional Practice for Interior Design	.....3

The minor in Design Studies is open to all students of the university. It is especially suited to students pursuing the Bachelor of Interdisciplinary Studies degree. To pursue the minor in Design Studies, students must have a minimum cumulative GPA of 2.50.

Interior Design

The curriculum in Interior Design is divided into a pre-professional program (first and second year) and a professional program (third, fourth, and fifth years):

Preprofessional program	.....55
Professional program	.....95
Total	.....150

The preprofessional curriculum balances a foundation in academic subjects such as English, algebra and trigonometry, computer technology, and physics with departmental courses that include history and theory, as well as studio courses in drawing, design fundamentals, and conceptual design.

The professional curriculum includes studio work in interior design, furniture design, construction methods/structures, codes as related to materials and finishes, human factors, environmental control systems, as well as lecture courses in the history of interior design, decorative arts, and

textiles. An eight-week supervised summer internship is part of the curriculum. The fifth year is an interdisciplinary year in which students address real-life environmental problems. This final year is a capstone experience that utilizes all previous learning within and outside the professional program. The student's final design project is completed in consultation with a member of the local professional community.

Graduates from the program accept entry-level professional positions in a variety of settings, including interior design firms, departments of space planning, architectural firms, public institutions, and industry. Students may also choose to continue their education through graduate studies, which offer greater enrichment in studio disciplines and which contribute to the possibility for postsecondary-level academic appointments, giving the recipients highly sought-after academic credentials.

General Studies Requirement. The following curriculum includes sufficient approved course work to fulfill the General Studies requirement. See "General Studies," page 83, for requirements and a list of approved courses. Note that all three General Studies awareness areas are required. Consult with your advisor for an approved list of courses.

Graduation Requirements. In addition to fulfilling college and major requirements, students must meet all university graduation and college degree requirements. See "University Graduation Requirements," page 79, and "College Degree Requirements," page 124.

Interior Design—B.S.D. Preprofessional Program Requirements¹

First Year

Fall

DSC 101	Design Awareness <i>HU, G</i>	.....3
DSC 121	Design Principles I ¹	.....3
ENG 101	First-Year Composition	.....3
	or ENG 105 Advanced First-Year Composition (3)	
	if qualified	
MAT 170	Precalculus <i>MA</i>	.....3
Elective	.....	3
Total	.....	15

Spring

DSC 120	Design Drawing ¹	.....3
DSC 122	Design Principles II ¹	.....3
ENG 102	First-Year Composition	.....3
	or elective if ENG 105 is taken (3)	
PHY 111	General Physics <i>SQ</i> ²	.....3
PHY 113	General Physics Laboratory <i>SQ</i> ²	.....1
SB elective	.....	3
Total	.....	16

Second Year

Fall

DSC 236	Introduction to Computer Modeling <i>CS</i>	.....3
INT 194	ST: Drafting for Interior Design ¹	.....3
INT 223	Interior Design Issues and Theories <i>HU</i> ¹	.....3
INT 235	User Needs and Behavior in Interior Design ¹	.....3
Total	.....	12

Spring	
ARS 102 Art of the Western World II <i>HU, H</i>	3
INT 220 Media for Design Development ¹	3
INT 231 Concepts for Interior Design ¹	3
Elective.....	3
Total	12
Preprofessional program total	55

¹ Transfer credits for the lower-division program must be equivalent in both content and level of offering. Samples of studio work must be provided for evaluation. See a college academic advisor for an appointment.

² Both PHY 111 and 113 must be taken to secure SQ credit.

**Interior Design—B.S.D.
Professional Program Requirements**

Third Year

Fall	
DSC 344 Human Factors in Design.....	3
INT 310 History of Interior Design I <i>HU, H</i>	3
INT 340 Interior Codes: Public Welfare and Safety.....	3
INT 364 Interior Design Studio I	5
INT 366 Construction Methods in Interior Design	3
Total	17

Spring	
DSC 483 Preinternship Seminar.....	1
INT 311 History of Interior Design II <i>HU, H</i>	3
INT 341 Interior Materials and Finishes	3
INT 365 Interior Design Studio II.....	5
INT 455 Environmental Control Systems	3
Total	15

Summer	
DSC 484 Internship	3
Total	3

Fourth Year

Fall	
INT 412 History of Decorative Arts in Interiors <i>HU</i>	3
INT 442 Specifications and Documents for Interiors <i>L</i>	3
INT 457 Acoustics for Interior Design.....	3
INT 464 Interior Design Studio III.....	5
L elective.....	3
Total	17

Spring	
INT 413 History of Textiles in Interior Design	3
INT 458 Lighting for Interior Design.....	3
INT 465 Interior Design Studio IV.....	5
Natural science elective with laboratory.....	4
Total	15

Fifth Year*

Fall	
INT 422 Facilities Planning and Management I.....	3
INT 446 Furniture Design and Production	3
INT 466 Interior Design Studio V.....	5
SB and C elective.....	3
Total	14

Spring	
INT 423 Facilities Planning and Management II	3
INT 467 Interior Design Studio VI.....	5

INT 472 Professional Practice for Interior Design.....	3
Elective.....	3
Total	14
Professional program total	95
B.S.D. minimum total	150

* See "Fifth Year," below.

Fifth Year. During the fifth year, the student concentrates on research and application of that research related to the development of a comprehensive project. This year is self-directed in nature and prepares the student for independent thinking and creative problem solving. The fifth-year experience promotes high expectations for producing professional work that represents the culmination of the major's academic experience. It should be noted that the fifth-year studio sequence is designed to draw majors from the upper-division programs of industrial design, graphic design, and architecture, thus furthering a real-life interdisciplinary problem-solving experience.

MINOR

Interior Design History

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 School of 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.

The selected courses satisfy the minimum requirement (18 semester hours) 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 is offered.

Required Courses

DSC 101 Design Awareness <i>HU, G</i>	3
INT 223 Interior Design Issues and Theories <i>HU</i>	3
INT 310 History of Interior Design I <i>HU, H</i>	3
INT 311 History of Interior Design II <i>HU, H</i>	3
INT 412 History of Decorative Arts in Interiors <i>HU</i>	3
INT 413 History of Textiles in Interior Design	3
Total	18

The minor in Interior Design History is open to students majoring in Architectural Studies, Art, Communication, Psychology, or Sociology and students in any College of Business major or the Bachelor of Interdisciplinary Studies program. All other majors are considered on an individual basis and approved by the coordinators of the Interior Design program within the School of Design. To pursue the minor in Interior Design History, students must have a minimum cumulative GPA of 2.50.

L literacy and critical inquiry / MA mathematics / CS computer/statistics/ quantitative applications / HU humanities and fine arts / SB social and behavioral sciences / SG natural science—general core courses / SQ natural science—quantitative / C cultural diversity in the United States / G global / H historical / See "General Studies," page 83.

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DESIGN (DSC)

DSC 100 Introduction to Environmental Design. (3)

fall and spring

Survey of environmental design: includes historic examples and the theoretical, social, technical, and environmental forces that shape them. Cross-listed as APH 100/PUP 100. Credit is allowed for only APH 100 or DSC 100 or PUP 100.

General Studies: HU, G, H

DSC 101 Design Awareness. (3)

fall

Survey of cultural, global, and historical context for the design professions.

General Studies: HU, G

DSC 120 Design Drawing. (3)

spring

Drawing as language to explore and communicate ideas. Development of drawing aptitude as language and process for design thinking. 1 hour lecture, 5 hours studio.

DSC 121 Design Principles I. (3)

fall

Design as a language and process for creative thinking and realization. 1 hour lecture, 5 hours studio. Prerequisite: major in the College of Architecture and Environmental Design.

DSC 122 Design Principles II. (3)

spring

Continued exploration of design as a language and process for creative thinking and realization. 1 hour lecture, 5 hours studio. Prerequisite: DSC 121.

DSC 236 Introduction to Computer Modeling. (3)

fall and spring

Computers in design, including software concepts, specific packages, and problem solving, illustration, typography, modeling, and animation. Lab. Prerequisite: Design major.

General Studies: CS

DSC 344 Human Factors in Design. (3)

fall

Man-machine environment systems; human characteristics and behavior applied to design of products, systems, and their operating environment.

DSC 483 Preinternship Seminar. (1)

spring

Preparation of internship materials that produce and enhance a successful internship experience. Seminar. Prerequisite: 3rd-year major in the School of Design.

DSC 484 Internship. (1–3)

summer

Full-time summer internship under supervision of practitioners in the Phoenix area or other locales. Prerequisite: instructor approval.

DSC 494 Special Topics. (1–4)

fall and spring

Topics may include the following:

- Finding Purpose: Survival in Design. (3)

DSC 500 Research Methods. (1–12)

selected semesters

Fee.

DSC 520 Contemporary Design Issues. (3)

fall and spring

Projected applications in design production, planning, and decision-making processes. Lecture, seminar. Prerequisites: INT 310 and 311 (or their equivalents).

DSC 524 Illumination and Acoustics. (3)

selected semesters

Research and laboratory investigation of advanced illumination and acoustics issues of facility design. Emphasizes human factors and performance aspects. Prerequisites: INT 457 and 458 (or their equivalents).

DSC 525 Design Methodologies. (3)

fall

Practical exercises and studies in problem-solving strategies; problem definition and supporting theory for the designer. Lecture, seminar, lab. Fee. Prerequisite: senior or graduate standing.

DSC 527 Modern Design Theory. (3)

spring

Aesthetic, political, economic, and social theories that have shaped modern design; theory as the basis for design philosophies. Lecture, seminar. Prerequisite: DSC 525 (or its equivalent).

DSC 529 Design Criticism. (3)

fall

Critical methods applied to design as material culture and human expression; evaluation of achievement versus intention. Lecture, seminar. Prerequisite: DSC 527 (or its equivalent).

DSC 544 Human Factors Systems and Documentation. (3)

fall

Advanced topics associated with theory and methods of human factors in design. Individual projects stressing problem organization, evaluation, and documentation. Lecture, seminar, lab. Prerequisite: DSC 344 (or its equivalent).

DSC 552 Computer Simulation in Design. (3)

fall

Use of computer graphics as a medium to develop and present images of the environment for analysis and perception. Lecture, lab. Prerequisite: senior or graduate standing.

DSC 553 Computer Imaging and Visual Perception. (3)

spring

Issues and applications of computer simulation as a tool for describing and testing human interface with the environment. Lecture, lab. Prerequisite: senior or graduate standing.

DSC 558 Daylighting. (3)

selected semesters

Daylighting as a design determinant; concepts, techniques, methodology, experiments, and case studies. Lecture, studio. Prerequisite: senior or graduate standing.

DSC 580 Practicum: Methods of Teaching Design. (3)

fall

Background and development of design education theories. Concepts of studio teaching methods. Comprehensive student project development and evaluation methods. Prerequisite: graduate standing.

DSC 592 Research. (1–12)

selected semesters

DSC 593 Applied Project. (1–12)

selected semesters

Fee.

DSC 598 Special Topics. (1–4)

selected semesters

Topics may include the following:

- Facilities Planning II
Fee.

DSC 599 Thesis. (1–12)

selected semesters

Fee.

Omnibus Courses. For an explanation of courses offered but not specifically listed in this catalog, see "Omnibus Courses," page 56.

ENVIRONMENTAL DESIGN AND PLANNING (EPD)

See the *Graduate Catalog* for the EPD courses.

GRAPHIC DESIGN (GRA)

GRA 283 Letterform I. (3)

fall

Drawing of letterforms with focus on proportion and structure. Introduces letterform nomenclature and classifications. 6 hours a week. Fee. Prerequisites: DSC 122; acceptance into Graphic Design professional program.

GRA 284 Visual Communication I. (3)

fall

Theoretical and applied studies in shape, drawing, and color. 6 hours a week. Fee. Prerequisite: GRA 283.

GRA 286 Visual Communication II. (3)*spring*

Transition from theoretical to applied problems. Emphasizes refinement of visual skills. 6 hours a week. Fee. Prerequisites: GRA 284; acceptance into Graphic Design professional program. Corequisite: GRA 287.

GRA 287 Letterform II. (3)*spring*

Continuation of GRA 283 with emphasis on lowercase letters; basics of pen writing and font design. 6 hours per week. Fee. Prerequisites: GRA 284; acceptance into Graphic Design professional program. Corequisite: GRA 286.

GRA 318 History of Graphic Design. (3)*fall*

Surveys development in the graphic arts, innovative printing methods, aesthetic values, and social and cultural environments that shape them.

*General Studies: HU***GRA 345 Design Rhetoric. (3)***fall and spring*

Develops critical thinking and expression of ideas in concise and persuasive written and spoken form. Prerequisites: ENG 101, 102.

*General Studies: L***GRA 382 Graphic Representation. (3)***fall*

Studio practice in drawing with an application toward graphic communication. 6 hours a week. May be repeated once for credit. Fee. Prerequisite: GRA 284.

GRA 383 Typography I. (3)*fall*

Theoretical exercises in spatial and textural qualities of type. Problems in tension, activation, and balance. Exercises in simple typographical applications. 6 hours a week. Fee. Prerequisites: GRA 286, 287. Corequisite: GRA 386.

GRA 385 Typography II. (3)*spring*

Problems in composition, choice, and combinations of typefaces, formats, and their application to a variety of design projects. 6 hours a week. Fee. Prerequisite: GRA 383. Corequisite: GRA 387.

GRA 386 Visual Communication III. (3)*fall*

Problems in specific design applications such as poster, packaging, publications. Emphasizes development of concepts in visual communications. 6 hours a week. Fee. Prerequisites: GRA 286, 287. Corequisite: GRA 383.

GRA 387 Visual Communication IV. (3)*spring*

Client-oriented projects. Multifaceted problems with emphases on continuity of design in more than one medium and format. 6 hours a week. Fee. Prerequisites: GRA 383, 386. Corequisite: GRA 385.

GRA 481 Visual Communication V. (3)*fall*

Studio problems with emphasis on analysis, problem solving, and professional portfolio preparation. 6 hours a week. Fee. Prerequisites: GRA 385, 387.

GRA 482 Visual Communication VI. (3)*spring*

Individual and group projects with outside clients. All projects culminate in an exhibit. 6 hours a week. Fee. Prerequisite: GRA 481.

GRA 485 Graphic Design Workshop. (3)*selected semesters*

Preprofessional client/designer situations from concept to printed work. Studio workshop and internships for selected students. 6 hours a week. May be repeated once for credit. Fee. Prerequisite: instructor approval.

GRA 494 Special Topics. (1–4)*fall and spring*

Topics may include the following:

- Graphic Design. (3)

Omnibus Courses. For an explanation of courses offered but not specifically listed in this catalog, see "Omnibus Courses," page 56.

INDUSTRIAL DESIGN (IND)**IND 194 Special Topics. (1–4)***spring*

Topics may include the following:

- Drafting for Industrial Design. (3)
Applies mechanical drafting knowledge and skills. Manual drafting principles and techniques with transition to computer-aided industrial design.

IND 227 Visual Methods for Problem Solving. (3)*fall*

Introduces conceptual design activity based on the mind-eye-media feedback loop. Graphic language used to represent conjecture, analysis, synthesis of objects, and their contexts. Seminar, studio. Prerequisite: DSC 122.

IND 228 Imaging and Visualization. (3)*spring*

Design activities stressing graphic language abstraction practiced for presentation. Discusses structure of criticism, including description, interpretation, and evaluation. Seminar, studio. Prerequisite: IND 227.

IND 242 Materials and Design. (3)*fall*

Materials application in design. Introduces characteristics and properties of metals and organic materials, including plastics, and inorganic materials.

IND 243 Process and Design. (3)*spring*

Influences of industrial processing on design. Introduces basic materials processing and post-forming processes. Emphasizes appearance enhancement and design constraints of material processing. Prerequisite: IND 242.

IND 260 Industrial Design I. (3)*fall*

Introduces the method and process of the industrial designer. Determinants necessary in small product design. 1 hour lecture, 2 hours studio. Prerequisite: DSC 122.

IND 261 Industrial Design II. (3)*spring*

Issues of physical form development related to product and design; form development properties of paper, fibers, wood, metal, and plastics. 1 hour lecture, 2 hours studio. Prerequisite: IND 260 (or its equivalent).

IND 316 20th-Century Design I. (3)*fall*

Modern European and American design from 1900 to 1940. Emphasizes transportation, product, furniture, exhibition, and graphic design. *General Studies: HU, H*

IND 317 20th-Century Design II. (3)*spring*

Modern European, Asian, and American design since 1940. Emphasizes transportation, product, furniture, exhibition, and graphic design. *General Studies: HU, H*

IND 327 Presentation Graphics. (3)*fall*

Studies methods for portfolio and professional product presentation using graphic media for information transfer. Stresses aesthetic judgment, organization, and craftsmanship. Seminar, studio. Prerequisite: IND 228.

IND 328 Graphics for Industrial Design. (3)*spring*

Investigates and applies packaging applications and planning to the development of an identity for a product line structured as a system. Lab. Prerequisite: IND 327.

L literacy and critical inquiry / MA mathematics / CS computer/statistics/ quantitative applications / HU humanities and fine arts / SB social and behavioral sciences / SG natural science—general core courses / SQ natural science—quantitative / C cultural diversity in the United States / G global / H historical / See "General Studies," page 83.

COLLEGE OF ARCHITECTURE AND ENVIRONMENTAL DESIGN

IND 354 Principles of Product Design. (3)

fall

Influences of physical and mechanical concepts in product design; mechanisms, kinematics, and fastening systems. Concepts of analysis for product design. Influences of concepts on aesthetics. Prerequisite: PHY 111.

IND 360 Industrial Design III. (5)

fall

Methods of visual thinking, conceptualization, and ideation related to building skill levels in professional design presentation techniques. 10 hours studio. Fee. Prerequisite: school approval.

IND 361 Industrial Design IV. (5)

spring

Emphasizes developing ideas into a complete functional product, including survey and application of aesthetics, human factors, materials, and manufacturing. 10 hours studio. Fee. Prerequisite: IND 360.

IND 460 Design Project I. (5)

fall

Complete analysis of the product unit as an element of mass production, featuring marketing, technology, human factors, and visual design. Emphasizes professional standards. 10 hours studio. Fee. Prerequisites: DSC 484; IND 361.

IND 461 Design Project II. (5)

spring

Product design, with emphasis in systems interaction. Culmination of design process and technique. Encourages individual project direction. 10 hours studio. Fee. Prerequisite: IND 361.

IND 470 Professional Practice for Industrial Design. (3)

fall

Business procedures, management techniques, accounting systems, ethics, and legal responsibilities of the design professions. May be repeated for credit. Prerequisite: senior standing.

General Studies: L

IND 474 Design Seminar. (3)

spring

Manufacturer's liability, statutes, regulations, and common law rules; role of expert witnesses; insurance and product safety programs. Seminar. Prerequisite: senior standing.

IND 494 Special Topics. (3)

selected semesters

Applies mechanical drafting knowledge and skills. Manual drafting principles and techniques with transition to computer-aided industrial design.

Omnibus Courses. For an explanation of courses offered but not specifically listed in this catalog, see "Omnibus Courses," page 56.

INTERIOR DESIGN (INT)

INT 194 Special Topics. (1-4)

fall

Topics may include the following:

- Drafting for Interior Design. (3)

INT 220 Media for Design Development. (3)

spring

Graphic representation methods used to describe and analyze space; emphasizes quick presentation techniques. 6 hours studio. Prerequisite: DSC 122.

INT 223 Interior Design Issues and Theories. (3)

fall

Interiors issues, theories, and philosophies. Emphasizes unique social and cultural factors that shape 20th-century design concepts.

General Studies: HU

INT 231 Concepts for Interior Design. (3)

spring

Conceptual design development, including scale and proportion, light, texture, form, volume, and spatial hierarchy; passage and repose. 1 hour lecture, 4 hours lab. Prerequisite: DSC 236.

INT 235 User Needs and Behavior in Interior Design. (3)

fall

Applies conceptual design to issues of programming and space planning, user needs, and behavior. 1 hour lecture, 4 hours lab. Prerequisite: DSC 122.

INT 310 History of Interior Design I. (3)

fall

Design of interior spaces as an expression of cultural influences to 1835.

General Studies: HU, H

INT 311 History of Interior Design II. (3)

spring

Design of interiors as an expression of cultural influences from 1835 to the present. Prerequisite: INT 310 or instructor approval.

General Studies: HU, H

INT 340 Interior Codes: Public Welfare and Safety. (3)

fall

Codes and regulations as performance criteria for interior design. Corequisite: INT 366.

INT 341 Interior Materials and Finishes. (3)

spring

General analysis of quality control measures relating to interior design materials, finishes, and performance criteria. Prerequisites: INT 340, 366.

INT 364 Interior Design Studio I. (5)

fall

Studio problems in interior design related to behavioral response in personal and small group spaces. 10 hours studio. Fee. Prerequisite: school approval.

INT 365 Interior Design Studio II. (5)

spring

Studio problems in interior design, with emphasis on issues of public and private use of interior places of assembly. 10 hours studio. Fee. Prerequisite: INT 364.

INT 366 Construction Methods in Interior Design. (3)

fall

Design theory related to analysis, materials, and building techniques of horizontal and vertical construction in interior design. Lecture, field trips. Corequisite: INT 340.

INT 412 History of Decorative Arts in Interiors. (3)

fall

Design of decorative arts as an expression of cultural influences and as an extension of interior spaces. Prerequisite: INT 311 or instructor approval.

General Studies: HU

INT 413 History of Textiles in Interior Design. (3)

spring

Cultural and historical expression of textiles as related to interiors. Possible field trips. Prerequisite: INT 412 or instructor approval.

INT 422 Facilities Planning and Management I. (3)

fall

Facility management process in large-scale organizations. Planning, long-range forecasting, and productivity. Project management methodologies using micro-based software programs. Prerequisite: senior standing.

INT 423 Facilities Planning and Management II. (3)

spring

Formation of facilities policies, procedures, and standards. Facilities database, space allocations, and management process. Evaluation of programming criteria. Prerequisites: INT 422; senior standing.

INT 442 Specifications and Documents for Interiors. (3)

fall

Contract specifications, documents, schedules, and bidding procedures for interior design. Prerequisites: INT 341, 365.

General Studies: L

INT 446 Furniture Design and Production. (3)

fall

Design, construction, cost estimating, and installation in interior furniture and millwork. 1 hour lecture, 4 hours studio.

INT 455 Environmental Control Systems. (3)

spring

Survey of environmental control systems and their application in the design of building interiors. Lecture, field trips. Prerequisites: MAT 117, 170; PHY 111, 113; junior standing.

INT 457 Acoustics for Interior Design. (3)

fall

Physical properties of sound. Studies pertaining to sound-absorbing materials, constructions, and room acoustics. Prerequisites: MAT 170; PHY 111, 113.

INT 458 Lighting for Interior Design. (3)

spring

Light as an aspect of interior design. Evaluation of light sources for distribution, color, and cost.

INT 464 Interior Design Studio III. (5)

fall

Studio problems in interior design related to commercial spaces. 10 hours studio. Fee. Prerequisites: DSC 484; INT 365.

INT 465 Interior Design Studio IV. (5)

spring

Studio problems in interior design related to health and educational facilities. 10 hours studio. Fee. Prerequisite: INT 464.

INT 466 Interior Design Studio V. (5)

fall

Advanced interior design problem solving, design theory, and criticism. Thesis project development based upon the major's concentration. 10 hours studio. Fee. Prerequisite: school approval.

INT 467 Interior Design Studio VI. (5)

spring

Advanced series of specialized projects or continuation of thesis project based upon the major's concentration. 10 hours studio. Fee. Prerequisite: school approval.

INT 472 Professional Practice for Interior Design. (3)

spring

Business procedures, project control, fee structures, and professional product liabilities.

Omnibus Courses. For an explanation of courses offered but not specifically listed in this catalog, see "Omnibus Courses," page 56.

**School of Planning and
Landscape Architecture**

www.asu.edu/caed/planning

480/965-7167

AED 158A

Professors: Kihl, Lai, Mushkatel, Pijawka

Associate Professors: Cameron, Cook, Guhathakurta, Kim, McSherry, Yabes

Assistant Professors: Crewe, Ewan, Fish Ewan, Larsen, Musacchio

Faculty Associates: Abele, Cafarella, Dollin, Fry, Gammage, Holway

PURPOSE

The faculty in the School of Planning and Landscape Architecture offer curricula that provide an education for careers in environmental planning, housing and urban development, landscape architecture, urban and regional planning, and urban design. The goal of the faculty is to advance the professions of planning and landscape architecture through scholarship, teaching, research, and community service.

Planners and landscape architects work on projects that range in scale from site and landscape development to the design of entire communities and the formulation of policies that shape urban and regional growth. Planning and landscape architecture graduates work for private firms and government agencies. Their work typically involves fields such as land-use planning, housing, natural resource management, urban transportation, development controls, and environmental impact assessment.

ORGANIZATION

The programs are organized by the faculty of the school under the direction and administration of the program coordinators and the school director.

DEGREES

The faculty in the School of Planning and Landscape Architecture offer the Bachelor of Science in Planning degree in Urban Planning, Bachelor of Science in Landscape Architecture degree, and Bachelor of Science in Design degree in Housing and Urban Development.

Bachelor of Science in Planning (B.S.P.)

The B.S.P. degree prepares students for careers in urban planning. Students take courses that include comprehensive planning, socioeconomic and environmental analysis, computer and analytical methods, planning law, site planning, landscape architecture, urban design, and public-policy formulation and administration. An internship or an approved elective is required between the third and fourth years. 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 of planning.

Bachelor of Science in Landscape Architecture (B.S.L.A.)

The B.S.L.A. prepares students to be professional landscape architects. Students explore the reasons for and the techniques involved in the analysis, planning, and design of the environment, both natural and built. The B.S.L.A. is an accredited program.

Bachelor of Science in Design (B.S.D.)

A B.S.D. degree with a major in Housing and Urban Development (HUD) educates and trains professionals to lead in the production of high-quality affordable housing, in the development of creatively designed and soundly planned neighborhoods and communities, in the revitalization of communities, and in the exemplification of social inclusiveness and environmental sensitivity in responsible land development. HUD graduates may pursue careers in the private home development industry, in publicly sponsored housing and community redevelopment, with nonprofit housing agencies, or in postgraduate housing and urban development research and education. The B.S.D. degree with a major in Housing and Urban Development is offered in conjunction with the College of Extended Education.

L literacy and critical inquiry / MA mathematics / CS computer/statistics/ quantitative applications / HU humanities and fine arts / SB social and behavioral sciences / SG natural science—general core courses / SQ natural science—quantitative / C cultural diversity in the United States / G global / H historical / See "General Studies," page 83.

MINORS

Landscape Studies

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.

Students must complete a minimum of 18 semester hours from the following list of courses. Students may petition to have other PLA special topics courses considered as part of the 18 semester hours required.

PLA 101 Landscape and Society *HU, G*3
 PLA 310 History of Landscape Architecture3
 PLA 311 Contemporary Landscape Architecture.....3
 PLA 410 Social Factors in Landscape and Urban Planning.....3
 PLA 411 Landscape Architecture Theory and Criticism *L*3
 PLA 412 Landscape Ecology and Planning3
 PLA 413 Southwest Landscape Interpretation3
 PLA 420 Theory of Urban Design *HU*.....3
 PLA 485 International Field Studies in Landscape Architecture *G*.....6

The minor is open to students of all majors. Students must however, have an overall GPA of 3.00 or higher and achieve a minimum 3.00 GPA in minor classes to be awarded the minor. Students seeking admission to the minor in Landscape Studies must submit a minor verification form to the landscape architecture coordinator in the School of Planning and Landscape Architecture.

Urban Planning

The minor in Urban Planning is designed for students who are interested in the field but who wish to pursue other majors. The course selection is designed to provide an overview of the field and offer information of broad appeal.

All students must complete a minimum of 15 semester hours from the following courses:

PUP 200 The Planned Environment *HU, H*3
 PUP 301 Introduction to Urban Planning *L**3
 PUP 412 History of the City *H*.....3
 PUP 420 Theory of Urban Design *HU*.....3
 PUP 425 Urban Housing Analysis3
 PUP 430 Transportation Planning and the Environment3
 PUP 432 Planning and Development Control Law3
 PUP 433 Zoning Ordinances, Subdivision Regulations, and Building Codes3
 PUP 442 Environmental Planning.....3
 PUP 444 Preservation Planning3
 PUP 475 Environmental Impact Assessment3
 PUP 494 Special Topics3
 PUP 510 Citizen Participation.....3

* PUP 301 Introduction to Urban Planning is required. Landscape Architecture students must choose another class with an advisor’s approval since PUP 301 is already required for the B.S.L.A.

The minor is automatically open to students from the following majors: Architectural Studies, Civil Engineering, Environmental Resources, Geography, Housing and Urban Development, Landscape Architecture, and Real Estate. Students pursuing other majors will be considered on an individual basis. To pursue a minor in Urban Planning, stu-

dents must have a minimum cumulative GPA of 3.00. These students must submit a letter of application to the School of Planning and Landscape Architecture seeking approval to enter the minor program.

GRADUATE PROGRAMS

The faculty in the School of Planning and Landscape Architecture offer concentrations in landscape ecological planning, urban and regional development, and urban design under the Master of Environmental Planning (M.E.P.) degree and a collegewide, interdisciplinary Ph.D. degree in Environmental Design and Planning with concentrations in design; history, theory, and criticism; and planning. For more information, see the *Graduate Catalog*.

ADMISSION

Lower-Division Program. New and transfer students who have been admitted to the university and who have selected a program in the School of Planning and Landscape Architecture are admitted to the lower-division program. Transfer credits for the lower-division program are reviewed by the college and evaluated for applicability to this curriculum. To be applicable, transfer courses must be equivalent in both content and level of offering. A review of samples of work is required for studio classes. See a college academic advisor for an appointment.

Completion of lower-division requirements does not ensure acceptance to the upper-division professional program. Admission to the upper division is competitive and limited to the space available. Admission requires formal application and acceptance.

Upper-Division Program. Admission to the upper-division programs of the School of Planning and Landscape Architecture is limited to applicants who have completed the lower-division program requirements and who are determined by the admissions committee to have the best potential for academic success. Spaces in the program are limited by available facilities, faculty, and qualified applicants. A minimum lower-division program GPA of 3.00 may be required. See “Application to Upper-Division Programs,” on this page.

Students not admitted to upper-division programs are not dismissed from the university and may reapply later or may transfer to other programs. Students who plan to reapply should meet with a college academic advisor.

APPLICATION TO UPPER-DIVISION PROGRAMS

Upper-Division Application Procedures. Students should write to a college academic advisor for the application form well in advance of the application deadline. For more information on portfolios, ask for a copy of the portfolio guidelines from a college academic advisor.

Landscape Architecture students in good standing who will complete all required lower-division courses by the end of the fall semester of their sophomore year may apply for admission to the upper-division in November of their sophomore year. Urban Planning and Housing, and Urban Development students in good standing who will complete all required lower-division courses by the end of the spring

semester of their sophomore year may apply for admission to the upper-division in April of their sophomore year.

Upper-Division Application Deadlines. *November 15, 2002.* Landscape Architecture portfolio and application documents are due in the school office by 5 P.M.

December 16, 2002. Acceptance notices are mailed to Landscape Architecture students no later than December 16.

January 3, 2003. Landscape Architecture students must submit transcripts of non-ASU course work if their spring semester includes course work taken at another institution. These transcripts may be unofficial copies.

April 15, 2003. Urban Planning, and Housing and Urban Development portfolio and application documents due in the school office by 5 P.M.

June 3, 2003. Urban Planning, and Housing and Urban Development students must submit transcripts of non-ASU course work if their spring semester includes course work taken at another institution. These transcripts may be unofficial copies.

Official Transcripts. A second set of official transcripts must be sent to the university's Office of the Registrar. An application is not complete until the university receives official transcripts for transfer course work.

July 1, 2003. Acceptance notices are mailed no later than July 1.

Return of Letter of Acceptance. A signed receipt of acceptance of admission must be received by the school by the date indicated on the Notice of Acceptance. Alternates may be accepted at a later date if space becomes available.

Matriculation. An accepted student is expected to begin his or her upper-division professional program at the beginning of the immediate fall term. There is no spring admission to the upper division.

Portfolio Format Requirements. Each applicant is responsible for obtaining the following documents and including them in a presentation binder (portfolio) with plastic sleeves (8.5" x 11" format only) and a label, with the student's name, affixed to the outside:

1. evidence of graphic and design work shown in 35 mm slides or 3" x 5" or other appropriately sized photographs (20 maximum);
2. a statement of intent describing the applicant's specific background and interest in the major;
3. latest college-level transcript(s) (no high school transcripts are required);
4. one example of written work (e.g., a class paper); and
5. samples of individual work; team work can be included, but the contribution of the candidate must be clarified.

Students are also strongly encouraged to submit evidence of other endeavors related to the major. The applicant's GPA based on required courses and cumulative GPA is evaluated. Housing and Urban Development students completing the Phoenix Community College (PCC) articulation program

with the B.S.D.-HUD program should submit similar material from PCC.

Students should obtain a portfolio requirements addendum for their major from the college's Academic Advising Office, ARCH 141, at the beginning of the academic year in which they intend to apply to the upper-division program. Requirements or instructions indicated in the addendum for that academic year take precedence over any other printed material.

Return of Portfolios. Application documents remain the property of the School of Planning and Landscape Architecture. However, the remainder of the portfolio is returned after the admissions review, provided the applicant encloses a self-addressed return mailer with sufficient prepaid postage. Portfolios may be claimed in person after the letter of response is submitted. If the applicant provides written permission, another person may claim the portfolio. After one year, unclaimed portfolios are discarded. While care is taken in handling the portfolios, no liability for lost or damaged materials is assumed by the college or school.

ADVISING

Advising for the lower-division curriculum is provided through a college academic advisor. Advising for the upper-division curriculum is provided by the school director and faculty advisors.

DEGREE REQUIREMENTS

Urban Planning

The Bachelor of Science in Planning degree requires a total of 120 semester hours.

Preprofessional program courses	61
Professional program courses core	56
Internship	3
Total	120

General Studies Requirement. The following curriculum includes sufficient approved course work to fulfill the General Studies requirement. See "General Studies," page 83, for requirements and a list of approved courses. Note that all three General Studies awareness areas are required. Consult your advisor for an approved list of courses.

Graduation Requirements. In addition to fulfilling college and major requirements, students must meet all university graduation and college degree requirements. See "University Graduation Requirements," page 79, and "College Degree Requirements," page 124.

L literacy and critical inquiry / MA mathematics / CS computer/statistics/ quantitative applications / HU humanities and fine arts / SB social and behavioral sciences / SG natural science—general core courses / SQ natural science—quantitative / C cultural diversity in the United States / G global / H historical / See "General Studies," page 83.

COLLEGE OF ARCHITECTURE AND ENVIRONMENTAL DESIGN

**Bachelor of Science in Planning,
Major in Urban Planning
Preprofessional Program Requirements¹**

First Year

Fall

ENG 101	First-Year Composition.....3 or ENG 105 Advanced First-Year Composition (3) if qualified	3
MAT 117	College Algebra <i>MA</i>.....3 or approved more advanced MA elective (3)	3
PUP 100	Introduction to Environmental Design <i>HU, G, H</i>.....3	3
PUP 161	Graphic Communication ².....3	3
	Elective.....3	3
	<hr/>	
Total	.....15	15

Spring

ENG 102	First-Year Composition.....3 HU elective if ENG 105 is taken (3)	3
	Elective.....3	3
	C elective.....3	3
	SB elective.....3	3
	SQ or SG elective.....4	4
	<hr/>	
Total	.....16	16

Second Year

Fall

PLA 101	Landscape and Society <i>HU, G</i>.....3 or any HU or SB elective	3
PUP 261	Urban Planning I ².....4	4
PUP 301	Introduction to Urban Planning <i>L</i>.....3	3
PUP 322	Computers in Planning.....3	3
	HU elective.....3	3
	<hr/>	
Total	.....16	16

Spring

PUP 262	Urban Planning II ².....4	4
PUP 363	History of Planning.....3	3
	Approved statistics or quantitative reasoning elective.....3	3
	Natural science elective with laboratory.....4	4
	<hr/>	
Total	.....14	14
	Preprofessional program total.....61	61

¹ Transfer credits are reviewed by the college and evaluated as applicable to this curriculum. To be applicable, transfer courses must be equivalent in both content and level of offering.

² Portfolio review is required for transfer studio work. See a college academic advisor for an appointment.

The first round of admission to the upper-division takes place after the fall semester of the second year. The second round, if needed, takes place after the spring semester.

**Bachelor of Science in Planning,
Major in Urban Planning
Professional Program Requirements**

Third Year

Fall

PUP 361	Urban Planning III.....4	4
PUP 424	Planning Methods.....4	4
PUP 452	Ethics and Theory in Planning <i>L</i>.....3	3
	Elective.....3	3
	<hr/>	
Minimum total	.....14	14

Spring

PUP 362	Urban Planning IV.....4	4
PUP 436	City Structure and Planning.....3	3
PUP 510	Citizen Participation.....3	3
	Approved program elective*.....3	3
	SB elective.....3	3
	<hr/>	
Total	.....16	16

Summer

PUP 484	Internship or Study Abroad (use elective credit).....3 or approved elective (3)	3
	<hr/>	
Total	.....3	3

Fourth Year

Fall

PUP 432	Planning and Development Control Law.....3	3
PUP 442	Environmental Planning.....3	3
PUP 461	Urban Planning V.....4	4
	Approved program elective*.....3	3
	<hr/>	
Total	.....13	13

Spring

PUP 420	Theory of Urban Design <i>HU</i>.....3	3
PUP 434	Urban Land Economics.....3 or approved program elective* (3)	3
PUP 462	Urban Planning VI.....4	4
	Elective.....3	3
	<hr/>	
Total	.....13	13
	Professional program total.....59	59
	B.S.P. minimum total.....120	120

* Select a minimum of nine semester hours from approved SPLA elective list.

Landscape Architecture

The Bachelor of Science in Landscape Architecture degree requires a total of 120 semester hours.

Preprofessional program courses.....47	
Professional program courses.....73	
	<hr/>
Total.....120	

General Studies Requirement. The following curriculum includes sufficient approved course work to fulfill the General Studies requirement. See “General Studies,” page 83, for requirements and a list of approved courses. Note that all three General Studies awareness areas are required. Consult your advisor for an approved list of courses.

Graduation Requirements. In addition to fulfilling college and major requirements, students must meet all university graduation and college degree requirements. See “University Graduation Requirements,” page 79, and “College Degree Requirements,” page 124.

**Bachelor of Science in Landscape Architecture
Preprofessional Requirements¹**

First Year

Fall

ENG 101	First-Year Composition.....3 or ENG 105 Advanced First-Year Composition (3)	3
PLA 101	Landscape and Society <i>HU, G</i>.....3	3
PLA 161	Graphic Communication ².....3	3
PUP 100	Introduction to Environmental Design <i>HU, G, H</i>.....3	3

SCHOOL OF PLANNING AND LANDSCAPE ARCHITECTURE

Elective.....	3
Total	15
Spring	
ADE 120 Design Fundamentals I ²	3
ARS 102 Art of the Western World II <i>HU, H</i>	3
ENG 102 First-Year Composition	3
GPH 111 Introduction to Physical Geography <i>SQ</i>	4
MAT 117 College Algebra <i>MA</i>	3
Total	16

Second Year

Fall	
PLA 240 Landscape Survey Techniques	3
PLA 261 Landscape Architecture I ²	4
PLA 310 History of Landscape Architecture <i>H</i>	3
PLA 494 ST: Plant Materials.....	3
PUP 301 Introduction to Urban Planning <i>L</i>	3
Total	16
Preprofessional program total	47

- ¹ Transfer credits are reviewed by the college and evaluated as applicable to this curriculum. To be applicable, transfer courses must be equivalent in both content and level of offering.
- ² Portfolio review is required for transfer studio work. See a college academic advisor for an appointment.

**Bachelor of Science in Landscape Architecture
Professional Program Requirements**

Second Year

Spring	
PLA 222 Computers in Landscape Architecture <i>CS</i>	3
PLA 242 Landscape Construction I	4
PLA 262 Landscape Architecture II	4
SQ or SG elective with laboratory	4
Total	15

Third Year

Fall	
PLA 311 Contemporary Landscape Architecture.....	3
PLA 344 Landscape Construction II.....	4
PLA 361 Landscape Architecture III.....	4
C elective.....	3
SB elective	3
Total	17

Spring	
PLA 345 Professional Practice Seminar.....	1
PLA 362 Landscape Architecture IV	4
PLA 363 Landscape Planting Design.....	4
PUP 420 Theory of Urban Design <i>HU</i>	3
Elective.....	3
Minimum total	15

Summer	
PLA 484 Internship (optional).....	3
or PLA 485 International Field Studies in Planning and Landscape Architecture (6) (optional)*	

Fourth Year

Fall	
PLA 410 Social Factors in Landscape and Urban Planning.....	3
PLA 461 Landscape Architecture V	4
PUP 432 Planning and Development Control Law	3

Elective.....	3
Total	13
Spring	
PLA 411 Landscape Architecture Theory and Criticism <i>L</i>	3
PLA 462 Landscape Architecture VI.....	4
Electives	6
Total	13
Professional program total	73
B.S.L.A. minimum total.....	120

* PLA 484 or 485 would be used as an elective in the fourth year.

Housing and Urban Development

The Bachelor of Science in Design degree in Housing and Urban Development requires a total of 120 semester hours.

Preprofessional program courses	61
Professional program courses core	59
Total	120

General Studies Requirements

The following curriculum includes sufficient approved course work to fulfill the General Studies requirement. See "General Studies," page 83, for requirements and a list of approved courses. Note that all three General Studies awareness areas are required. Consult your advisor for an approved list of courses.

Graduation Requirements. In addition to fulfilling college and major requirements, students must meet all university graduation and college degree requirements. See "University Graduation Requirements," page 79, and "College Degree Requirements," page 124.

**Bachelor of Science in Design,
Major in Housing and Urban Development
Preprofessional Program Requirements¹**

First Year

Fall	
ENG 101 First-Year Composition.....	3
HUD 161 Graphic Communication.....	3
MAT 117 College Algebra <i>MA</i>	3
or MAT 170 Precalculus <i>MA</i> (3) or MAT 210 Brief Calculus <i>MA</i> (3)	
Elective.....	3
SB elective	3
Total	15

Spring	
ENG 102 First-Year Composition.....	3
HUD 201 Introduction to Housing and Urban Development.....	3
HU, H elective.....	3
Natural science elective with laboratory <i>SQ</i>	4
SB elective	3
Total	16

L literacy and critical inquiry / MA mathematics / CS computer/statistics/ quantitative applications / HU humanities and fine arts / SB social and behavioral sciences / SG natural science—general core courses / SQ natural science—quantitative / C cultural diversity in the United States / G global / H historical / See "General Studies," page 83.

COLLEGE OF ARCHITECTURE AND ENVIRONMENTAL DESIGN

Second Year

Fall

APH 200	Introduction to Architecture <i>HU, G</i> .....3 or any CAED history course listed below (3) ²	3
CON 252	Building Construction Methods, Materials, and Equipment .....3	3
PLA 261	Landscape Architecture I .....4 or PUP 261 Urban Planning I (4)	4
C	elective.....3	3
CS	statistics elective.....3	3
Total	.....	16

Spring

ACC 230	Uses of Accounting Information I.....3	3
CON 294	ST: Working Drawings and Specifications Analysis.....1	1
L	elective.....3	3
Natural science	elective with laboratory <i>SQ</i> or <i>SG</i> .....4	4
Upper-division	<i>HU</i> elective .....3	3
Total	.....	14
Preprofessional	program total.....61	61

¹ Transfer credits are reviewed by the college and evaluated as admissible to this curriculum. To be admissible, transfer courses must be equivalent in both content and level of offering.

² See "CAED History Courses," on this page. If the selected course does not also satisfy the *G* requirement, the student must select a course that does satisfy the *G* requirement either as an elective, or in conjunction with another General Studies course.

CAED History Courses. These CAED history courses also fulfill *HU*. See the course listings for prerequisites.

APH 300	World Architecture I/Western Cultures <i>HU, G, H</i> .....3	3
APH 305	Contemporary Architecture <i>HU</i> .....3	3
APH 313	History of Western Architecture I <i>L/HU/G</i> .....3	3
APH 446	20th-Century Architecture I <i>HU</i> .....3	3
DSC 101	Design Awareness <i>HU, G</i> .....3	3
GRA 318	History of Graphic Design <i>HU</i> .....3	3
IND 316	20th-Century Design I <i>HU, H</i> .....3	3
INT 223	Interior Design Issues and Theories <i>HU</i> .....3	3
INT 310	History of Interior Design I <i>HU, H</i> .....3	3
INT 311	History of Interior Design II <i>HU, H</i> .....3	3
INT 412	History of Decorative Arts in Interiors <i>HU</i> .....3	3
PUP 200	The Planned Environment <i>HU, H</i> .....3	3
PUP 420	Theory of Urban Design <i>HU</i> .....3	3

Bachelor of Science in Design, Major in Housing and Urban Development Professional Program Requirements

Third Year

Fall

CON 383	Construction Estimating.....3	3
HUD 301	Housing and Community Design and Development.....3	3
HUD 361	Housing and Urban Development Studio I: Residential Design and Development .....2	2
HUD 363	Housing and Urban Development Seminar I: Residential Design and Development .....3	3
Any REA	course .....3	3
Total	.....	14

Spring

CON 389	Construction Cost Accounting and Control <i>CS</i> .....3	3
HUD 302	Housing Production Process .....3	3
HUD 362	Housing and Urban Development Studio II: Community Design and Development .....2	2

HUD 364	Housing and Urban Development Seminar II: Community Design and Development .....3	3
HUD 403	Advanced Topics in Housing and Urban Development .....3	3
Elective	.....3	3
Total	.....	17

Fourth Year

Fall

CON 495	Construction Planning and Scheduling <i>CS</i> .....3	3
HUD 401	Assisted Housing .....3	3
HUD 461	Housing and Urban Development Studio III: Comprehensive Housing Development Process .....2	2
HUD 463	Housing and Urban Development Seminar III: Comprehensive Housing Development Process .....3	3
PUP 452	Ethics and Theory in Planning <i>L</i>.....3	3
Total	.....	14

Spring

HUD 402	Community Revitalization: Problems and Strategies ....3	3
HUD 462	Housing and Urban Development Studio IV: Neighborhood Revitalization Process .....2	2
HUD 464	Housing and Urban Development Seminar IV: Neighborhood Revitalization Process .....3	3
PUP 433	Zoning Ordinances, Subdivision Regulations, and Building Codes.....3 or PUP 432 Planning and Development Control Law (3)	3
Elective	.....3	3
Total	.....	14
Professional	program total .....59	59
B.S.D.-HUD	minimum total .....120	120

INQUIRIES

For more information, contact a college academic advisor:

COLLEGE OF ARCHITECTURE AND
ENVIRONMENTAL DESIGN
ARIZONA STATE UNIVERSITY
PO BOX 871605
TEMPE AZ 85287-1605

ENVIRONMENTAL DESIGN AND PLANNING (EPD)

See the *Graduate Catalog* for EPD courses.

HOUSING AND URBAN DEVELOPMENT (HUD)

HUD 161 Graphic Communication. (3)

fall

Develops drawing skills and understanding of the graphic communication systems used by planning, homebuilding, and landscape architecture professions. Studio. Cross-listed as PLA 161/PUP 161. Credit is allowed for only HUD 161 or PLA 161 or PUP 161.

HUD 201 Introduction to Housing and Urban Development. (3)

spring

Perspectives and issues concerning HUD. Guest lectures by interdisciplinary faculty and private, public, and nonprofit practitioners.

HUD 301 Housing and Community Design and Development. (3)

fall

Single- and multi-family housing, residential neighborhoods, and planned communities. Affordability in owner-occupied and rental housing. First-time, move-up, and adult markets.

HUD 302 Housing Production Process. (3)

spring

Development feasibility analysis, finance, contracts, land acquisition, community and permit presentation and negotiation, scheduling, cost control, marketing, and sales.

HUD 361 Housing and Urban Development Studio I: Residential Design and Development. (2)

fall

Affordable residential design, development, and production process. Studio. Pre- or corequisites: HUD 301, 363; upper-division HUD major.

HUD 362 Housing and Urban Development Studio II: Community Design and Development. (2)

spring

Neighborhood and new community design and development process. Studio. Pre- or corequisites: HUD 301, 361, 363, 364; upper-division HUD major.

HUD 363 Housing and Urban Development Seminar I: Residential Design and Development. (3)

fall

Affordable residential design, development, and production process. Seminar. Pre- or corequisites: HUD 301, 361; upper-division HUD major.

HUD 364 Housing and Urban Development Seminar II: Community Design and Development. (3)

spring

Neighborhood and new community design and development process. Seminar. Pre- or corequisites: HUD 301, 361, 362, 363; upper-division HUD major.

HUD 401 Assisted Housing. (3)

fall

Publicly subsidized and nonprofit housing. Policy, implementation, and administration. FHA, Section 8, FmHA, projects and scatter site, and tax considerations.

HUD 402 Community Revitalization: Problems and Strategies. (3)

spring

Public policy and strategies for neighborhood revitalization and community renewal. Preservation and adaptive reuse, gentrification, neighborhood safety, and related socioeconomic concerns.

HUD 403 Advanced Topics in Housing and Urban Development. (3)

fall and spring

Varying topics, such as manufactured housing, homelessness, mortgage and finance in housing, housing abroad, marketing housing, and sustainable community development.

HUD 461 Housing and Urban Development Studio III: Comprehensive Housing Development Process. (2)

fall

Comprehensive development process simulation. Feasibility analysis, finance, design, community and permit presentation, construction, cost management, and marketing. Studio. Pre- or corequisites: HUD 302, 463; upper-division HUD major.

HUD 462 Housing and Urban Development Studio IV: Neighborhood Revitalization Process. (2)

spring

Housing rehabilitation, neighborhood revitalization, and urban infill. CDBG, empowerment-enterprise zoning, code enforcement, citizen participation, etc. Studio. Pre- or corequisites: HUD 401, 402, 464; upper-division HUD major.

HUD 463 Housing and Urban Development Seminar III: Comprehensive Housing Development Process. (3)

fall

Comprehensive development process simulation. Feasibility analysis, finance, design, community and permit presentation, construction and cost management, and marketing. Seminar. Pre- or corequisites: HUD 302, 461; upper-division HUD major.

HUD 464 Housing and Urban Development Seminar IV: Neighborhood Revitalization Process. (3)

spring

Housing rehabilitation, neighborhood revitalization, and urban infill. CDBG, empowerment-enterprise zoning, code enforcement, citizen participation, etc. Seminar. Pre- or corequisites: HUD 401, 402, 462; upper-division HUD major.

HUD 484 Internship. (1)

summer

Omnibus Courses. For an explanation of courses offered but not specifically listed in this catalog, see "Omnibus Courses," page 56.

LANDSCAPE ARCHITECTURE (PLA)

PLA 101 Landscape and Society. (3)

fall

Examines interrelationship between society and the landscape with emphasis on human involvement in shaping the landscape.

General Studies: HU, G

PLA 161 Graphic Communication. (3)

fall

Develops drawing skills and understanding of the graphic communication systems used by planning, homebuilding, and landscape architecture professions. Studio. Cross-listed as HUD 161/PUP 161. Credit is allowed for only HUD 161 or PLA 161 or PUP 161.

PLA 222 Computers in Landscape Architecture. (3)

spring

Computer applications in landscape architecture including CAD, GIS, graphics, and visualization. Lab.

General Studies: CS

PLA 240 Landscape Survey Techniques. (3)

fall

Develops landscape survey skills including aerial photography, satellite images, geo-referencing, landscape surveys, and field data collection. Lecture, lab.

PLA 242 Landscape Construction I. (4)

spring

Landscape constructions focusing on landform transformations. Topics include landform analysis, grading, and earthwork. Studio. Prerequisite: admission to professional program.

PLA 261 Landscape Architecture I. (4)

fall

Landscape communication: communication techniques for urban planning and landscape architecture. Credit is allowed for only PLA 261 or PUP 261. Studio. Prerequisites: ADE 120; GPH 111.

PLA 262 Landscape Architecture II. (4)

spring

Reading the landscape: observing, experiencing, and graphically expressing the symbolic and aesthetic significance of natural landscapes. Prerequisites: ADE 120; PLA 261; admission to professional program.

PLA 310 History of Landscape Architecture. (3)

fall

Physical record of human attitudes toward the land. Ancient through contemporary landscape planning and design. Cross-listed as APH 411. Credit is allowed for only APH 411 or PLA 310.

General Studies: H

PLA 311 Contemporary Landscape Architecture. (3)

fall

Explores concerns, projects, and movements in landscape architecture of late 20th-century understanding: social, ecological, regional, and historical influences.

PLA 344 Landscape Construction II. (4)

fall

Characteristics of materials and methods used in landscape architectural construction. Studio. Prerequisite: PLA 242 or instructor approval.

PLA 345 Professional Practice Seminar. (1)

spring

Landscape architecture practice including contracts, project and office management, liability, licensing, and professional development.

L literacy and critical inquiry / MA mathematics / CS computer/statistics/ quantitative applications / HU humanities and fine arts / SB social and behavioral sciences / SG natural science—general core courses / SQ natural science—quantitative / C cultural diversity in the United States / G global / H historical / See "General Studies," page 83.

COLLEGE OF ARCHITECTURE AND ENVIRONMENTAL DESIGN

PLA 361 Landscape Architecture III. (4)

fall

Site planning: analysis of natural and cultural features; site systems and implications for plan making and design. Studio. Fee. Prerequisite: admission to professional program.

PLA 362 Landscape Architecture IV. (4)

spring

Site design: site-specific design of configured space by the creative development of form. Studio. Fee. Prerequisite: admission to professional program.

PLA 363 Landscape Planting Design. (4)

spring

Functional and aesthetic use of plants in arid-region landscape design. Explores design philosophies through planting design problems. Studio. Prerequisite: admission to professional program.

PLA 410 Social Factors in Landscape and Urban Planning. (3)

fall

Examines the influence of social factors in landscape architecture and urban planning.

PLA 411 Landscape Architecture Theory and Criticism. (3)

spring

Critically analyzes landscape architecture theories and projects to evaluate validity of design and contribution to society. Prerequisites: PLA 310, 361, 362, 420, 461.

General Studies: L

PLA 412 Landscape Ecology and Planning. (3)

selected semesters

Reviews the evolution of landscape ecology and landscape planning and examines use and value.

PLA 413 Southwest Landscape Interpretation. (3)

selected semesters

Explores methods and implications of landscape interpretation within the American Southwest.

PLA 420 Theory of Urban Design. (3)

spring

Analyzes the visual and cultural aspects of urban design. Theories and techniques applied to selected study models. Prerequisite: junior standing.

General Studies: HU

PLA 446 Landscape Construction III. (3)

spring

Landscape construction focusing on low-technology, biotechnical, regional, and experimental techniques or systems. Lecture, studio.

PLA 461 Landscape Architecture V. (4)

fall

Landscape ecological planning: collection and application of ecological data relevant to planning and design at landscape scale. Studio. Fee. Prerequisite: PLA 362.

PLA 462 Landscape Architecture VI. (4)

spring

Advanced landscape architecture: integrative capstone studio with multifaceted design problems. Fee. Prerequisite: PLA 461.

PLA 484 Internship. (3)

fall, spring, summer session 1

Full-time internship under the supervision of practitioners in the Phoenix area or other locales. Credit/no credit. Prerequisite: school major or instructor approval.

PLA 485 International Field Studies in Planning and Landscape Architecture. (1–12)

fall, spring, summer

Organized field study of planning and landscape architecture in specified international locations. May be repeated for credit with school approval. Study abroad. Cross-listed as PUP 485. Credit is allowed for only PLA 485 or PUP 485.

General Studies: G

PLA 494 Special Topics. (1–4)

fall and spring

Topics may include the following:

- Plant Materials. (3)

PLA 498 Pro-Seminar. (1–7)

spring

Topics may include the following:

- Professional Senior Seminar. (1)

Omnibus Courses. For an explanation of courses offered but not specifically listed in this catalog, see "Omnibus Courses," page 56.

URBAN AND ENVIRONMENTAL PLANNING (PUP)

PUP 100 Introduction to Environmental Design. (3)

fall and spring

Survey of environmental design: includes historic examples and the theoretical, social, technical, and environmental forces that shape them. Cross-listed as APH 100/DSC 100. Credit is allowed for only APH 100 or DSC 100 or PUP 100.

General Studies: HU, G, H

PUP 161 Graphic Communication. (3)

fall

Develops drawing skills and understanding of the graphic communication systems used by planning, home building, and landscape architecture professions. Studio. Cross-listed as HUD 161/PLA 161. Credit is allowed for only HUD 161 or PLA 161 or PUP 161.

PUP 200 The Planned Environment. (3)

fall

Environmental, aesthetic, social, economic, political, and other factors influencing urban development.

General Studies: HU, H

PUP 236 Introduction to Computer Modeling. (3)

fall and spring

Fundamentals of computer operation, geographic information systems, geometric modeling of three-dimensional forms and rendering of light, mathematical modeling of processes using spreadsheets. Lab. Prerequisite: major in the College of Architecture and Environmental Design.

General Studies: CS

PUP 261 Urban Planning I. (4)

fall

Planning communication: communication techniques for urban planning and landscape architecture communication. Credit is allowed only for PUP 261 or PLA 261. Prerequisite: PUP 161 (or its equivalent).

PUP 262 Urban Planning II. (4)

spring

Reading the landscape: observing, experiencing, and graphically expressing the symbolic and aesthetic significance of natural landscapes. Studio. Prerequisite: PUP 261.

PUP 301 Introduction to Urban Planning. (3)

fall, spring, summer

Theoretical and practical aspects of city planning. Interrelationships among physical planning, environment, government, and society.

General Studies: L

PUP 322 Computers in Planning. (3)

fall

Planning methods using Geographic Information Systems, database, spreadsheet, image manipulation, and desktop publishing computer software packages. Lecture, lab.

PUP 361 Urban Planning III. (4)

fall

Site planning: analysis of natural and cultural features; site systems and implications for plan making and design. Studio. Fee. Prerequisite: school major or instructor approval.

PUP 362 Urban Planning IV. (4)

spring

Neighborhood planning: local community plan making; urban development and neighborhood improvement. Studio. Fee. Prerequisite: PUP 361 or instructor approval.

PUP 363 History of Planning. (3)

spring

Historical overview of western urban and regional planning and planning theory, focusing on the 19th and 20th centuries.

PUP 412 History of the City. (3)

fall

The city from its ancient origins to the present day. Emphasizes European and American cities during the last five centuries. Cross-listed as APH 414. Credit is allowed for only APH 414 or PUP 412.

General Studies: H

PUP 420 Theory of Urban Design. (3)

spring

Analyzes the visual and cultural aspects of urban design. Theories and techniques applied to selected study models. Prerequisite: junior standing.

General Studies: HU

PUP 424 Planning Methods. (4)

fall

Tools useful for urban planning research; emphasizes research design and survey methods. Studio. Prerequisite: PUP 301 or instructor approval.

PUP 425 Urban Housing Analysis. (3)

fall

Nature, dimensions, and problems of urban housing, government policy environment, and underlying economics of the housing market.

PUP 430 Transportation Planning and the Environment. (3)

spring

Overview of transportation planning from the perspective of land use planning, economic development, environmental planning, and social needs. Lecture, discussion. Prerequisite: junior standing or instructor approval.

PUP 432 Planning and Development Control Law. (3)

fall

Case studies on police power, eminent domain, zoning, subdivision controls, exclusion, preservation, urban redevelopment, and aesthetic and design regulation. Prerequisite: admission to upper division or Construction major or instructor approval.

PUP 433 Zoning Ordinances, Subdivision Regulations, and Building Codes. (3)

spring

Analyzes zoning ordinances, subdivision regulations, building codes, and other planning implementation techniques relative to local development. Prerequisite: admission to upper division or instructor approval.

PUP 434 Urban Land Economics. (3)

spring

Interaction between space and economic behavior. Examines the use and value of land through economic theories. Prerequisite: admission to upper division or instructor approval.

PUP 436 City Structure and Planning. (3)

spring

Political structure and organization of government as it relates to planning. Prerequisite: PUP 301.

PUP 442 Environmental Planning. (3)

fall

Environmental planning problems, including floodplains, water quality and quantity, solid and hazardous waste, air quality, landslides, and noise. Field trips. Prerequisite: PUP 301 or instructor approval.

PUP 444 Preservation Planning. (3)

spring

History, theory, and principles of historic preservation. Emphasizes legal framework and methods practiced. Lecture, off-campus field study. Prerequisite: instructor approval.

PUP 445 Women and Environments. (3)

fall

Examines the role women play in shaping the built environment; ways built/natural forms affect women's lives. Focuses on contemporary U.S. examples. Prerequisite: admission to upper division or graduate standing.

General Studies: C

PUP 452 Ethics and Theory in Planning. (3)

fall

Ethics and theory of professional planning practice in urban and regional communities. Prerequisite: admission to upper division or instructor approval.

General Studies: L

PUP 461 Urban Planning V. (4)

fall

Comprehensive planning: collection and analysis of economic, social, and environmental data relevant to urban planning; development of land-use plans. Studio. Fee. Prerequisite: PLA 362 or PUP 362 or instructor approval.

PUP 462 Urban Planning VI. (4)

spring

Capstone studio: project focusing on synthesis aspects of plan making. Studio. Fee. Prerequisite: PUP 461 or instructor approval.

PUP 475 Environmental Impact Assessment. (3)

spring

Criteria and methods for compliance with environmental laws; development of skills and techniques needed to prepare environmental impact statements/assessments.

PUP 484 Internship. (1–12)

fall, spring, summer session 1

Full-time internship under the supervision of practitioners in the Phoenix area or other locale. Credit/no credit. Prerequisite: school major or instructor approval.

PUP 485 International Field Studies in Planning and Landscape Architecture. (1–12)

fall, spring, summer

Organized field study of planning and landscape architecture in specified international locations. May be repeated for credit with school approval. Study abroad. Cross-listed as PLA 485. Credit is allowed for only PLA 485 or PUP 485.

General Studies: G

PUP 494 Special Topics. (1–4)

fall and spring

Topics may include the following:

- Environmental Planning Economics. (3)

PUP 498 Pro-Seminar. (1–7)

fall

Topics may include the following:

- Senior Pro-Seminar. (1)

PUP 501 The Idea of Planning. (3)

fall

Comprehensive review of planning profession within a political, governmental, multicultural, and gender framework.

PUP 510 Citizen Participation. (3)

spring

Theory and practice of citizen participation in planning. Examines and critiques participation techniques and roles of planners. Prerequisite: instructor approval.

PUP 520 Planning Theories and Processes. (3)

fall

Reviews past and current theoretical developments related to social change perspectives, the role and ethics of planners. Prerequisite: instructor approval.

PUP 524 Planning Methods I: Planning Research Methods. (3)

fall

Tools useful for urban planning research; emphasizes research design and survey methods. Pre- or corequisite: PUP 501 or instructor approval.

PUP 525 Urban Housing Analysis. (3)

fall

Nature, dimensions, and problems of urban housing, government policy environment, and underlying economics of the housing market.

PUP 531 Planning and Development Control Law. (3)

spring

Case studies on police power, eminent domain, zoning, subdivision controls, exclusion, preservation, urban redevelopment, and aesthetic and design regulation.

L literacy and critical inquiry / MA mathematics / CS computer/statistics/ quantitative applications / HU humanities and fine arts / SB social and behavioral sciences / SG natural science—general core courses / SQ natural science—quantitative / C cultural diversity in the United States / G global / H historical / See "General Studies," page 83.

COLLEGE OF ARCHITECTURE AND ENVIRONMENTAL DESIGN

PUP 532 Advanced Urban Planning Law. (3)

spring

Advanced study on selected issues in planning law, such as urban design controls, exclusionary practices, compensable regulation, and tax policy. Prerequisite: PUP 432 or instructor approval.

PUP 542 Environmental Administration and Planning. (3)

spring

Environmental administration of policies and their relationship to environmental planning practices. Prerequisite: PUP 442.

PUP 544 Urban Land Use Planning. (3)

spring

Theory and methods of urban land use planning, including the rational planning process, comprehensive, functional, and neighborhood plans. Pre- or corequisite: PUP 501 or instructor approval.

PUP 546 Urban Design Policy. (3)

selected semesters

Advanced study of local, state, and federal urban design policy. Prerequisite: PLA 420 or PUP 420.

PUP 561 Urban Design Studio. (4)

selected semesters

Current urban form and urban landscape design problems within the Phoenix-centered region. Studio.

PUP 572 Planning Studio I: Data Inventory and Analysis. (4)

fall

Comprehensive planning workshop dealing with real community problems. Focuses on the data gathering and analysis steps of the planning process. Fee. Prerequisite: Master of Environmental Planning major or instructor approval.

PUP 574 Planning Studio II: Options and Implementation. (4)

spring

Comprehensive planning workshop dealing with real community problems. Focuses on the development of options, plan making, and plan implementation. Studio. Fee. Prerequisite: PUP 572 or instructor approval.

PUP 575 Environmental Impact Assessment. (3)

spring

Criteria and methods for compliance with environmental laws; develops skills and techniques needed to prepare environmental impact statements/assessments.

PUP 576 GIS Studio. (3)

spring

GIS as a tool to address large, multifaceted planning problems. Prerequisites: a combination of GPH 373 (or 598) and PAF 591 and PUP 322 or only instructor approval.

PUP 584 Internship. (3)

fall, spring, summer session 1

Internship under the supervision of practitioners in the Phoenix area or other locales. Credit/no credit.

PUP 591 Seminar. (1-12)

fall and spring

Topics may include the following:

- Transportation Systems Pro-Seminar

PUP 598 Special Topics. (1-4)

selected semesters

Topics may include the following:

- Air Transportation Regulation
- Airport Systems
- Transportation Planning and the Environment

PUP 599 Thesis. (1-12)

fall, spring, summer session 1

Fee.

PUP 622 Planning Methods II: Quantitative Planning Analysis. (3)

spring

Methods and models used as the basic quantitative techniques of urban, regional, and environmental planning and policy analysis. Prerequisites: PUP 524; a course in statistics; instructor approval.

PUP 642 Land Economics. (3)

fall

Land use and locational impact of economic activity and the urban real property market. Prerequisite: instructor approval.

PUP 644 Public Sector Planning. (3)

spring

Urban fiscal problems and public goods provision in state and local governments. Prerequisites: a course in microeconomics; instructor approval.

Omnibus Courses. For an explanation of courses offered but not specifically listed in this catalog, see "Omnibus Courses," page 56.



Sandra Mood constructs a model for an Industrial Design course.

Tim Trumble photo