# College of Architecture and Environmental Design 

## www.asu.edu/caed

Wellington Reiter, MArch, Dean

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## 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 and Landscape Architecture School of Design
School of Planning
Administration of the college is the responsibility of the dean, who in turn is responsible to the president of the university through the executive vice president and provost of the university.
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 newly renovated Gallery of Design in the College of Architecture and Environmental Design focuses exhibitions on architecture; landscape architecture; planning; and graphic, industrial, and interior design. Changing exhibitions feature top student work for each semester; faculty research and design projects; and special exhibitions from local, national, and international designers. A flat projection monitor provides a changing mural of design projects, college information, and announcements. Additional space for CAED student projects is located throughout the Architectural and Environmental Design buildings. The gallery is open Monday through Friday from 8 A.M. to 4 P.M. For more information, call 480/965-6384.

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 Research; InnovationSpace, an interdisciplinary product development laboratory; and the Joint Urban Design Program, which also has a studio at the Downtown Center at ASU. 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

College of Architecture and Environmental Design Baccalaureate Degrees and Majors

| Major | Degree | Concentration | Administered By |
| :--- | :--- | :--- | :--- |
| Architectural Studies | BSD | - | School of Architecture and Landscape <br> Architecture |
| Design Science* | BSD | - | School of Design |
| Graphic Design | BSD | - | School of Design |
| Housing and Urban Development | BSD | - | School of Planning |
| Industrial Design | BSD | - | School of Design |
| Interior Design | BSD | - | School of Design |
| Landscape Architecture | BSLA | - | School of Architecture and Landscape <br> Architecture |
| Urban Planning | BSP | - | School of Planning |

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

Upper-Division Programs. Admission to upper-division programs is competitive. Consult the 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 an upper-division program 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 115). Records for upper-division program students are kept in the appropriate academic units, and advising is provided by the school's academic advisor. 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 year degree programs: the Bachelor of Science in Design (BSD) degree in Architectural Studies, Graphic Design, Housing and Urban Development, Industrial Design, and Interior Design; the Bachelor of Science in Landscape Architecture (BSLA) degree; and the Bachelor of Science in Planning (BSP) degree in Urban Planning. Applications for the BSD 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 lowerdivision program does not guarantee advancement to an upper-division program.

## GRADUATE PROGRAMS

The faculty in the College of Architecture and Environmental Design offer the National Architectural Accrediting Board-accredited Master of Architecture (MArch) professional degree; Planning Accreditation Board-accredited Master of Environmental Planning (MEP) professional degree; MS degree in Building Design; Master of Science in Design (MSD) degree; and PhD degree in Environmental Design and Planning. For more information,

[^0] H historical / See "General Studies," page 92.

College of Architecture and Environmental Design Graduate Degrees and Majors

| Major | Degree | Concentration $^{1}$ | Administered By |
| :--- | :--- | :--- | :--- |
| Architecture | MArch | - | School of Architecture and <br> Landscape Architecture |
| Building Design | MS | Design knowledge and computing, energy <br> performance and climate-responsive architecture, <br> or facilities development and management | School of Architecture and <br> Landscape Architecture |
| Design | MSD | Graphic design, industrial design, or interior design | School of Design |
| Environmental Design <br> and Planning |  |  |  |
| Urban and Environmental <br> Planning | MUD | Design; history, theory, and criticism; or planning | College of Architecture and <br> Environmental Design |

1 If a major offers concentrations, one must be selected unless noted as optional.
2 Doctoral courses for these interdisciplinary programs administered by the Tempe campus are also offered at the East campus.
see the "College of Architecture and Environmental Design Graduate Degrees and Majors" table, on this page, and the Graduate Catalog.

## MINORS

The faculty in the School of Architecture and Landscape Architecture offer two minors: Architectural Studies, see "Architectural Studies Minor," page 143 and "Landscape Studies Minor," page 143. The faculty in the School of Design offer minors in Design Studies and Interior Design History, see "Minors," page 149. The faculty in the School of Planning offer a minor in Urban Planning. See "Minor," page 159 , for more information.

## COLLEGE OF EXTENDED EDUCATION

The university-wide College of Extended Education provides an interactive link between ASU and the diverse communities it serves. The college assesses lifelong learning requirements and works in partnership with campuses, other colleges, and the community to serve learners, using a network of locations, programs, schedules, and technologies.
For more information, see "College of Extended Education," 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 88.

## General Studies Requirement

All students enrolled in a baccalaureate degree program must satisfy the university requirement of a minimum of 35 semester hours of approved course work in General Studies, as described under "General Studies," page 92. Consult an advisor for an approved list of courses. General Studies courses are listed in the "General Studies Courses" table, page 94, 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 (BSD), Bachelor of Science in Landscape Architecture (BSLA), or Bachelor of Science in Planning (BSP) 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" (2.00) or higher in each studio course; and
3. met all university degree requirements.

## MAJOR REQUIREMENTS

A student seeking the BSD, BSLA, or BSP must satisfactorily complete a curriculum of 120 semester hours.

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 91.

## 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 Standards and Appeals Committee; see a college advisor for the necessary appeals forms. For more information, see "Retention and Academic Standards," page 84.

Upper-Division Retention Standards. Students in upperdivision programs are placed on probation when any of the following occurs:

1. failure, incomplete, or withdrawal from any required course;
2. a semester GPA below 3.00 ;
3. a grade of "D" (1.00) or " $E$ " $(0.00)$ in a design studio, a design laboratory, or a design lecture; or
4. violation of the 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
5. the requirements imposed are not met or the probationary semester GPA is below 3.00 after one semester on probation;
6. failures or withdrawals in required courses are not resolved at the next offering of the course;
7. they fail or withdraw from required sequential courses; or
8. 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 84.

Incompletes. Students are responsible for contacting the instructor regarding the process of requesting and fulfilling an incomplete. Tardiness in contacting the instructor may result in a failing grade. Students must obtain official "Request for Grade of Incomplete" forms from their academic unit. 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 school office. An incomplete in any course that is a prerequisite for sequential courses automatically denies enrollment in subsequent courses. For more information, see "Incomplete," page 81.
Withdrawals. University withdrawal regulations apply to all 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 upperdivision course in a required sequence automatically removes the student from the program beginning the subsequent semester. For more information, see "Grading System," page 81.

Pass/Fail or Credit/No Credit. The only courses accepted toward graduation with a grade of pass/fail or credit/no credit are internships and field studies.
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. The student must petition the academic unit regarding course equivalency for any exchange programs.

Exchange programs currently exist with Stuttgart University, Germany; Wageningen 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 majoring in Architectural Studies, Graphic Design, Industrial Design, or Interior Design are required to complete an internship program as part of their curriculum between the third and fourth years of study. Internships are optional for Landscape Architecture, Housing and Urban Development, and Urban Planning majors.
Attendance. Attendance is expected at all classes, laboratories, and seminars and is a criterion for evaluating 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 23.

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

[^1]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. Students on leave must make the written request for readmission before April 15 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 and deferrals are not allowed.

## 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 or from 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 a wide range of courses for honors credit.

## 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 (not offered by ASU), which requires a minimum of five years of study, and (2) the Master of Architecture, which requires a minimum of two years of study following a related preprofessional bachelor's degree or three years following an unrelated 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 desiring 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 712.

Dean's List. Undergraduate students who earn 12 or more graded semester hours ("A" [4.00], "B" [3.00], "C" [2.00], " $D$ " $[1.00]$, or " $E$ " $[0.00]$ ) 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 712.

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
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 Planning Association
Student Chapter/American Society of Landscape Architects
Student Chapter/Industrial Designers Society of America
Student Chapter/Society of Environmental Graphic Designers

## ENVIRONMENTAL DESIGN AND PLANNING (EPD)

Graduate-Level Courses. For information about courses numbered from 500 to 799, see the Graduate Catalog, or access www.asu.edul aad/catalogs on the Web. In some situations, undergraduate students may be eligible to take these courses; for more information, see "Graduate-Level Courses," page 62.

# School of Architecture and Landscape Architecture 

www.asu.edu/caed/sala<br>480/965-3536<br>AED 162

Professors: Brooks, Bryan, Hoffman, McCoy, Meunier, Ozel, Reiter, Rotondi, Underhill, Underwood

Associate Professors: Cook, Ellin, Fish Ewan, Hartman, Loope, Petrucci, Spellman, Van Duzer, Zygas

Assistant Professors: Burnette, Ewan, Hejduk, Innes, Kobayashi, Lerum, Vekstein

Clinical Associate Professor: Murff

## PURPOSE

The architecture and landscape architecture programs at ASU offer an integrated curriculum of professional courses and focus on the design laboratory. The programs reflect an awareness of the complex factors affecting the quality of the built environment. The programs seek 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, landscape architecture, and professional practice, students are encouraged to select electives from a broad range of approved courses both within the college and across the university. These electives may be selected to devise a minor, to further professional study, or in some other fashion to enrich the student's academic experience.

## ORGANIZATION

The School of Architecture and Landscape Architecture programs are 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 and Landscape Architecture offer the Bachelor of Science in Design (BSD) degree with a major in Architectural Studies and a Bachelor of Science in Landscape Architecture (BSLA) degree.
The program in architecture culminates with the professional degree Master of Architecture (MArch), 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 pro-
gram 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, threeyear, or two-year term of accreditation, depending on its degree of conformity 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 141. The professional program includes two years of upper-division study leading to the BSD and two years of graduate study leading to the MArch, as described in "Upper-Division Professional Program," page 140.

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

The BSLA degree 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 BSLA is an accredited program.

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 or Landscape Architecture Studies as their major are admitted to the lower-division architecture program without separate application to the School of Architecture and Landscape 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 additional information.

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

[^2]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 the upper-division program are separate from application and admission to ASU);
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 transfer students have met the eligibility requirements above. 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 BSD 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 access the Web site at www.asu.edu/caed/sala for the application form well in advance of the application deadline. The
following dates and procedures are for students applying to 2006-2007 upper-division programs.

Upper-Division Application Deadlines. May 3, 2006 (last day of classes). Portfolio and application documents are due in the school office by 5 P.M. Applications received after the deadline are not accepted.
June 2, 2006. If the spring 2006 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 2. These transcripts may be unofficial copies. A second set of official transcripts must be sent to the university Undergraduate Admissions office. The 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 3, 2006. Acceptance notices are mailed no later than July 3.
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 program and deferrals are not allowed.

Portfolio Format Requirements. Application materials must be submitted at one time in a presentation binder (portfolio).

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 consult the School of Architecture Web site at www.asu.edu/caed/sala for specific application information.

Students are encouraged to include additional materials, written or pictorial, that provide additional evidence of skills, abilities, 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. The application and essay 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, 2006. 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 curriculum is provided by the school's academic advisor.

## DEGREE REQUIREMENTS

The Bachelor of Science in Design degree in Architectural Studies requires a minimum of 120 semester 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 115) for information about option B.
Option B students who intend to pursue graduate degrees in an engineering discipline should also consult with the Ira A. Fulton School of Engineering 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 92, 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 88, and "College Degree Requirements," page 136 .
The accredited professional degree Master of Architecture requires an additional 56 hours of approved graduatelevel course work. For more information, see the Graduate Catalog.

> Architectural Studies-BSD ${ }^{1}$ Lower-Division Requirements

First Year

## Fall

APH 100 Introduction to Environmental Design $H U, G, H \ldots \ldots . . . .3$ or ADE 120 Design Fundamentals I ${ }^{2}$ (3)
ENG 101 First-Year Composition.................................................. 3
MAT 210 Brief Calculus MA.......................................................... 3
SB elective ........................................................................................ 3
Elective............................................................................................. 3
Total ................................................................................................ 15
Spring
ADE 120 Design Fundamentals $\mathrm{I}^{2}$............................................. 3 or APH 100 Introduction to Environmental Design $H U, G, H$ (3)
ENG 102 First-Year Composition.............................................. 3
Elective............................................................................................. 3
C elective.......................................................................................... 3
SB elective ........................................................................................ 3
Total ................................................................................................ 15

## Second Year

Fall
ADE 221 Design Fundamentals II ${ }^{2}$ .....  3
ADE 223 Design Fundamentals II Lecture .....  1
ANP 236 Introduction to Computer Modeling CS .....  3
APH 200 Introduction to Architecture $H U, G$ .....  3
PHY 101 Introduction to Physics $S Q$. .....  4
Total .....  14
Spring
ADE 222 Design Fundamentals III ${ }^{2}$ .....  3
ADE 224 Design Fundamentals III Lecture .....  1
ATE 353 Architectural Construction. .....  3
L elective .....  .3
SG or SQ elective. .....  4
Total ..... 14
Option A lower-division total ..... 58
1 Transfer credits are reviewed by the college and evaluated forapplicability to this curriculum. To be applicable, transfercourses must be equivalent in both content and level of offering.2 Portfolio review is required for transfer studio work. Submit theportfolio to the Academic Advising Office, ARCH 115.
Architectural Studies-BSD
Upper-Division Requirements
Third Year
Fall
ADE 321 Architectural Studio I .....  5
APH 313 History of Architecture I $L / H U, G, H^{*}$ .....  3
ATE 361 Building Structures I .....  3
Elective*. .....  3
Total ..... 14
Spring
ADE 322 Architectural Studio II .....  5
APH 314 History of Architecture II $L / H U, G, H^{*}$ .....  3
ATE 462 Building Structures II .....  3
Elective*. .....  .3
Total .....  14
Summer
ARP 484 Clinical Internship .....  3
Total .....  3
Fourth Year
Fall
ADE 421 Architectural Studio III .....  5
ANP 331 Programming for Design. .....  3
ATE 451 Building Systems I. .....  .3
Elective*. .....  .3
CAED Professional elective* .....  3
Total ..... 17
Spring
ADE 422 Architectural Studio IV .....  5
ATE 452 Building Systems II .....  3
CAED history elective* .....  3
Elective* .....  3
Total ..... 14
Option A upper-division total ..... 62
BSD option A minimum total ..... 120

* These courses may be completed before admission into the upper division.
Landscape Architecture-BSLA Lower-Division Requirements
First Year
Fall
ADE 120 Design Fundamentals $I^{1,2}$ .....  .3
or APH 100 Introduction to EnvironmentalDesign $H U, G, H^{3}$ (3)
ENG 101 First-Year Composition .....  3
or ENG 105 First-Year Composition if qualified (3)
MAT 210 Brief Calculus $M A^{3}$ .....  3
Social/Behavioral Science Elective $S B^{3}$ .....  3
Elective. .....  3
Total ..... 15
Spring
APH 100 Introduction to Environmental Design $H U, G, H^{3}$. .....  3 or ADE 120 Design Fundamentals $I^{1,2}$ (3)
ENG 102 First-Year Composition .....  3
Elective. .....  3
Social/Behavioral Science Elective $S B^{3}$ .....  3
Cultural Diversity Elective $C^{3}$ .....  3
Total ..... 15
Second Year
Fall
ADE 221 Design Fundamentals II ${ }^{1,2}$ .....  3
ADE 223 Design Fundamentals II Lecture .....  1
ANP 236 Introduction to Computer Modeling $C S^{1,2,3}$ .....  3
APH 200 Introduction to Architecture $H U, G^{1,3}$ .....  3
PHY 101 Introduction to Physics $S Q^{3}$ .....  4
Total ..... 14
Spring
ADE 222 Design Fundamentals III ${ }^{1,2}$ .....  3
ADE 224 Design Fundamentals III Lecture. .....  1
ATE 353 Architectural Construction. .....  3
Literacy and Critical Inquiry Elective $L^{3}$ .....  3
Natural Science Elective with Laboratory $S Q$ or $S G^{3}$ .....  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 portfolio to the Academic Advising Office, ARCH 115.
3 This course satisfies a general studies requirement. See the course description for specific requirement(s) the course fulfills.
Landscape Architecture-BSLA
Upper-Division Requirements
Third Year
Fall
PLA 361 Landscape Architecture III ..... 4
PLA 310 History of Architecture $H^{1}$ .....  3
PLA 242 Landscape Construction I .....  4
Elective .....  3
Upper-division elective $H U$ or $S B$. ..... $\ldots$
Total .....  17
Spring
PLA 311 Contemporary Landscape Architecture .....  .3
PLA 344 Landscape Construction II .....  3
PLA 362 Landscape Architecture IV .....  4
PLA 363 Landscape Planting Design .....  4
Total .....  14
Summer
ARP 484 Clinical Internship .....  2
Total .....  2
Fourth Year
Fall
PLA 411 Landscape Architecture Theory and Criticism $L$ .....  3
PLA 461 Landscape Architecture V .....  4
PLA 494 ST: Plant Materials. .....  3
PUP 432 Planning and Development Control Law .....  3
Elective. .....  3
Total .....  .16
Spring
PLA 446 Landscape Construction III .....  .3
PLA 462 Landscape Architecture VI. .....  4
CAED Professional elective ${ }^{3}$ .....  3
CAED history elective ${ }^{3}$. .....  3
Total .....  13
Upper Division total ..... $\overline{62}$
BSLA program total. ..... 120

1 This course satisfies a general studies requirement. See the course description for specific requirement(s) the course fulfills.
2 Portfolio review is required for transfer studio work. Submit portfolio to the Academic Advising Office, ARCH 115.
3 Professional elective is a 300 or higher level course, taken within CAED (Architecture, Design, and/or Planning). The history elective is a 300 or higher level course also taken within CAED and must have historical/theoretical content.

## Master of Architecture <br> Graduate-Level Professional Program Requirements <br> 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
CAED Professional elective.............................................................. 3
Total .............................................................................................. 14

## Sixth Year

Fall
AAD 551 Architectural Management I
ADE 621 Advanced Architectural Studio III .....  .5
CAED Professional elective .....  3
CAED Professional elective .....  3
Total ..... 14
Spring
AAD 552 Architectural Management II .....  3
ADE 622 Advanced Architectural Studio IV ..... 5
Approved elective .....  3
CAED Professional elective .....  3
Total ..... 14
Graduate division total ..... 56

## ARCHITECTURAL STUDIES MINOR

The Architectural Studies minor is available to non-architecture majors interested in this field. 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 $H U, G$.............................. 3
APH 300 World Architecture I/Western Cultures $H U, G$................. 3
APH 313 History of Architecture I $L / H U, G, H$........................... 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 304 American Architecture $H U$ ..... 3
APH 394 Special Topics .....  3
APH 411 History of Landscape Architecture $H$ .....  3
APH 414 History of the City $H$ .....  3
APH 446 20th-Century Architecture I HU ..... 3
APH 447 20th-Century Architecture II HU .....  3
APH 494 Special Topics .....  3
APH 499 Individualized Instruction* .....  3
APH 511 Energy Environment Theory .....  3
APH 598 Special Topics ..... 1-4

* These courses require a petition to the School of Architecture and Landscape Architecture.
A minimum GPA of 3.00 is required to pursue the minor in Architectural Studies.


## LANDSCAPE STUDIES MINOR

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.
PLA 310 History of Landscape Architecture H ............................ 3

PLA 311 Contemporary Landscape Architecture.......................... 3
PLA 411 Landscape Architecture Theory and Criticism L ........... 3
PLA 412 Landscape Ecology and Planning ................................... 3
PLA 413 Southwest Landscape Interpretation.............................. 3
PLA 485 International Field Studies in Planning G....................... 6
The minor is open to students of all majors. Students must, however, have an overall GPA of 2.50 or higher and achieve a minimum 2.50 GPA in minor classes to be awarded the minor. Students seeking admission to the minor in Landscape Studies must submit a minor verification form to the landscape architecture coordinator in the School of Architecture and Landscape Architecture.

## BIS CONCENTRATION

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

## INQUIRIES

For more information, contact a college academic advisor at 480/965-3584, e-mail caed.advising@asu.edu, or write

## ACADEMIC ADVISING/STUDENT SERVICES OFFICE <br> COLLEGE OF ARCHITECTURE AND ENVIRONMENTAL DESIGN <br> ARIZONA STATE UNIVERSITY <br> PO BOX 871905 <br> TEMPE AZ 85287-1905

## 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

[^3]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 MS 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 W. P. Carey School of Business. Also offered is a collegewide, interdisciplinary PhD 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
Omnibus Courses. For an explanation of courses offered but not specifically listed in this catalog, see "Omnibus Courses," page 63. Graduate-Level Courses. For information about courses numbered from 500 to 799, see the Graduate Catalog, or access www.asu.edu/ aad/catalogs on the Web. In some situations, undergraduate students may be eligible to take these courses; for more information, see "Graduate-Level Courses," page 62.

## 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 " $C$ " (2.00) 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" (2.00) 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.
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" (2.00) 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" (2.00) 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 " $C$ " (2.00) or higher: ADE 421.
Omnibus Courses. For an explanation of courses offered but not specifically listed in this catalog, see "Omnibus Courses," page 63.
Graduate-Level Courses. For information about courses numbered from 500 to 799, see the Graduate Catalog, or access www.asu.edu/ aad/catalogs on the Web. In some situations, undergraduate students may be eligible to take these courses; for more information, see "Graduate-Level Courses," page 62.

## ENVIRONMENTAL ANALYSIS AND PROGRAMMING (ANP)

## ANP 236 Introduction to Computer Modeling. (3)

fall
Fundamentals of computer operation, geographic information systems, geometric modeling of 3-D 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.
ANP 494 Special Topics. (1-4)
fall, spring, summer
Omnibus Courses. For an explanation of courses offered but not specifically listed in this catalog, see "Omnibus Courses," page 63.
Graduate-Level Courses. For information about courses numbered from 500 to 799, see the Graduate Catalog, or access www.asu.edu/ aad/catalogs on the Web. In some situations, undergraduate students may be eligible to take these courses; for more information, see "Graduate-Level Courses," page 62.

## 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 PUP 100. Credit is allowed for only APH 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
APH 304 American Architecture. (3)
selected semesters
Architecture in the United States from earliest colonial times to present.
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, H
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, H
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, H
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. Crosslisted as PUP 412. Credit is allowed for only APH 414 or PUP 412. Prerequisite: College of Architecture and Environmental Design junior standing.
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 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 " $C$ " (2.00) 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 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 63.

## 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 92.

## 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. Omnibus Courses. For an explanation of courses offered but not specifically listed in this catalog, see "Omnibus Courses," page 63.
Graduate-Level Courses. For information about courses numbered from 500 to 799, see the Graduate Catalog, or access www.asu.edu/ aad/catalogs on the Web. In some situations, undergraduate students may be eligible to take these courses; for more information, see "Graduate-Level Courses," page 62.

## 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)

 springIntroduces 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
Omnibus Courses. For an explanation of courses offered but not specifically listed in this catalog, see "Omnibus Courses," page 63. Graduate-Level Courses. For information about courses numbered from 500 to 799, see the Graduate Catalog, or access www.asu.edu/ aad/catalogs on the Web. In some situations, undergraduate students may be eligible to take these courses; for more information, see "Graduate-Level Courses," page 62.

## 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
Omnibus Courses. For an explanation of courses offered but not specifically listed in this catalog, see "Omnibus Courses," page 63.
Graduate-Level Courses. For information about courses numbered from 500 to 799, see the Graduate Catalog, or access www.asu.edu/ aad/catalogs on the Web. In some situations, undergraduate students may be eligible to take these courses; for more information, see "Graduate-Level Courses," page 62.

## LANDSCAPE ARCHITECTURE (PLA)

## PLA 101 Landscape and Society. (3) <br> fall

Examines interrelationship between society and the landscape with emphasis on human involvement in shaping the landscape. General Studies: G

## PLA 161 Graphic Communication. (3)

fall or spring
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 194 Special Topics. (1-4)
selected semesters
Topics may include the following:

- Presentation Graphics. (3)

PLA 222 Computers in Landscape Architecture. (3) fall
Computer applications in landscape architecture, including CAD, GIS, graphics, and visualization. Lab.
PLA 240 Landscape Survey Techniques. (3)
spring
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)
fall
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)
spring
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)

## spring

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.
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. (1-12) summer
Organized field study of planning in specified international locations. May be repeated for credit with school approval. Study abroad, field trip. Cross-listed as PUP 485. Credit is allowed for only PLA 485 or PUP 485.
General Studies: $G$ (3 hours must be taken to secure $G$ credit.)

## 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 63.

## School of Design

www.asu.edu/caed/SOD

480/965-4135
AED 154

## Jacques Giard, Director

Professors: Brandt, Giard
Associate Professors: Bernardi, Cutler, Johnson, McDermott, Patel, Rothstein, Sanft, Witt

Assistant Professors: Bender, Boradkar, Brungart, Herring, McCoy, Schoenhoff, Shin, Thibeau Catsis

Clinical Associate Professor: Weed
Adjunct Professors: Heywood, Kendle, Moore
Faculty Associates: Clark, Johannes, Jones, Montgomery, Shigo, Sola, Song, White

## PURPOSE

The School of Design educates individuals for the profession of graphic design, industrial design, and interior design. The curricula are focused 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.

For more information, access the Web site at www.asu.edu/caed/SOD or send e-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.

[^4]
## 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. The School of Design is an accredited member of the National Association of Schools of Art and Design.

Graphic Design. The Graphic Design program places an emphasis on strategic communication developed through a design process that includes research, analysis, conceptualization, planning, and realization. The process leads to innovative visual communication solutions for contemporary design problems that are local to global in scope.

Students integrate design theories and methodologies, cultural and contextual studies, environmental and human factors, traditional and contemporary technologies, and visual aesthetics to develop comprehensive design strategies. These strategies are then employed to give experiential and interactive form to physical artifacts (books, brochures, packaging, etc.), virtual artifacts (Web sites, CD-ROMs, kiosks, interfaces, etc.), and environments (exhibits, sign systems, etc.) Faculty professes the objective of valuable and appropriate graphic design that informs, educates, directs, and communicates effectively.

Studio projects prepare students not only for the graphic design profession but also for graduate studies. Studio projects allow students to think critically, both as individuals and as members of multidisciplinary teams. Some Graphic Design students collaborate with Industrial Design students and participate in a program that focuses on integrated innovation, an educational initiative that provides an interdisciplinary experience with academic partners in the schools of business and engineering at ASU. Third-year students perform internships either in a corporation or a consulting firm. Fourth-year students complete their undergraduate studies with a public exhibition, a unique tradition that has earned professional admiration for more than a decade.
Based on a very diversified portfolio upon graduation, students opting for the graphic design profession gain employment in brand and corporate identity, interaction and interface design, broadcast (TV graphics), museum/exhibit, publication, and advertising. Students may also pursue graduate studies leading to careers in design education and other fields of professional endeavor in design. The Graphic Design program is actively involved with the American Institute of Graphic Arts, playing a critical role in the development and facilitation of national and regional initiatives.
Students interested in videography, video games, animation/film production, cartoon design, illustration, styling, and photography should consult with the School of Art.

Industrial Design. The program of studies in Industrial Design prepares individuals for a professional career in product design and development, especially in the area of manufactured objects used by people on a daily basis. By developing products that are innovative, useful, safe, aesthetically appropriate, and socially and culturally sensitive, the industrial design profession serves the needs of society, consumers, and manufacturers.

The Industrial Design Program at ASU focuses on a new model of interdisciplinary product development called integrated innovation. The primary goal of integrated innovation is to produce design solutions that 1) meet user needs in unexpected ways, 2 ) create value in the marketplace, and 3) improve society and the environment. This unique focus has led the program to form strong academic partnerships with graphic design and the schools of engineering and business at ASU. Students graduating with this experience can expect to possess an acute understanding of the potential that industrial design brings to the social, commercial, and environmental challenges facing the twenty-first century.

To support integrated innovation, the Industrial Design program at ASU teaches both traditional and cutting-edge design skills and knowledge, including a strong visual acumen; technological aptitude; a practical knowledge of manufacturing, sustainability, and ergonomics; critical comprehension of design history; and a clear understanding of how to identify, evaluate, and respond to the physical and psychological needs of users. By way of studio projects, students learn to research problems and opportunities; visualize and communicate ideas; and to refine their skills in freehand sketching, computer-aided design, and model simulation. Assignments are a balance of conceptual challenges and practical techniques. Typical design projects (some of which are conducted with external partners) feature product planning and user experience along with exercises dealing with the design of electronic devices, housewares, 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 either a corporation or a consulting firm. The program also has very close ties with the Industrial Designers Society of America.

Interior Design. The four-year Interior Design program focuses on commercial interior design but also offers courses in residential design. Interior design is the study of the interface of people and space as it is influenced by culture, history, and political and economic climates. The professional interior designer applies knowledge of human behavior based on psychological, sociological, physiological, and emotional needs of the occupants of the space. Interior designers often manage or work in teams with architects, engineers, landscape architects, planners, and artisans. The ability to translate the creative design process into a language that is understood by corporate executives and upper management is dependent on the designer's command of visual, verbal, and written communication.

Interior design courses offer opportunities to explore creative expression as well as to develop critical thinking skills. Classes include basic design principles and elements, drawing and drafting, design theory and history, professional development, and environmental systems. Skills and knowledge obtained in these classes are used to solve design problems related to the following environments: large and small residences, hotels, restaurants, corporate offices, retail stores, malls, schools, hospitals, and other types of care facilities. Course work is presented in both lecture and studio formats. Lectures facilitate the thoughtful completion of studio projects. The studio environment provides unique individual and team learning opportunities. National,
regional, and local professional interior designers offer their expertise as lecturers and guest critics. Studio projects involve drawing, sketching, hand and computer drafting, the application of color, materials selection, computer modeling, and the application of technical knowledge. The Interior Design program is in an advantageous program position because of its location within a multidisciplinary college of architecture and design. The close proximity to these other design professions provides a unique opportunity for a comprehensive and holistic educational experience. The Interior Design program is accredited by the Foundation for Interior Design and Education Research. The program provides the educational credentials and knowledge needed for graduates to take required exams for a professional design organization, or for licensure/registration exams required in several states.

## MINORS

## Design Studies

Students interested in design who do not wish to major in graphic, industrial, or interior design can earn a minor in Design Studies. The courses may also appeal to students not accepted to the upper-division of graphic, industrial, or interior design who wish to pursue the study of design within the Bachelor of Interdisciplinary Studies degree.

Courses selected must satisfy the minimum requirement of 18 semester hours for the minor. In addition students must take 12 semester hours in upper-division course work. To enhance understanding of the subject matter, some of the designated courses are sequential in nature and require certain prerequisites. Consequently, students should carefully note the semester in which these particular courses are offered. All designated courses for the minor in design studies are lecture courses.
To pursue the minor in Design Studies, students must have a minimum cumulative GPA of 2.50.

## Designated Courses for the Minor

## Design

DSC 101 Design Awareness $H U, G$. .....  3
DSC 236 Introduction to Computer Modeling CS ..... 3
DSC 344 Human Factors in Design. .....  3
DSC 440 Finding Purpose .....  3
Graphic Design
GRA 111 Graphic Design History I HU .....  3
GRA 112 Graphic Design History II. .....  3
GRA 225 Communication/Interaction Design Theory .....  3
GRA 345 Design Rhetoric $L$ ..... 3
Industrial Design
IND 236 Introduction to Computer Modeling for Industrial Design. ..... 3
IND 242 Materials and Design .....  3
IND 243 Process and Design .....  .3
IND 316 20th-Century Design I $H U, H$ .....  3
IND 317 20th-Century Design II $H U, H$ .....  .3
IND 354 Principles of Product Design .....  3
IND 470 Professional Practice for Industrial Design $L$ .....  3
Interior Design
INT 111 Interior Design Issues and Theories $H U$ .....  3
INT 121 Introduction to Computer
Modeling for Interior Design CS ..... 3
INT 131 Design and Human Behavior $S B$. .....  3
INT 238 Introduction to Computer-Aided Design of Built Environments .....  3
INT 310 History of Interior Design I $H U, H$ .....  3
INT 311 History of Interior Design II $H U, H$. .....  3
INT 412 History of Decorative Arts in Interiors $H U$. .....  3
INT 413 History of Textiles in Interior Design .....  3

## 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 HU, G.............................................. 3
INT 111 Interior Design Issues and Theories $H U$.............................. 3


INT 412 History of Decorative Arts in Interiors HU.................... 3
INT 413 History of Textiles in Interior Design ............................. 3
Total .$\overline{18}$

The minor in Interior Design History is open to students majoring in Architectural Studies, Art, Communication, Psychology, or Sociology, and students in any W. P. Carey School of Business major or the Bachelor of Interdisciplinary Studies program. All other majors are considered on an individual basis and approved by the coordinator 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 .

## BIS CONCENTRATIONS

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

## GRADUATE PROGRAMS

The School of Design offers a Master of Science in Design (MSD) degree with concentrations in graphic

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 92.
design, industrial design, and interior design. The faculty also participates in a collegewide, interdisciplinary PhD 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 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 program'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," on this page.
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.

## 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, students should ask a college academic advisor for a copy of the application and portfolio guidelines. The following dates and procedures are for students applying to 2006-2007 upper-division programs.

Upper-Division Application Deadlines. The following dates and procedures apply to all three majors in the School of Design.

April 14, 2006. Portfolio and application documents are due in the school office by 5 P.M.
June 1, 2006. If the spring 2006 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 Academic Advising/Student Services office, ARCH 115, no later than June 1. 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 3, 2006. Acceptance notices are mailed no later than July 3.
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 program, and deferrals are not allowed.

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 115. 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, which are reviewed by the faculty and which become part of 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); 8.5" x $11^{\prime \prime}$ 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 2005 semester. Copies are acceptable. An academic advisor forwards 2006

ASU transcripts. (Applicants wishing to transfer spring semester 2006 work are responsible for submitting these transcripts by June 1 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 2006 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 an application and a portfolio guidelines form for their major from the college's Academic Advising Office, ARCH 115, at the beginning of the academic year in which they intend to apply to the upper-division program. Requirements or instructions indicated in the guidelines 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, abilities, 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 unless specified in the guidelines. 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 applicant encloses a self-addressed return mailer with sufficient prepaid postage. Portfolios may be claimed in person after July 1, 2006. 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 115).

## DEGREE REQUIREMENTS

The Bachelor of Science in Design degree requires a minimum of 120 semester hours for a major in Graphic Design, Industrial Design, and Interior Design. The program may include 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 preprofessional (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, numeracy, and psychology 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 two years of the preprofessional program. 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 inhouse 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 92, 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 requirements. See "University Graduation Requirements," page 88, and "College Degree Requirements," page 136.

## School of Design Graphic Design-BSD

## First Year

Fall
DSC 101 Design Awareness HU, G............................................... 3
ENG 101 First-Year Composition............................................................................. 3 or ENG 105 Advanced First-Year Composition if qualified (3)
GRA 111 Graphic Design History I HU ......................................... 3
GRA 121 Principles for Graphic Design I ${ }^{1}$..................................... 3
MA elective ${ }^{2}$................................................................................................. 3
Total ................................................................................................ 15
Spring
ARS 102 Art from Renaissance to Present $H U, H$........................ 3
ENG 102 First-Year Composition................................................... 3 or elective if ENG 105 is taken (3)
GRA 112 Graphic Design History II. ... 3
GRA 122 Principles for Graphic Design II ${ }^{1}$.................................................................................

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 92.
Computer Science elective ${ }^{2}$ .....  3
Total ..... 15
Second Year
Fall
GRA 220 Design Drawing I .....  3
GRA 221 Letterform .....  .3
GRA 222 Visual Communication I ${ }^{1}$ .....  3
GRA 225 Communication/Interaction Design Theory .....  3
Literacy and Critical Inquiry elective ${ }^{2}$. .....  .3
Total ..... 15
Spring
GRA 223 Typography ${ }^{1}$ .....  3
GRA 224 Visual Communication II ${ }^{1}$ .....  .3
PGS 101 Introduction to Psychology SB. .....  3
Natural Science Elective with Laboratory $S Q^{2}$ .....  4
Elective ${ }^{2}$ .....  3
Total ..... 16
Preprofessional program total ..... 61
Third Year
Fall
DSC 440 Finding Purpose .....  3
GRA 321 Technology for Design I .....  3
GRA 361 Visual Communication III .....  .5
Natural Science Elective with Laboratory $S Q, S G^{2}$ .....  .4
Total ..... 15
Spring
GRA 322 Technology for Design II .....  .3
GRA 345 Design Rhetoric $L$ .....  3
GRA 362 Visual Communication IV ${ }^{1}$ .....  5
Social/Behavioral Science Elective (upper division) $S B^{2}$ .....  3
Total ..... 14
Summer
GRA 484 Internship: Graphic Design .....  2
Total .....  2
Fourth Year
Fall
GRA 421 Exhibit Design .....  3
GRA 422 Motion Graphics and Interaction Design .....  3
GRA 461 Visual Communication V ${ }^{1}$ .....  5
Cultural Awareness elective ${ }^{2}$ .....  3
Total ..... 14
Spring
Spig
GRA 424 Advanced Media
3 3
GRA 462 Visual Communication VI .....  .5
Elective ${ }^{2}$ .....  3
Total ..... 14
Professional program total ..... 59
BSD minimum total ..... 120

[^5]
## Industrial Design

The curriculum in Industrial Design is divided into a preprofessional (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 design 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, 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 92, 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 88, and "College Degree Requirements," page 136.

## Industrial Design-BSD Preprofessional Program Requirements ${ }^{1}$ <br> First Year

## Fall


ENG 101 First-Year Composition.............................................. 3 or ENG 105 Advanced First-Year Composition (3) if qualified
IND 120 Drawing for Industrial Design ${ }^{1}$................................... 3
MAT 170 Precalculus MA .......................................................... 3
Elective..................................................................................... 3
Total ......................................................................................... 15
Spring
ENG 102 First-Year Composition ..... 3
or elective if ENG 105 is taken (3) .....  3
IND 121 Principles for Industrial Design I .....  3
PGS 101 Introduction to Psychology $S B$ ..... 3
PHY 111 General Physics $S Q^{2}$ .....  3
PHY 113 General Physics Laboratory $S Q^{2}$ .....  1
Total ..... 16
Second Year
Fall
IND 227 Visual Methods for Problem Solving .....  3
IND 236 Introduction to Computer Modeling for Industrial Design .....  3
IND 242 Materials and Design .....  3
IND 260 Industrial Design I .....  3
IND 316 20th-Century Design I $H U, H$ .....  3
Total ..... 15
Spring
ECN 112 Microeconomic Principles $S B$ .....  3
IND 228 Imaging and Visualization .....  3
IND 243 Process and Design .....  3
IND 261 Industrial Design II .....  3
IND 317 20th-Century Design II $H U, H$ .....  3
Total ..... 15
Preprofessional program total ..... 61
1 Transfer credits for the lower-division program must be equiva- lent 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 115. Most studio courses and some lecture courses are sequential. They must be taken in, and may be offered only during, the semester noted.
2 Both PHY 111 and 113 must be taken to secure SQ credit
Industrial Design-BSD
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 382 Advertising and Marketing Communication .....  3
Elective. .....  3
Total ..... 14
Summer
IND 484 Internship: Industrial Design .....  2
Total .....  2

## Fourth Year

## Fall

ENG 301 Writing for the Professions $L$ ..... 3
IND 460 Design Project I. .....  .5
IND 470 Professional Practice for Industrial Design $L$ .....  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
BSD minimum total ..... 120

## Interior Design

The curriculum in Interior Design is divided into a preprofessional program (first and second year) and a professional program (third and fourth year):
Preprofessional program .....  .59
Professional program .....  .61
Total ..... 120

The preprofessional curriculum balances a foundation in academic subjects such as English, algebra and trigonometry, computer technology, and physics with design 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, construction methods/structures, codes as related to materials and finishes, environmental control systems, as well as lecture courses in the history of interior design. An eight-week supervised summer internship is part of the curriculum.

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 provide greater enrichment in studio disciplines and contribute to the possibility for postsecondary-level academic appointments.

General Studies Requirement. The following curriculum includes sufficient approved course work to fulfill the General Studies requirement. See "General Studies," page 92, 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 88, and "College Degree Requirements," page 136.

[^6]
## Interior Design-BSD

Preprofessional Program Requirements ${ }^{1}$

## First Year

## Fall


ENG 101 First-Year Composition.................................................. 3 or ENG 105 Advanced First-Year Composition (3) if qualified
INT 111 Interior Design Issues and Theories $H U$........................ 3
INT 121 Introduction to Computer Modeling for
Interior Design $C S^{1}$......................................................... 3
MAT 170 Precalculus MA ............................................................... 3
Total ................................................................................................ 15
Spring
ENG 102 First-Year Composition......................................................... 3
INT 120 Design Drawing and Media ........................................... 3
INT 131 Design and Human Behavior SB.................................... 3
INT 238 Introduction to Computer-Aided Design of Built $\begin{aligned} & \text { Environments ................................................................ }\end{aligned}$
PHY 111 General Physics $S Q^{2}$....................................................... 3

Total ................................................................................................ 16

## Second Year

## Fall

INT 221 Principles of Design ${ }^{1}$..................................................... 3
INT 222 Principles of Design Lecture ${ }^{1}$......................................... 1
INT 223 Drafting for Interior Design ${ }^{1}$.......................................... 3

SB elective ......................................................................................... 3
Elective.............................................................................................. 3
Total .............................................................................................. 16
Spring
ARS 102 Art from Renaissance to Present $H U, H$......................... 3
INT 261 Interior Design Studio 1: Residential ${ }^{1}$............................ 3
SQ or SG elective.............................................................................. 4
Elective............................................................................................. 3
Total ................................................................................................ 13
Lower-division total........................................................................ 60

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 115. Most studio courses and some lecture courses are sequential. They must be taken in, and may be offered only during, the semester noted.
2 Both PHY 111 and 113 must be taken to secure SQ credit.

## Interior Design - BSD <br> Professional Program Requirements <br> Third Year

Fall
INT 211 Concepts for Interior Design*......................................... 3

INT 352 Construction Methods in Interior Design ...................... 3
INT 362 Interior Design Studio II: Hospitality and Retail........... 5
INT 381 Preinternship Seminar..................................................... 1
Total .............................................................................................. 15

## Spring

INT 311 History of Interior Design II HU, H............................... 3
INT 351 Lighting for Interior Design.......................................................... 3
INT 353 Interior Materials, Finishes, and Specifications............. 3
INT 363 Interior Design Studio III: Poetics and Materiality........ 5
Total ............................................................................................... 14
Summer
INT 484 Internship ....................................................................... 2
Total ................................................................................................ 2

## Fourth Year

Fall
INT 341 Interior Codes: Public Welfare and Safety..................... 2
INT 464 Interior Design Studio IV: Work Environments.............. 5
INT 471 Facilities Management................................................... 3
L elective (upper division) ................................................................ 3
Elective............................................................................................... 3

Total. ..... 16

## Spring

INT 465 Interior Design Studio V: Institutional Design............... 5
INT 472 Professional Practice for Interior Design....................... 2
Elective.............................................................................................. 3
Elective............................................................................................. 3
Total .......................................................................................................... 13
Upper-division total ........................................................................ 60
BSD minimum total....................................................................... 120

* 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 115. Most studio courses and some lecture courses are sequential. They must be taken in, and may be offered only during, the semester noted.


## INQUIRIES

For more information, contact a college academic advisor at 480/965-3584, send e-mail to caed.advising@asu.edu, or write

## ACADEMIC ADVISING/STUDENT SERVICES OFFICE <br> COLLEGE OF ARCHITECTURE AND ENVIRONMENTAL DESIGN <br> ARIZONA STATE UNIVERSITY <br> PO BOX 871905 <br> TEMPE AZ 85287-1905

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.
General Studies: HU, G, H
DSC 101 Design Awareness. (3)
fall and spring
Survey of cultural, global, and historical context for the design
professions.
General Studies: HU, G

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 440 Finding Purpose. (3)
fall and spring
Career orientation in the creative professions, including value clarification, decision making, lifestyle planning, goal setting, and expression of individual talents
DSC 484 Internship. (1-3)

## ummer

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
Omnibus Courses. For an explanation of courses offered but not specifically listed in this catalog, see "Omnibus Courses," page 63.
Graduate-Level Courses. For information about courses numbered from 500 to 799, see the Graduate Catalog, or access www.asu.edu/ aad/catalogs on the Web. In some situations, undergraduate students may be eligible to take these courses; for more information, see "Graduate-Level Courses," page 62.

## GRAPHIC DESIGN (GRA)

## GRA 286 Visual Communication II. (3)

## Effective through fall 2005

Transition from theoretical to applied problems. Emphasizes refinement of visual skills. 6 hours a week. Fee. Prerequisite: acceptance into Graphic Design professional program.
GRA 383 Typography I. (3)
Effective through fall 2005
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. Prerequisite: GRA 286.
Corequisite: GRA 386.

## GRA 385 Typography II. (3)

Effective through spring 2006
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)
Effective through fall 2005
Problems in specific design applications such as posters, packaging, publications. Emphasizes development of concepts in visual communications. 6 hours a week. Fee. Prerequisite: GRA 286. Corequisite: GRA 383.
GRA 387 Visual Communication IV. (3)
Effective through spring 2006
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)
Effective through fall 2006
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)
Effective through spring 2007
Individual and group projects with outside clients. All projects culminate in an exhibit. 6 hours a week. Fee. Prerequisite: GRA 481.

GRA 484 Internship: Graphic Design. (1-3)
Effective through summer 2006
Full-time summer internship under supervision of practitioners in the Phoenix area or other locales. Prerequisite: GRA 387.
Omnibus Courses. For an explanation of courses offered but not specifically listed in this catalog, see "Omnibus Courses," page 63.

## GRAPHIC DESIGN (GRA) <br> New Curriculum <br> Effective Fall 2004

GRA 111 Graphic Design History I. (3)
fall
Surveys development of visual communication from its origins to the 20th century. Investigates significant technological, industrial, and social influences
General Studies: HU
GRA 112 Graphic Design History II. (3)
spring
Surveys contemporary and 20th-century graphic design. Investigates relationships between gra[phic design and related disciplines,
technological, industrial, and social influences. Prerequisite: GRA
111.

## GRA 121 Principles for Graphic Design I. (3)

 fallGraphic design as a language and process for creative thinking and realization. Studio. Prerequisite: Graphic Design major. Corequisite for Graphic Design majors: GRA 111.
GRA 122 Principles for Graphic Design II. (3)
spring
Continued exploration of graphic design as a language and process
for creative thinking and realization. Studio. Prerequisite: GRA 121.
Corequisite for Graphic Design majors: GRA 112.
GRA 194 Special Topics. (1-4)
selected semesters
GRA 220 Design Drawing I. (3)
fall
Drawing as language to explore and communicate ideas
Development of drawing aptitude as language and process for graphic design thinking. Studio. Prerequisite: GRA 122.

## GRA 221 Letterform. (3)

 fallDrawing of letterforms with focus on proportion and structure. Introduces letterform nomenclature and classifications. 6 hours a week. Fee. Prerequisites: GRA 122. Corequisite: GRA 222.

## GRA 222 Visual Communication I. (3)

 fallTheoretical and applied studies in shape, drawing, and color. 6 hours a week. Fee. Prerequisite: GRA 122. Corequisite: GRA 221.

## GRA 223 Typography. (3)

spring
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. Prerequisite: GRA 221.
Corequisite: GRA 224.
GRA 224 Visual Communication II. (3)
spring
Transition from theoretical to applied problems. Emphasizes refinement of visual skills. 6 hours a week. Fee. Prerequisite: GRA 222. Corequisite: GRA 223.

GRA 225 Communication/Interaction Design Theory. (3) fall
Theory related to the design of communication artifacts and interaction within various media environments. Prerequisite: GRA 122 or instructor approval.
GRA 294 Special Topics. (1-4)
selected semesters

[^7]
## GRA 321 Technology for Design I. (3)

Effective fall 2006
Explores the process of technology in design. Projects interface with GRA 361. Prerequisite: admission to upper-division program. Corequisite: GRA 361.
GRA 322 Technology for Design II. (3)
Effective spring 2007
Emphasizes advanced technology in design problems. Projects interface with GRA 362. Prerequisite: GRA 321. Corequisite: GRA 362.

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 361 Visual Communication III. (5)
Effective fall 2006
Explores methodologies of strategic communication, development of visual systems, and information design ideation processes leading to applied projects in print and digital media. Studio. Fee. Prerequisites:
GRA 223, 224; admission to upper-division program. Corequisite: GRA 321

GRA 362 Visual Communication IV. (5)
Effective spring 2007
Comprehensive studio projects with emphasis on production processes leading to multidisciplinary applied projects in print, 3-D space, and digital media. Studio. Fee. Prerequisite: GRA 361. Corequisite: GRA 322.

## GRA 382 Graphic Representation. (3)

 fallStudio practice in drawing with an application toward graphic communication. 6 hours a week. May be repeated once for credit Fee. Prerequisite: GRA 222
GRA 394 Special Topics. (1-4)
selected semesters
GRA 421 Exhibit Design. (3)
fall
Familiarization with the processes associated with the design of exhibits, especially visual communication in 3-D. Studio. Prerequisite: GRA 362 or instructor approval.

GRA 422 Motion Graphics and Interaction Design. (3) fall
Discusses and explores theory related to the design of motion graphics and interaction through lectures and studio projects. Studio. Prerequisite: GRA 322 or instructor approval
GRA 423 Advanced Interaction Design. (3)
spring
Advanced discussion and exploration of theory related to the design of interaction. Prerequisite: GRA 422 or instructor approval.
GRA 424 Advanced Media. (3)
spring
Advanced exploration of digital media for communication. Studio.
Prerequisite: GRA 422. Corequisite for Graphic Design majors: GRA 462.

## GRA 461 Visual Communication V. (5)

Effective fall 2007
Comprehensive studio projects with emphasis on design processes, including research, writing, critical thinking, practice, presentation, and analysis. Studio. Fee. Prerequisite: GRA 362.
GRA 462 Visual Communication VI. (5)
Effective spring 2008
Comprehensive studio projects pursued in cooperation with a public organization or private enterprise. All projects culminate in an exhibit. Studio. Fee. Prerequisite: GRA 461.
GRA 484 Internship: Graphic Design. (1-3)
Effective summer 2007
Full-time summer internship under supervision of practitioners in the Phoenix area or other locales. Students must register for GRA 484 in the fall semester following their summer internship. Prerequisite: GRA 362.

GRA 494 Special Topics. (1-4) selected semesters
Omnibus Courses. For an explanation of courses offered but not specifically listed in this catalog, see "Omnibus Courses," page 63.

## INDUSTRIAL DESIGN (IND)

IND 120 Drawing for Industrial Design. (3)
fall
Drawing as language to explore and communicate ideas Development of drawing aptitude as language and process for industrial design thinking. Studio. Prerequisite: Industrial Design major.
IND 121 Principles for Industrial Design I. (3) spring
Industrial design as a language and process for creative thinking and realization. Studio. Prerequisite: Industrial Design major. Corequisite: IND 122.
IND 122 Principles for Industrial Design II. (3) spring
Continued exploration of industrial design as a language and process for creative thinking and realization. Studio. Prerequisite: Industria Design major. Corequisite: IND 121.
IND 194 Special Topics. (1-4)
selected semesters
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: IND 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 236 Introduction to Computer Modeling for Industrial Design. (3)
fall and spring
Computers in industrial design, including software concepts, specific packages, and problem solving, illustration, typography, modeling, and animation. Lab. Prerequisite: Industrial Design major.

## 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: IND 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: acceptance into Industrial Design professional program.
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.
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)

Product design, with emphasis in systems interaction. Culmination of design process and technique. Encourages individual project direction. 10 hours studio. Fee. Prerequisite: IND 460.
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 484 Internship: Industrial Design. (1-3)

## summer

Full-time summer internship under supervision of practitioners in the Phoenix area or other locales. Students must register for IND 484 in the fall semester following their summer internship. Prerequisite: IND 361.

## 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 63.

## INTERIOR DESIGN (INT)

## INT 111 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 120 Design Drawing and Media. (3)
spring
Visual thinking: Development of freehand drawing techniques as a language and tool to explore, communicate, and process ideas. Studio. Prerequisite: Interior Design major.
INT 121 Introduction to Computer Modeling for Interior Design. (3)
fall and spring
Computers in interior design, including software concepts, specific packages, and problem solving, illustration, typography, modeling, and animation. Lab. Prerequisite: Interior Design major.
General Studies: CS
INT 131 Design and Human Behavior. (3)
spring
Applies conceptual design to issues of programming and space
planning, user needs, and behavior.
General Studies: SB
INT 194 Special Topics. (1-4)
fall
Topics may include the following:

- Drafting for Interior Design. (3)

INT 211 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: INT 121.
INT 221 Principles of Design. (3) fall
Applied visual vocabulary: studio experience exploring applications, process, and conceptual development of the principles of order and composition. Studio. Prerequisite: INT 120. Corequisite: INT 222.
INT 222 Principles of Design Lecture. (1) fall
Applications of the visual vocabulary: explores the principles of organization through examination of historical precedence and contemporary interior design. Corequisite: INT 221.
INT 223 Drafting for Interior Design. (3)
fall
Orthographic, paraline, axonometric, and perspective projection; shades and shadows; and basic descriptive geometry for interior designers. Studio. Prerequisite: Interior Design major.
INT 238 Introduction to Computer-Aided Design of Built Environments. (3)
spring
Introduces AutoCAD computer-aided design principles and strategies for designers of the built environment. Lecture, lab.
INT 261 Interior Design Studio I: Residential. (3)
spring
Studio problems in interior design related to behavioral response in
personal and small-group spaces. Studio. Prerequisite: INT 221.
INT 294 Special Topics. (1-4)
selected semesters
Topics may include the following:

- AutoCad. (3)

INT 310 History of Interior Design I. (3)
fall
Design of interior spaces as an expression of cultural influences to
1835. Prerequisite: ARS 102.

General Studies: HU, H

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 natura science-quantitative / C cultural diversity in the United States / G global / H historical / See "General Studies," page 92.

## COLLEGE OF ARCHITECTURE AND ENVIRONMENTAL DESIGN

## 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 341 Interior Codes: Public Welfare and Safety. (2)

 fallCodes and regulations as performance criteria for interior design
Prerequisite: admission to upper-division program. Corequisites: INT 352, 362, 381.
INT 351 Lighting for Interior Design. (3)
spring
Light as an aspect of interior design. Evaluation of light sources for distribution, color, and cost. Prerequisite: admission to upper-division program. Corequisites: INT 353, 363.
INT 352 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. Prerequisite: admission to upper-division program. Corequisites: NT 341, 362, 381.
INT 353 Interior Materials, Finishes, and Specifications. (3) spring
Survey, evaluation, and specification of materials, finishes, and performance criteria for interiors. Prerequisite: admission to upperdivision program. Corequisites: INT 351, 363.
INT 362 Interior Design Studio II: Hospitality and Retail. (5) fall
Investigates interior design issues in hospitality and retail environments. 10 hours studio. Fee. Prerequisite: admission to upperdivision program. Corequisites: INT 341, 352, 381.
INT 363 Interior Design Studio III: Poetics and Materiality. (5) spring
Explores the poetics of materials and their assemblage in the design of public and private spaces. 10 hours studio. Fee. Prerequisite: INT 362. Corequisites: INT 351, 353.

INT 381 Preinternship Seminar. (1) fall
Preparation of internship materials that produce and enhance a successful internship experience. Seminar. Prerequisite: 3rd-year major in the School of Design.
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 446 Furniture Design and Production. (3)
fall
Design, construction, cost estimating, and installation in interior furniture and millwork. 1 hour lecture, 4 hours studio. Prerequisite: acceptance into Interior Design professional program or instructor approval.
INT 451 Ambient Environment. (3) spring
Surveys environmental control systems, acoustics, and lighting issues in interiors. Lecture, field trips. Prerequisite: admission to upperdivision program. Corequisite: INT 465.
INT 464 Interior Design Studio IV: Work Environments. (5) fall
Studio problems in interior design-related issues in work environments. 10 hours studio. Fee. Prerequisite: INT 363.
INT 465 Interior Design Studio V: Institutional Design. (5) spring
Advanced interior design problem solving related to institutional facilities. 10 hours studio. Fee. Prerequisite: INT 464. Corequisite: INT 451.

INT 466 Interior Design Studio. (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: INT 465.
INT 467 Interior Design Studio. (5)
spring
Advanced series of specialized projects or continuation of thesis project based upon the major's concentration. 10 hours studio. Fee. Prerequisite: INT 466.
INT 471 Facilities Management. (3)
fall
Facility management process in large-scale organizations. Planning, long-range forecasting, and productivity. Project management methodologies using micro-based software programs. Prerequisite: admission to upper-division program.
INT 472 Professional Practice for Interior Design. (2)
spring
Business procedures, project control, fee structures, and professional product liabilities. Prerequisite: admission to upper-division program.
INT 484 Internship: Interior Design. (2)

## summer

Full-time summer internship under supervision of practitioners in the Phoenix area or other locales. Students must register for INT 484 in the fall semester following their summer internship. Prerequisite: INT 363.

Omnibus Courses. For an explanation of courses offered but not specifically listed in this catalog, see "Omnibus Courses," page 63.

## School of Planning

www.asu.edu/caed/SPLA 480/965-7167
AED 158

## Hemalata Dandekar, Director

Professors: Dandekar, Kihl, Lai, Pijawka
Associate Professors: Cameron, Crewe, Guhathakurta, Kim, Yabes

Assistant Professors: Balsas, Lara Valencia
Professor of Practice: Tiger
Faculty Associates: Abele, Adhikari, Boozer, Borushko, Brennan, Cromarty, Dornfield, Dworkin, Gammage, Hartman, Keane, Kulaga, Newcombe, Pearce, Piper, Sender, Starkey, Stephenson, Sumner

## PURPOSE

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

Planners work on projects that range in scale from site development to the design of entire communities and the formulation of policies that shape urban and regional
growth. Planning graduates work for private firms, government agencies, and nonprofit organizations. 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 offer the Bachelor of Science in Planning degree in Urban Planning, and the Bachelor of Science in Design degree in Housing and Urban Development.

## Bachelor of Science in Planning (BSP)

The BSP 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 Design (BSD)

A BSD 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 BSD degree with a major in Housing and Urban Development is offered in conjunction with the College of Extended Education.

## MINOR

## 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 100 Introduction to Environmental Design $H U, G, H \ldots \ldots . . . .3$
PUP 190 Sustainable Cities $S B, G$................................................ 3
PUP 200 The Planned Environment $H U, H$.................................. 3
PUP 301 Introduction to Urban Planning $L^{*}$................................ 3
PUP 363 History of Planning......................................................... 3

PUP 425 Urban Housing Analysis ................................................. 3
PUP 430 Transportation Planning and the Environment .............. 3
PUP 432 Planning and Development Control Law. .....  3
PUP 433 Zoning Ordinances, Subdivision Regulations, and Building Codes .....  3
PUP 434 Urban Land Economics .....  3
PUP 442 Environmental Planning .....  3
PUP 444 Preservation Planning .....  3
PUP 445 Women and Environments $C$ .....  .3
PUP 452 Ethics and Theory in Planning $L$ .....  3
PUP 475 Environmental Impact Assessment. .....  .3
PUP 485 International Field Studies in Planning $G$. .....  3
PUP 510 Citizen Participation. .....  3

* PUP 301 Introduction to Urban Planning is required.

The minor is open to students of all majors. Students must, however, have an overall GPA of 2.50 or higher and achieve a minimum 2.50 GPA in minor classes to be awarded the minor. Students seeking admission to the minor in Urban Planning must submit a minor verification form to the student coordinator in the School of Planning.

## BIS CONCENTRATIONS

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

## GRADUATE PROGRAMS

School of Planning faculty offer a Master of Urban and Environmental Planning (MUEP) degree. This is an interdisciplinary, professional degree designed to prepare students for leadership roles in planning within both the public and private sectors and from local to international organizations. Two specializations are offered: community and urban development, and environmental planning. The community and urban development specialization provides students with knowledge and skills in areas such as housing, economic and community development, public policy analysis, transportation, land use planning, urban design, and historic preservation. The environmental planning specialization provides students with knowledge and skills in such areas as sustainable design, environmental resources, growth management, environmental policy analysis, open space design, and conservation. Faculty also participate in offering a collegewide, interdisciplinary PhD 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

[^8]a program in the School of Planning 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. 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," page 160 .
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 see a college academic advisor for the application form well in advance of the application deadline.

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 upperdivision in April of their sophomore year.
Upper-Division Application Deadlines. April 14, 2006. Urban Planning, and Housing and Urban Development application and optional portfolio documents due in the school office by 5 P.M.
June 1, 2006. 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 3, 2006. Acceptance notices are mailed no later than July 3.
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 for Urban Planning, and Housing and Urban Development. Deferrals are not allowed.

Admission Requirements. Each applicant is responsible for obtaining the following documents:

1. a statement of intent describing the applicant's specific background and interest in the major;
2. latest college-level transcript(s) (no high school transcripts are required);
3. one example of written work (e.g., a class paper); and
4. 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 BSD-HUD program should submit similar material from PCC.

## ADVISING

Advising for the lower-division curriculum is provided through a college academic advisor. Advising for the upperdivision curriculum is provided by the school's faculty and student coordinator.

## DEGREE REQUIREMENTS

## Urban Planning

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

Preprofessional program courses ...................................................... 60
Professional program courses ......................................................... 60
Total .120

General Studies Requirement. The following curriculum includes sufficient approved course work to fulfill the General Studies requirement. See "General Studies," page 92, 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 88, and "College Degree Requirements," page 136.

> Bachelor of Science in Planning, Major in Urban Planning Preprofessional Program Requirements*

## First Year

Fall
ENG 101 First-Year Composition.............................................. 3 or ENG 105 Advanced First-Year Composition (3)
PUP 100 Introduction to Environmental Design $H U, G, H$.......... 3
G electives..................................................................................... 6
MA elective .....  3
Total ..... 15
Spring
ENG 102 First-Year Composition .....  .3
or elective if ENG 105 is taken (3)
C elective .....  3 .....  3
Elective ..... 3
SB elective .....  3
SQ elective .....  4
Total ..... 16
Second Year
Fall
PUP 190 Sustainable Cities $H U / S B, G$ .....  3
PUP 200 or any HU elective .....  3
Electives .....  6
SB elective .....  3
Total ..... 15
Spring
PUP 301 Introduction to Urban Planning $L$ ..... 3 or elective
Electives ..... 6
Free elective .....  1
SQ or SG elective .....  4
Total ..... 14
Preprofessional program total ..... 60

* 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.
The first round of admission to the upper-division takesplace after the spring semester of the second year. The sec-ond round, if needed, takes place after the summer semester.
Bachelor of Science in Planning, Major in Urban Planning Professional Program Requirements
Third Year
Fall
PUP 301 Introduction to Urban Planning $L$ .....  3or Elective (if PUP 301 already taken)
PUP 361 Introductory Urban Planning Studio .....  4
PUP 424 Planning Methods .....  4
Approved statistics or quantitative reasoning $C S$. .....  3
Minimum total ..... 14
Spring
PUP 363 History of Planning .....  3
PUP 420 Theory of Urban Design $H U$ .....  3
PUP 436 City Structure and Planning. .....  3
Approved program electives* .....  6
Total ..... 15
Summer
PUP 484 Internship .....  3or PUP 484 Study Abroad (3)or PUP 485 International Field Studies inPlanning $G$ (3)or approved program elective* (3)Total$\overline{3}$


## Fourth Year

Fall
PUP 432 Planning and Development Control Law. ..... 3
PUP 433 Zoning Ordinances, Subdivision Regulations, and Building Codes ..... 3
PUP 442 Environmental Planning .....  3
PUP 452 Ethics and Theory in Planning $L$ .....  3
Approved program elective* .....  3
Total ..... 15
Spring
PUP 434 Urban Land Economics .....  .3
PUP 462 Advanced Urban Planning Studio. .....  4
PUP 510 Citizen Participation .....  3
Approved program elective* .....  3
Total ..... 13
Professional program total ..... 60
BSP minimum total ..... 120

* Approved program elective: Select a minimum of four classes (12 semester hours) from the approved SOP list
Housing and Urban Development
The Bachelor of Science in Design degree in Housingand Urban Development requires a total of 120 semesterhours.
Preprofessional program courses ..... 60
Professional program courses core ..... 60
Total ..... 120

General Studies Requirements. The following curriculum includes sufficient approved course work to fulfill the General Studies requirement. See "General Studies," page 92 , for requirements and a list of approved 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 88, and "College Degree Requirements," page 136.

## Bachelor of Science in Design, Major in Housing and Urban Development Preprofessional Program Requirements ${ }^{1}$

## First Year

## Fall

ENG 101 First-Year Composition............................................... 3 or ENG 105 Advanced First-Year Composition (3)
HUD 161 Graphic Communication. .....  3
Elective. .....  3
MA elective. .....  3
SB elective .....  3
Total ..... $\overline{15}$
Spring
ENG 102 First-Year Composition .....  .3
HUD 201 Introduction to Housing and Urban Development .....  3
HU, H elective ..... 3

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 natura science-quantitative / C cultural diversity in the United States / G global / H historical / See "General Studies," page 92.
SB elective .....  3
SQ elective .....  .4
Total ..... 16
Second Year
Fall
APH 200 Introduction to Architecture $H U, G$ .....  3
or any CAED history course (3) ${ }^{2}$
CON 252 Building Construction Methods, Materials, and Equipment ..... 3
Elective. .....  4
C elective ..... 3
CS statistics elective. .....  3
Total ..... 16
Spring
ACC 230 Uses of Accounting Information .....  3
Lelective ..... 3
SQ or SG elective .....  4
Upper-division HU elective .....
Total ..... 13
Preprofessional program total ..... 60
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 $H U, G$............... 3
APH 305 Contemporary Architecture $H U, H$ .....  3
APH 313 History of Architecture I $L / H U, G, H$ .....  3
APH 446 20th-Century Architecture I HU .....  3
DSC 101 Design Awareness $H U, G$ .....  3
GRA 111 Graphic Design History I HU .....  3
GRA 112 Graphic Design History II .....  3
IND 316 20th-Century Design I $\mathrm{HU}, \mathrm{H}$ .....  3
IND 317 20th-Century Design II $H U, H$ .....  3
INT 111 Interior Design Issues and Theories $H U$ .....  3
INT 310 History of Interior Design I $\mathrm{HU}, \mathrm{H}$ .....  3
INT 311 History of Interior Design II $H U, H$. .....  3
PUP 200 The Planned Environment $H U, H$ .....  .3
PUP 420 Theory of Urban Design $H U$ .....  3
Bachelor of Science in Design, Major in Housing and Urban Development Professional Program Requirements
Third Year
Fall
CON 383 Construction Estimating .....  4
HUD 301 Housing and Community Design and Developmen .....  3
HUD 361 Housing and Urban Development Studio I: Residential Design and Development .....  2
HUD 363 Housing and Urban Development Seminar I: Residential Design and Development .....  .3
REA elective course .....  3
Total ..... 15

## Spring

CON 389 Construction Cost Accounting and Control CS .....  3
HUD 302 Housing Production Process ..... 3
HUD 362 Housing and Urban Development Studio II: Community Design and Development. .....  2
HUD 364 Housing and Urban Development Seminar II: Community Design and Development. ..... 3
HUD 403 Advanced Topics in Housing and Urban Development .....  3
Elective .....  .3
Total ..... 17
Fourth Year
Fall
CON 495 Construction Planning and Scheduling CS .....  3
HUD 401 Assisted Housing .....  3
HUD 461 Housing and Urban Development Studio III: Comprehensive Housing Development Process .....  2
HUD 463 Housing and Urban Development Seminar III: Comprehensive Housing Development Process .....  3
PUP 452 Ethics and Theory in Planning $L$ .....  3
Total .....  .14
Spring
HUD 402 Community Revitalization: Problems and Strategies .....  3
HUD 462 Housing and Urban Development Studio IV: Neighborhood Revitalization Process .....  2
HUD 464 Housing and Urban Development Seminar IV: Neighborhood Revitalization Process .....  3
PUP 433 Zoning Ordinances, Subdivision Regulations, and Building Codes .....  3or PUP 432 Planning and DevelopmentControl Law (3)Elective 3
Total ..... 14
Professional program total .....  60
BSD-HUD minimum total ..... 120
INQUIRIES

For more information, contact a college academic advisor at 480/965-3584, send e-mail to caed.advising@asu.edu, or write

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ACADEMIC ADVISING/STUDENT SERVICES
    OFFICE
COLLEGE OF ARCHITECTURE AND
    ENVIRONMENTAL DESIGN
ARIZONA STATE UNIVERSITY
PO BOX 871905
TEMPE AZ 85287-1905
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[^9]
## HUD 301 Housing and Community Design and Development. (3)

 fallSingle- and multifamily 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 63.

## 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. Credit is allowed for only APH 100 or PUP 100.
General Studies: HU, G, H
PUP 161 Graphic Communication. (3)
fall or spring
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 190 Sustainable Cities. (3) fall
Introduces technological, social, and cultural principles and innovations for cities under the notion of sustainability and sustainable development within the global, regional, and local contexts. Lecture, online.
General Studies: HU/SB, G
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 3-D 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.

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 92.

## COLLEGE OF ARCHITECTURE AND ENVIRONMENTAL DESIGN

## PUP 361 Introductory Urban Planning Studio. (4)

fall
Basic site planning and design techniques. Collection and analysis of information and basic planning research. Report writing and public presentation skills. Studio. Fee. Prerequisite: upper-division BSP majors.
PUP 362 Urban Planning III. (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. Prerequisite: College of Architecture and Environmental Design junior standing.

## 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. Crosslisted as APH 414. Credit is allowed for only APH 414 or PUP 412. Prerequisite: College of Architecture and Environmental Design junior standing.
General Studies: H

## PUP 420 Theory of Urban Design. (3)

 springAnalyzes 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
Methods for urban planning research. Emphasizes research design, quantitative and qualitative methods, survey research, and data analysis. Studio. Pre- or corequisites: PUP 301; junior standing.
PUP 425 Urban Housing Analysis. (3)
fall
Methods for urban planning research. Emphasizes research design, quantitative and qualitative methods, survey research, and data analysis. Prerequisite: junior standing. Pre- or corequisite: PUP 301. 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)
fall and spring
Analyzes zoning ordinances, subdivision regulations, building codes, and other planning implementation techniques relative to local development. Prerequisite: upper-division BSP, HUD, or Environmental Planning major.
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. Prerequisites: PUP 301; junior standing.
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. Prerequisites: PUP 301; junior standing

## PUP 444 Preservation Planning. (3)

spring
History, theory, and principles of historic preservation. Emphasizes legal framework and methods practiced. Prerequisite: junior standing.
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: junior 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 IV. (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 Advanced Urban Planning Studio. (4)

spring
Comprehensive planning. Synthesis of complex data- and communitybased analyses. Advanced report writing and public presentation skills. Studio. Fee. Prerequisite: upper-division BSP. Prerequisite with a grade of " C " or higher: PUP 361.
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. Topics may include the following:

- Study Abroad. (3)

Prerequisite: school major or instructor approval.
PUP 485 International Field Studies in Planning. (1-12)
summer
Organized field study of planning in specified international locations. May be repeated for credit with school approval. Study abroad, field trip. Cross-listed as PLA 485. Credit is allowed for only PLA 485 or PUP 485.
General Studies: $G$ (3 hours must be taken to secure $G$ credit.)
PUP 494 Special Topics. (1-4)
fall and spring
Topics may include the following:

- Environmental Planning Economics. (3)

Prerequisite: junior standing.
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: upper-division BSP, HUD, or Master of Urban and Environmental Design major.
PUP 520 Planning Theories and Processes. (3)
fall
Reviews past and current theoretical developments related to socia change perspectives, the role and ethics of planners. Prerequisite: instructor approval.

## PUP 524 Planning Methods I. (3)

fall
Methods for urban planning research. Emphasizes research design, demographic analysis, forecasting, and survey research. Pre- or corequisite: PUP 501.
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.

## 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)

 springTheory 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 580 Practicum. (1-12)
fall, spring, summer
Topics may include the following:

- Capstone Studio/Workshop. (5)

Comprehensive planning workshop dealing with real community problems. Focuses on integrative real-world planning applications culminating in a professional report.

## 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


The College of Architecture and Environmental Design offers seven undergraduate degree programs.

John Buchholz photo

PUP 593 Applied Project. (1-12)
fall, spring, summer
Topics may include the following:

- Professional Project. (5)

Applies advanced planning techniques and methodology to a
specific, real-world planning issue, with a specified client.

## PUP 598 Special Topics. (1-4)

selected semesters
Topics may include the following:

- Transportation Planning and the Environment

PUP 599 Thesis. (5)
fall, spring, summer
Creative, scholarly work developed from independent inquiry involving a substantial body of original research. 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)

 fallLand 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 63.

[^10]
[^0]:    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 /

[^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 92.

[^2]:    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 92.

[^3]:    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 92.

[^4]:    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 natura science-quantitative / C cultural diversity in the United States / G global / H historical / See "General Studies," page 92.

[^5]:    ${ }^{1}$ 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 115. 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.

[^6]:    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 92.

[^7]:    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 natura science-quantitative / C cultural diversity in the United States / G global / H historical / See "General Studies," page 92.

[^8]:    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 92.

[^9]:    HOUSING AND URBAN DEVELOPMENT (HUD)

    ## HUD 161 Graphic Communication. (3)

    fall or spring
    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.

[^10]:    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 92.

