SCHOOL OF ARCHITECTURE AND PLANNING

The School of Architecture and Planning supports the education of future professionals in the practice of architecture and interior design. The graduate programs of the School of Architecture and Planning are directed to a terminal degree for qualification for professional licensure and architectural study for post-professionals and allied professionals. For its graduate programs, the School takes advantage of its unique location within downtown San Antonio, as well as South Texas and the borderlands of the western United States and Mexico.

- Master of Architecture - The Professional Program (p. 1)
- M.S. in Architecture - The Research Program (p. 2)
- M.S. in Urban and Regional Planning (p. 4)

Master of Architecture Degree – The Professional Program

The School of Architecture and Planning offers the Master of Architecture (M.Arch.) as a STEM-designated, first professional degree (terminal degree) for those intending to enter the professional practice of architecture. The M.Arch. is currently accredited by NAAB, the National Architectural Accrediting Board, the sole agency authorized to accredit U.S. professional degree programs in architecture. According to the NAAB 2009 Conditions for Accreditation:

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

Doctor of Architecture and Master of Architecture degree programs may require a preprofessional undergraduate degree in architecture for admission. However, the preprofessional degree is not, by itself, recognized as an accredited degree.

The University of Texas at San Antonio, School of Architecture and Planning offers the following NAAB-accredited degree programs:

- M.Arch. 2 (preprofessional degree + 52 graduate semester credit hours).
- M.Arch. 3 (non-preprofessional degree + (up to) 40 preparatory graduate semester credit hours + 52 graduate semester credit hours = (up to) 92 graduate semester credit hours).

The Master of Architecture 2 Program

The M.Arch. 2 program is designed for students who have earned architectural degrees (such as B.A., B.S., and B.E.D.) and consists of studies focused on developing the next generation of critical practitioners. This studio-based professional program is normally two years (52 semester credit hours) in length and is completed via an independently-derived, research-informed design project.

Master of Architecture 2 Program Admission Requirements

In addition to University-wide admission requirements, applicants must have completed a preprofessional bachelor's degree in architecture with a minimum grade point average of no less than 3.0 in the applicant’s last 60 hours of coursework (including all graduate and postgraduate coursework taken).

A complete application package consists of the following:

- Completed Application form
- Official transcripts from all universities attended
- Graduate Record Examination (GRE) scores
- Two (2) Letters of Recommendation
- Letter of Intent, that clearly and succinctly outlines the applicant’s goals for graduate study, including anticipated focus of study and impact on subsequent professional practice
- Portfolio, documenting proficiency in design, graphic communications, and other creative work
- Test of English as a Foreign Language (TOEFL) scores for international applicants whose first language is not English.

An application fee and all application materials must be sent directly to the UTSA Graduate School at One UTSA Circle, San Antonio, TX 78249. Please consult the College of Engineering and Integrated Design website (https://ceid.utsa.edu/graduate/) for applicable dates when the review of applications will begin and for more information about the College and its programs.

Master of Architecture 2 Degree Requirements

Degree candidates must complete 52 semester credit hours of coursework exclusive of coursework or other study required to remove admission deficiencies. Credit toward the program is earned only for grades of “A,” “B,” and “C.” Students must also maintain an overall grade point average of 3.0. Students who earn a grade of "CR" in ARC 6931 Master's Project PreparationMaster’s Project Preparation will satisfy the comprehensive examination requirement. Required coursework consists of:

A. 37 semester credit hours of the following required courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARC 5133</td>
<td>Professional Architectural Practice and Ethics</td>
</tr>
<tr>
<td>ARC 5173</td>
<td>Architectural Theory and Criticism</td>
</tr>
<tr>
<td>ARC 5193</td>
<td>Principles of Global Architecture: Place, Context &amp; Culture</td>
</tr>
<tr>
<td>ARC 5733</td>
<td>Advanced Building Technology and Sustainability</td>
</tr>
<tr>
<td>ARC 6126</td>
<td>Advanced Design Studio</td>
</tr>
<tr>
<td>ARC 6136</td>
<td>Advanced Topics Studio</td>
</tr>
<tr>
<td>ARC 6146</td>
<td>Advanced Technical Studio</td>
</tr>
<tr>
<td>ARC 6931</td>
<td>Master's Project Preparation</td>
</tr>
<tr>
<td>ARC 6996</td>
<td>Master's Project</td>
</tr>
</tbody>
</table>

B. One 3-semester-credit-hour elective, chosen from the following list of courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARC 5203</td>
<td>History and Theory of Preservation</td>
</tr>
<tr>
<td>ARC 5533</td>
<td>Contemporary Materials in Architecture and Design</td>
</tr>
<tr>
<td>ARC 5603</td>
<td>Advanced Seminar in Architectural History</td>
</tr>
<tr>
<td>ARC 5713</td>
<td>Environmental Architecture and Sustainability</td>
</tr>
<tr>
<td>ARC 5813</td>
<td>History and Theory of Urban Form</td>
</tr>
<tr>
<td>ARC 6823</td>
<td>Study Abroad: Advanced Architectural History/ Theory</td>
</tr>
</tbody>
</table>
The Master of Architecture 3 Program

The M.Arch. 3 program is designed for students with undergraduate degrees in fields other than architecture. This STEM-designated, professional program includes one year of preparatory studies (up to 40 semester credit hours) in preparation for the following two years (52 semester credit hours) of the Master of Architecture (M.Arch. 2) program sequence. These preparatory studies are required to be completed in full, as a condition of admission. We encourage students from all disciplines to consider this program as a means for entering the profession of architecture.

Master of Architecture 3 Program Admission Requirements

In addition to University-wide admission requirements, applicants must have completed a bachelor's degree with a minimum grade point average of no less than 3.0 in the applicant's last 60 semester credit hours (including all graduate and postgraduate coursework taken).

A complete application package consists of the following:

- Completed Application form
- Official transcripts from all universities attended
- Graduate Record Examination (GRE) scores
- Two (2) Letters of Recommendation
- Letter of Intent, that clearly and succinctly outlines the applicant's goals for graduate study, including anticipated focus of study and impact on subsequent professional practice
- Portfolio of work indicative of the applicant's preparedness for the study of architecture
- Test of English as a Foreign Language (TOEFL) scores for international applicants whose first language is not English

An application fee and all application materials must be sent directly to the UTSA Graduate School at One UTSA Circle, San Antonio, TX 78249. Please consult the College of Engineering and Integrated Design website (https://ceid.utsa.edu/graduate/) for applicable dates when the review of applications will begin and for more information about the College and its programs.

Master of Science Degree in Architecture

- The Research Program

The Master of Science in Architecture (M.S. Arch.) program is a STEM-designated, research-oriented program intended to support post-professional work, professional consulting, teaching, and future graduate studies. Within the degree, UTSA offers two formal concentrations (Historic Preservation and Sustainable Architecture) but students are able to focus on any topic related to faculty expertise. The program offers thesis and non-thesis options. Non-thesis option is recommended for students who are interested in "research in practice" topics.

M.S. Architecture Admission Requirements

In addition to University-wide admission requirements, applicants must have completed a bachelor's degree with a minimum grade point average of no less than 3.0 in the applicant's last 60 semester credit hours of undergraduate studies.

A complete application package consists of the following:

- Completed Application form
- Official transcripts from all universities attended
- Graduate Record Examination (GRE) scores
- Two (2) Letters of Recommendation
- Letter of Intent that clearly and succinctly outlines the applicant's goals for graduate study
- Thesis and non-thesis options. Non-thesis option is recommended for students who are interested in "research in practice" topics.
M.S. Architecture Degree Requirements

The minimum number of semester credit hours required for the Master of Science degree in Architecture, exclusive of coursework or other study required to remove admission deficiencies, is 33. Students may pursue a thesis or non-thesis option. Credit toward the program is earned only for grades of “A,” “B,” and “C.” Students must also maintain an overall grade point average of 3.0.

Degree candidates must complete 33 credit hours of coursework consisting of the following:

### Thesis Option

A. 9 semester credit hours of the following required courses, followed by Master’s Thesis:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARC 6323</td>
<td>Master's Research Preparation</td>
</tr>
<tr>
<td>ARC 6433</td>
<td>Research Methods</td>
</tr>
</tbody>
</table>

One of the required technology courses below:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARC 5543</td>
<td>Advanced Digital Design and Fabrication Technologies in Architecture</td>
</tr>
<tr>
<td>or</td>
<td>ARC 5733</td>
</tr>
<tr>
<td>or</td>
<td>ARC 6413</td>
</tr>
</tbody>
</table>

B. Candidates following the thesis option must complete 6 semester credit hours of ARC 6981, ARC 6982 or ARC 6983 Master’s Thesis (includes thesis defense).

C. Comprehensive Examination

Degree candidates in the thesis option are required to pass a comprehensive examination. Enrollment in ARC 6961 Comprehensive Examination is required only if the student is not registered for any other courses in the semester in which the comprehensive exam will be taken. Comprehensive examinations are given with approval of the Graduate Advisor and the thesis committee chair to students who:

- have satisfied all admission conditions
- are in good academic standing
- have approved research topic

D. Electives: 12 semester credit hours, to be selected in consultation with the assigned faculty mentor (first semester) or report committee chair (subsequent semesters).

### Non-Thesis Option (recommended for “research in practice” topics)

A. 9 semester credit hours of the following required courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARC 6323</td>
<td>Master's Research Preparation</td>
</tr>
<tr>
<td>ARC 6433</td>
<td>Research Methods</td>
</tr>
</tbody>
</table>

One of the required technology courses below:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARC 5543</td>
<td>Advanced Digital Design and Fabrication Technologies in Architecture</td>
</tr>
<tr>
<td>or</td>
<td>ARC 5733</td>
</tr>
<tr>
<td>or</td>
<td>ARC 6413</td>
</tr>
</tbody>
</table>

B. Candidates following the non-thesis option must complete 12 semester credit hours of the following course requirements:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARC 6943</td>
<td>Professional Internship (repeated for a total of 9 semester credit hours)</td>
</tr>
<tr>
<td>ARC 6923</td>
<td>Professional Report</td>
</tr>
</tbody>
</table>

C. Comprehensive Examination

Degree candidates are required to pass a comprehensive examination. Enrollment in ARC 6961 Comprehensive Examination is required only if the student is not registered for any other courses in the semester in which the comprehensive exam will be taken. Comprehensive examinations are given with approval of the Graduate Advisor and the report committee chair to students who:

- have satisfied all admission conditions
- are in good academic standing
- have approved research topic

D. Electives: 12 semester credit hours, to be selected in consultation with the assigned faculty mentor (first semester) or report committee chair (subsequent semesters).

### M.S. Architecture Degree Concentrations

#### M.S. Architecture Degree - Concentration in Historic Preservation

A. 12 semester credit hours of the following required courses, including 6 semester credit hours of Master’s Thesis:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARC 6323</td>
<td>Master's Research Preparation</td>
</tr>
<tr>
<td>ARC 6433</td>
<td>Research Methods</td>
</tr>
<tr>
<td>ARC 6983</td>
<td>Master's Thesis</td>
</tr>
</tbody>
</table>

B. Comprehensive Examination

C. Required Concentration Electives (9 semester credit hours):

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARC 5203</td>
<td>History and Theory of Preservation</td>
</tr>
<tr>
<td>ARC 5423</td>
<td>Preservation Laws and Environmental Policy</td>
</tr>
<tr>
<td>ARC 6413</td>
<td>Sustainable Preservation Technology</td>
</tr>
</tbody>
</table>

D. Prescribed electives (6 semester credit hours) chosen from the following list:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARC 5233</td>
<td>Architectural Surveys and Measured Drawings</td>
</tr>
<tr>
<td>ARC 5403</td>
<td>Historic Preservation Seminar</td>
</tr>
<tr>
<td>ARC 5613</td>
<td>American Architecture</td>
</tr>
<tr>
<td>ARC 6003</td>
<td>Morphology of the Architecture of the Southwest</td>
</tr>
<tr>
<td>ARC 6423</td>
<td>Architectural Conservation Theory</td>
</tr>
</tbody>
</table>

### M.S. Architecture Degree Concentration in Sustainable Architecture

A. 12 semester credit hours of the following required courses, including 6 semester credit hours of Master’s Thesis:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARC 6323</td>
<td>Master's Research Preparation</td>
</tr>
<tr>
<td>ARC 6433</td>
<td>Research Methods</td>
</tr>
<tr>
<td>ARC 6983</td>
<td>Master's Thesis</td>
</tr>
</tbody>
</table>

B. Comprehensive Examination

C. Required Concentration Electives (6 semester credit hours):

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARC 5713</td>
<td>Environmental Architecture and Sustainability</td>
</tr>
<tr>
<td>ARC 5733</td>
<td>Advanced Building Technology and Sustainability</td>
</tr>
</tbody>
</table>

D. Prescribed electives (6 semester credit hours) chosen from the following list:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARC 5723</td>
<td>Applications in Sustainable Design</td>
</tr>
<tr>
<td>ARC 5743</td>
<td>Building Performance Modeling and Simulation</td>
</tr>
<tr>
<td>ARC 5753</td>
<td>Advanced Daylighting Design and Analysis</td>
</tr>
<tr>
<td>ARC 5763</td>
<td>Post-Occupancy Evaluation of Buildings</td>
</tr>
<tr>
<td>ARC 5773</td>
<td>Environmental Life Cycle Assessment of Buildings</td>
</tr>
</tbody>
</table>

E. Electives. 9 semester credit hours, to be selected in consultation with Thesis Committee chair.
**Master of Science Degree in Urban and Regional Planning**

The Master of Science degree in Urban and Regional Planning is designed to prepare students for leadership roles and careers in the public and private sectors planning and designing communities and regions. The degree is developed through engaged learning experiences. Emphasis is placed upon developing research and analytic communication skills in the classroom, with professional practice skills developed through engaged learning experiences.

**Admission Requirements**

Applicants must satisfy University-wide graduate admission requirements. A complete application package consists of the following:

- Completed Application form
- Official transcripts from all universities attended
- Graduate Record Examination (GRE) scores required if undergraduate GPA is below 3.00 out of 4.00
- Two Letters of Recommendation addressing the applicant’s academic and/or professional skills
- Letter of Intent, outlining the applicant’s reasons for pursuing the Master of Science degree in Urban and Regional Planning and career plans
- Test of English as a Foreign Language (TOEFL) scores for international applicants whose first language is not English

Applicants may be admitted as unconditional or conditional, degree-seeking graduate students, or as special graduate students. Admission as a special graduate (non-degree-seeking) student does not guarantee subsequent admission as a degree-seeking student; such students must reapply for degree-seeking status. An application fee and all application materials must be sent directly to the UTSA Graduate School at One UTSA Circle, San Antonio, TX 78249. Please consult the College of Engineering and Integrated Design website (https://ceid.utsa.edu/) for applicable dates when the review of applications will begin and for more information about the College and its programs.

**Degree Requirements**

The minimum number of semester credit hours required for the Master of Science degree in Urban and Regional Planning, exclusive of coursework or other study required to remove deficiencies is 48. Students may pursue a thesis or non-thesis option.

Degree candidates must complete 48 semester credit hours of coursework consisting of the following requirements:

**A. 27 semester credit hours of the following required courses:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>URP 5333</td>
<td>Introduction to Urban and Regional Planning</td>
</tr>
<tr>
<td>URP 5343</td>
<td>History and Theory of Urban and Regional Planning</td>
</tr>
<tr>
<td>URP 5363</td>
<td>Urban Planning Methods I</td>
</tr>
<tr>
<td>URP 5393</td>
<td>Urban Planning Methods II</td>
</tr>
<tr>
<td>or URP 5513</td>
<td>Public Participation and Qualitative Analysis</td>
</tr>
<tr>
<td>URP 5413</td>
<td>Planning Practice and Ethics</td>
</tr>
<tr>
<td>URP 5453</td>
<td>Urban and Regional Sustainability</td>
</tr>
<tr>
<td>URP 5483</td>
<td>Planning Workshop</td>
</tr>
</tbody>
</table>

**B. 15 semester credit hours of electives, chosen in consultation with and approved by the Urban and Regional Planning Graduate Advisor:**

To satisfy the major area coursework for the urban policy specialization, a student must complete 12 semester credit hours from the following public administration courses from the Department of Public Administration in the College for Health, Community and Policy:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PAD 5103</td>
<td>Planning and Land Use Law</td>
</tr>
<tr>
<td>PAD 5513</td>
<td>Urban and Regional Economic Development</td>
</tr>
</tbody>
</table>

To satisfy the major area coursework for the urban design specialization, a student must complete 12 semester credit hours from the following courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>URP 5233</td>
<td>GIS for Urban Studies</td>
</tr>
<tr>
<td>URP 5373</td>
<td>Site Planning and Design</td>
</tr>
<tr>
<td>URP 5423</td>
<td>Graphic Communication for Planners</td>
</tr>
<tr>
<td>URP 6976</td>
<td>Special Topics (Urban Design Studio)</td>
</tr>
<tr>
<td>ARC 5163</td>
<td>Current Issues and Topics in Contemporary Architecture (content approved by GAR)</td>
</tr>
<tr>
<td>ARC 5713</td>
<td>Environmental Architecture and Sustainability</td>
</tr>
<tr>
<td>ARC 6453</td>
<td>Cultural Landscapes and Urban Conservation</td>
</tr>
<tr>
<td>ARC 6513</td>
<td>Sustainable Tourism Development</td>
</tr>
<tr>
<td>ARC 6973</td>
<td>Special Topics (content approved by GAR)</td>
</tr>
</tbody>
</table>

**C. 6 semester credit hours of the following “capstone” coursework consisting of either the Thesis or Non-Thesis Option described below:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARC 6973</td>
<td>Special Topics (content approved by GAR)</td>
</tr>
</tbody>
</table>
Thesis Option Requirements: All candidates for the Master of Science degree in Urban and Regional Planning with a thesis option must complete 6 semester credit hours of URP 6983 Master’s Thesis (includes defense/seminar presentation).

Non-Thesis Option Requirements: All candidates for the Master of Science degree in Urban and Regional Planning with a non-thesis option must complete 6 semester credit hours from the following: URP 6933 Planning Professional Report, and either URP 6943 Professional Internship, or an additional 3 hours of URP 5483 Planning Workshop.

D. Degree candidates in the thesis option and non-thesis option are required to pass a written comprehensive examination, and enroll in URP 6961 Comprehensive Examination if no other courses are being taken that term.

Total Credit Hours 48

- Graduate Certificate in High-Performance Design and Sustainability (p. 5)
- Graduate Certificate in Historic Preservation (p. 5)
- Graduate Certificate in Urban and Regional Planning (p. 6)

**Graduate Certificate in High-Performance Design and Sustainability**

The negative impacts of human activities on the environment are a major challenge threatening the survival of humans and other species, and the built environment are a key contributor to environmental impacts. A certificate in High-Performance Design and Sustainability provides students with the theoretical knowledge and applied skills to understand how buildings impact the environment and how building performance, in terms of operational energy, daylighting, occupant comfort/health, embodied energy, water conservation and reuse, and other relevant and emerging issues (such as biophilia) can be predicted, analyzed and used to improve buildings.

The Certificate in High-Performance Design and Sustainability enables students the opportunity to gain understanding and skills in various aspects of sustainability and high environmental performance in the built environment. The certificate provides students with an understanding of the theoretical underpinnings of high-performance design and sustainability and prepares them for further graduate studies in this area. It also provides skills and knowledge complimentary to the pursuit of a professional career in the design and analysis of high-performance buildings and sustainability. The program is located within the Department of Architecture, and may be most effective for students with skills commensurate with a degree or experience in architecture for the most effective educational experience. However, other skills may be considered as relevant to the certificate (to be determined in consultation with the certificate coordinator/GAR) and it remains open to students from a variety of backgrounds. Students from different backgrounds may be required to take preparatory courses to provide them with the level of knowledge and expertise needed for the certificate. The certificate will not be subject to licensure and/or accreditation standards, but will remain current to expected standards of knowledge and skill expected in the profession.

**Admission Requirements**

New and existing graduate students in “good standing” shall declare the intent to seek the Certificate by requesting permission to enter and complete the program. Students not currently enrolled in a graduate program may apply according to UTSA admission requirements for certificate programs as a special (non-degree-seeking) graduate student. Special graduate student applicants are required to submit a personal statement. The Certificate Program Coordinator may determine that a student requires prerequisite background courses to adequately prepare for the courses of the Graduate Certificate Program.

**Certificate Program Requirements**

The Certificate requires 15 semester credit hours of coursework.

Two courses are required with an additional 9 semester credit hours of coursework to be selected from the list of approved courses or other courses approved in consultation with the Certificate Program Coordinator. All requirements must be completed within a six-year period. Courses taken for the Graduate Certificate in High-performance Design and Sustainability can be applied toward other graduate degree programs such as the Master of Architecture and the Master of Science in Architecture degrees. Students will be advised by the High-Performance Design and Sustainability Certificate Program Coordinator.

**A. 6 semester credit hours of required courses:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARC 5713</td>
<td>Environmental Architecture and Sustainability</td>
</tr>
<tr>
<td>ARC 5733</td>
<td>Advanced Building Technology and Sustainability</td>
</tr>
</tbody>
</table>

**B. 6 to 9 semester credit hours of elective courses selected from the following list:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARC 5723</td>
<td>Applications in Sustainable Design</td>
</tr>
<tr>
<td>ARC 5743</td>
<td>Building Performance Modeling and Simulation</td>
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<tr>
<td>ARC 5753</td>
<td>Advanced Daylighting Design and Analysis</td>
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<tr>
<td>ARC 5763</td>
<td>Post-Occupancy Evaluation of Buildings</td>
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<tr>
<td>ARC 5773</td>
<td>Environmental Life Cycle Assessment of Buildings</td>
</tr>
<tr>
<td>ARC 5163</td>
<td>Current Issues and Topics in Contemporary Architecture</td>
</tr>
<tr>
<td>ARC 6136</td>
<td>Advanced Topics Studio</td>
</tr>
<tr>
<td>ARC 6973</td>
<td>Special Topics</td>
</tr>
</tbody>
</table>

**C. 0 to 3 semester credit hours of approved elective courses selected from the following list:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARC 6413</td>
<td>Sustainable Preservation Technology</td>
</tr>
<tr>
<td>ARC 6513</td>
<td>Sustainable Tourism Development</td>
</tr>
<tr>
<td>CE 5643</td>
<td>Sustainable Energy Systems</td>
</tr>
<tr>
<td>CSM 5243</td>
<td>Sustainable Construction and Delivery</td>
</tr>
<tr>
<td>ES 5153</td>
<td>Urban Environmental Planning and Sustainability</td>
</tr>
<tr>
<td>ES 6053</td>
<td>Sustainability and Renewable Energy</td>
</tr>
<tr>
<td>GRG 5563</td>
<td>Applied Sustainability</td>
</tr>
<tr>
<td>URP 5453</td>
<td>Urban and Regional Sustainability</td>
</tr>
</tbody>
</table>

**Total Credit Hours 15**

**Graduate Certificate in Historic Preservation**

Historic Preservation is a process of design for continuity and the management of change within an existing historic context. The Graduate Certificate in Historic Preservation offers specialized education in historic preservation design, technology, planning and management through graduate-level courses.

The Graduate Certificate in Historic Preservation enables graduate students from multiple program areas to receive tangible confirmation
of skills and comprehension in historic preservation. A Graduate Certificate in Historic Preservation offers students from any discipline the opportunity to take historic preservation classes with rationale and purpose. Certificate holders can gain employment advantages in fields related to archaeology, architecture, business, engineering, geography, historic preservation, history, interior design, landscape architecture, law, museum studies, political science, public policy, social science and urban and regional planning. Many government jobs within federal, state, and local agencies specifically require or desire graduate-level training in historic preservation. All states, many counties, and most large cities have nonprofit organizations and societies devoted to historic preservation. Within the construction industry there is currently a huge trend upwards in adaptive use of existing buildings, especially within previously abandoned downtown areas. There is widespread demand for professionals with specialized training in historic preservation. Interested individuals should contact the Historic Preservation Certificate Program Coordinator within the College of Architecture, Construction and Planning.

Admission Requirements
New and existing graduate students in “good standing” shall declare the intent to seek the Certificate by requesting permission to enter and complete the program. Students not currently enrolled in a graduate program may apply according to UTSA admission requirements for certificate programs as a special (non-degree-seeking) graduate student. Special graduate student applicants are required to submit a personal statement, and 2 letters of recommendation. The Certificate Program Coordinator may determine that a student requires prerequisite background courses to adequately prepare for the courses of the Graduate Certificate Program.

Certificate Program Requirements
The Certificate requires 15 semester credit hours of coursework. Two courses are required with an additional 9 semester credit hours of coursework to be selected from the list of approved courses or other courses approved in consultation with the Certificate Program Coordinator. All requirements must be completed within a six-year period. Courses taken for the Graduate Certificate in Historic Preservation can be applied toward other graduate degree programs such as the Master of Architecture and the Master of Science in Architecture degrees. Students will be advised by the Historic Preservation Certificate Program Coordinator/Advisor.

A. 6 semester credit hours of required courses: 6

ARC 5203 History and Theory of Preservation
ARC 6413 Sustainable Preservation Technology
ARC 6443 World Heritage Management

B. 3 to 6 semester credit hours of approved elective courses selected from the following list (or any additional elective approved in consultation with the Certificate Program Coordinator): 3-6

ARC 5403 Historic Preservation Seminar
ARC 5423 Preservation Laws and Environmental Policy
ARC 5463 Heritage Resilience, Adaptation and Mitigation
ARC 5813 History and Theory of Urban Form
ARC 6003 Morphology of the Architecture of the Southwest
ARC 6413 Sustainable Preservation Technology (if not taken to meet requirement in section A)
ARC 6013 Theories and Philosophies of Regionalism
ARC 6423 Architectural Conservation Theory

Graduate Certificate in Urban and Regional Planning

The purpose of the professional certificate in Urban and Regional Planning is to provide students with an introductory understanding of the historical, social, international, and physical context of comprehensive land use planning and sustainable urbanism.

The Certificate in Urban and Regional Planning is a 15-semester-credit-hour program. Degree-seeking or special graduate students from any discipline at UTSA are allowed to complete the Certificate in Urban and Regional Planning (URP) program. Students will be advised by the URP Certificate Program Coordinator/Advisor. Interested individuals should contact the Urban and Regional Planning Certificate Program Coordinator within the College of Architecture, Construction and Planning.

Admission Requirements
New and existing graduate students in “good standing” shall declare the intent to seek the Certificate by requesting permission to enter and complete the program. Students not currently enrolled in a graduate program may apply according to UTSA admission requirements for certificate programs (see Certificate Program Regulations in this catalog). The Certificate Program Coordinator may determine that a student requires prerequisite background courses to adequately prepare for the courses of the Graduate Certificate Program.

Certificate Program Requirements
The Urban and Regional Planning Certificate curriculum consists of 9 semester credit hours of required planning courses and 6 elective hours. A minimum of one-half of all credits counted towards the certificate must be taken in Urban and Regional Planning. Courses taken for the Graduate Certificate in Urban and Regional Planning can be applied toward the Master of Science in Urban and Regional Planning, Master of Architecture, and Master of Science in Architecture degrees. Students will be advised by the Urban and Regional Planning Certificate Program Coordinator/Advisor.

A. 6 semester credit hours of the following required courses: 6

URP 5333 Introduction to Urban and Regional Planning
URP 5343 History and Theory of Urban and Regional Planning

or PAD 5103 Planning and Land Use Law

Total Credit Hours 15
ARCHITECTURAL DESIGN

Architecture (ARC) Courses

ARC 5003. Architectural Principles. (2-2) 3 Credit Hours.
Prerequisite: Enrollment in the Master of Architecture 3 program. An introduction to the basic principles and skills associated with architectural design. Differential Tuition: $165.

ARC 5011. Introduction to Architecture and Design. (1-0) 1 Credit Hour.
Prerequisite: Enrollment in the Master of Architecture Degree 3 program. A lecture course introducing ideas and concepts associated with architecture and design. Differential Tuition: $55.

ARC 5133. Professional Architectural Practice and Ethics. (3-0) 3 Credit Hours.
Prerequisite: ARC 6146. A study of national, international, and legal business practices and conventions relating to the building industry. Course material considers project delivery options, construction methodologies and corresponding administration systems, liability, contract documents, and ethics as practices that inform the professional practice of architecture. (Formerly titled “Professional Practice and Construction in a Global Setting”.) Differential Tuition: $165.

ARC 5156. Introductory Design Studio I. (0-14) 6 Credit Hours.
Prerequisite: Enrollment in the Master of Architecture 3 program. Architectural design as a theoretically informed and creative process. Provides students the opportunity to acquire fundamental design skills for the creative and practical design of architectural environments. Projects consider spatial experience, contextual response, building form and structure, and the development of representational skills. (Formerly ARC 5196. Credit cannot be earned for both ARC 5156 and ARC 5196.) Differential Tuition: $330.

ARC 5163. Current Issues and Topics in Contemporary Architecture. (3-0) 3 Credit Hours.
A critical survey of the leading issues, theories, writings, projects, and built works of architecture over the past 20 years. May be repeated for credit once when topics vary. Differential Tuition: $165.

ARC 5166. Introductory Design Studio II. (0-14) 6 Credit Hours.
Prerequisites: ARC 5156, ARC 5913, ARC 5923, ARC 5943, and enrollment in the Master of Architecture Degree 3 program. Provides students the opportunity to acquire design skills in the application of building technology and material use through the consideration of building structure and envelope. Projects consider spatial experience, contextual response, building performance, structure and detailing. Consideration is given to the political, social, ecological, economical, and/or technological context that informs the work as well as the diverse social and spatial patterns, values, and needs of those who occupy and use buildings. Differential Tuition: $165.

ARC 5203. History and Theory of Preservation. (3-0) 3 Credit Hours.
An introduction to the history, philosophy, methodologies, and practices of historic preservation and restoration. Differential Tuition: $165.

ARC 5223. Architectural Surveys and Measured Drawings. (3-0) 3 Credit Hours.
A survey of documentation and interpretation of sites and buildings and graphic recording techniques. Differential Tuition: $165.

ARC 5233. Architectural Surveys and Measured Drawings. (3-0) 3 Credit Hours.
A critical survey of the leading issues, theories, writings, projects, and built works of architecture over the past 20 years. May be repeated for credit once when topics vary. Differential Tuition: $165.

ARC 5243. Preservation Laws and Environmental Policy. (3-0) 3 Credit Hours.
A survey of the laws and regulations that affect preservation of the built environment nationally, regionally, and locally. Includes considerations of fundamentals of legal protection for and regulation of historic cultural resources in light of contemporary attitudes toward the historic environment, and the economic bases of the use of historic buildings and sites examined in terms of contemporary social and cultural attitudes that determine effective strategies of preservation action. (Formerly titled Legal and Economic Aspects of Preservation.) Differential Tuition: $165.

ARC 5244. Structural Analysis of Historical Buildings. (3-0) 3 Credit Hours.
Online studies on visual inspection methodology of historic structures. Diagnostic methods of investigation of material deterioration due to external causes and its effects on the overall structure. Analysis criteria and data collection on historic structural shapes. Differential Tuition: $165.

ARC 5403. Historic Preservation Seminar. (3-0) 3 Credit Hours.
An advanced study of selected topics in architecture, design, preservation, and planning. May be repeated once for credit when topics vary. Differential Tuition: $165.

ARC 5423. Heritage Resilience, Adaptation and Mitigation. (3-0) 3 Credit Hours.
A survey of the laws and regulations that affect preservation of the built environment nationally, regionally, and locally. Includes considerations of fundamentals of legal protection for and regulation of historic cultural resources in light of contemporary attitudes toward the historic environment, and the economic bases of the use of historic buildings and sites examined in terms of contemporary social and cultural attitudes that determine effective strategies of preservation action. (Formerly titled Legal and Economic Aspects of Preservation.) Differential Tuition: $165.

ARC 5443. Structural Analysis of Historical Buildings. (3-0) 3 Credit Hours.
Online studies on visual inspection methodology of historic structures. Diagnostic methods of investigation of material deterioration due to external causes and its effects on the overall structure. Analysis criteria and data collection on historic structural shapes. Differential Tuition: $165.

ARC 5463. Heritage Resilience, Adaptation and Mitigation. (3-0) 3 Credit Hours.
Advanced study and critical analysis of risk management planning tools for heritage sites including best practices for mitigation, adaptation, and preparedness in the face of climate change and disaster risks. The course also addresses the role of heritage in sustainable development. Differential Tuition: $165.

ARC 5483. GIS for Heritage Planning. (3-0) 3 Credit Hours.
Course provides the opportunity to acquire an understanding of the principles of spatial analysis using geographic information systems (GIS). Emphasis is placed on analyzing cultural resources and urban and cultural landscapes with GIS tools. Topics may include mapping density and changes over time, cultural mapping, etc. Differential Tuition: $165.
ARC 5533. Contemporary Materials in Architecture and Design. (1-4) 3 Credit Hours.
A survey and examination of contemporary materials from multiple perspectives. Includes consideration of the characteristics and applications of existing, new, and emerging materials. Includes design project. Differential Tuition: $165.

ARC 5543. Advanced Digital Design and Fabrication Technologies in Architecture. (3-0) 3 Credit Hours.
An in-depth examination of contemporary digital design and fabrication technologies in architecture and other design disciplines. Differential Tuition: $165.

ARC 5603. Advanced Seminar in Architectural History. (3-0) 3 Credit Hours.
An in-depth study or survey investigating selected topics in architectural history. May be repeated once for credit, when topics vary. Differential Tuition: $165.

ARC 5613. American Architecture. (3-0) 3 Credit Hours.
A survey of the development of the architecture of the United States from the earliest human settlements to the present. Differential Tuition: $165.

ARC 5623. History of Modern Architecture. (3-0) 3 Credit Hours.
Prerequisite: Enrollment in the Master of Architecture 3 program. Study of the social, aesthetic, theoretical, technical, cultural, Western and non-Western, and professional forces that form, shape, and constitute architecture of the modern era. Differential Tuition: $165.

ARC 5643. Modern Architecture of Mexico. (3-0) 3 Credit Hours.
A survey of the architecture and urbanism of Mexico from Independence in 1821 to the present. Differential Tuition: $165.

ARC 5653. Pre-Columbian and Colonial Architecture of Mexico. (3-0) 3 Credit Hours.
A survey of the architecture and urbanism of Mexico during the pre-Columbian and Colonial eras. Differential Tuition: $165.

ARC 5663. The Architecture and Cities of Northern Mexico. (3-0) 3 Credit Hours.
A detailed survey of the architecture and urbanism of the border states of Northern Mexico, focusing on the modern era from 1821 to the present. Differential Tuition: $165.

ARC 5713. Environmental Architecture and Sustainability. (3-0) 3 Credit Hours.
A study of history and theory of environmentally sustainable design. Includes the review of the general discourse of sustainability and consideration of the tools and techniques employed to produce sustainable architectural environments. (Formerly ARC 5153. Credit cannot be earned for both ARC 5713 and ARC 5153.) Differential Tuition: $165.

ARC 5723. Applications in Sustainable Design. (3-0) 3 Credit Hours.
An introduction to the integration of environmental performance criteria in architectural design. Includes the application of simulation methods, design decision support tools, rating systems (e.g., LEED), and consideration of building energy consumption patterns, conservation strategies, solar shading, solar access, integration of electric and daylight, and the life cycle analysis of materials and systems. Differential Tuition: $165.

ARC 5733. Advanced Building Technology and Sustainability. (3-0) 3 Credit Hours.
An advanced study of building technology, sustainability, and building performance. Includes consideration of sustainable techniques, technologies, building enclosure, and environmental systems for new and existing buildings. Addresses issues of systems integration and performance optimization. (Credit cannot be earned for both ARC 5513 and ARC 5733.) Differential Tuition: $165.

ARC 5743. Building Performance Modeling and Simulation. (3-0) 3 Credit Hours.
An introduction to the integration of building performance modeling and simulation into the design process to improve building performance in new and existing buildings. Includes consideration of building energy consumption patterns, conservation strategies, solar shading, solar access, and integration of electric lighting and daylighting. Differential Tuition: $165.

ARC 5753. Advanced Daylighting Design and Analysis. (3-0) 3 Credit Hours.
A study of the design, analysis methods, and technologies of architectural daylighting. Includes issues of the visual environment, daylight availability, lighting and energy use, lighting and thermal comfort, and the integration of electric lighting and daylighting. Differential Tuition: $165.

ARC 5763. Post-Occupancy Evaluation of Buildings. (3-0) 3 Credit Hours.

ARC 5773. Environmental Life Cycle Assessment of Buildings. (3-0) 3 Credit Hours.

ARC 5783. Architectural Lighting Design. (3-0) 3 Credit Hours.
Provides students with the opportunity to obtain in-depth knowledge of architectural lighting systems, fundamental scientific principles governing light in the built environment, the technologies, materials, and strategies for control of light in buildings, and basic methods of analysis. Differential Tuition: $165.

ARC 5813. History and Theory of Urban Form. (3-0) 3 Credit Hours.
Considers the origins and characteristics of cities, their current condition, and emerging theories of urban design. Differential Tuition: $165.

ARC 5913. Introduction to Construction Materials and Concepts. (3-0) 3 Credit Hours.
Prerequisite: Enrollment in the Master of Architecture 3 program. Introduction to concepts and skills fundamental to structures, construction, building enclosure, sustainability, and interior environments, along with the analysis and selection of materials, components, and assemblies. Provides an introduction to the historical role of materials in architectural and interior design. Differential Tuition: $165.
ARC 5923. Principles of Structures. (3-0) 3 Credit Hours.
Prerequisite: Enrollment in the Master of Architecture 3 program.
Introduction to architectural structures including the principles and systems of structural materials that consider the spatial, structural, sustainable, and aesthetic qualities possible in the articulation of structure through architectural design. (Formerly titled "Introduction to Structures I") Differential Tuition: $165.

ARC 5933. Structures. (2-2) 3 Credit Hours.
Prerequisites: ARC 5923 and enrollment in the Master of Architecture 3 program. Continued introduction to architectural structures that considers the physical principles that govern classical statics and strength of materials, the graphical and mathematical design of structural systems, and the role of structural articulation in the design of buildings. (Formerly titled "Introduction to Structures II") Differential Tuition: $165.

ARC 5943. Principles of Environmental Systems. (3-0) 3 Credit Hours.
Prerequisite: Enrollment in the Master of Architecture 3 program. Environmentally responsive design of buildings and the natural and artificial systems that support them, including heating, ventilation, cooling, water, and waste management. (Formerly titled "Introduction to Environmental Systems I") Differential Tuition: $165.

ARC 5953. Environmental Systems. (2-2) 3 Credit Hours.
Prerequisites: ARC 5943 and enrollment in the Master of Architecture 3 program. Light and sound as design considerations in building design including the natural and artificial systems that support them. Course deals with illumination, electrical design, and acoustics. (Formerly titled "Introduction to Environmental Systems II") Differential Tuition: $165.

ARC 6003. Morphology of the Architecture of the Southwest. (3-0) 3 Credit Hours.
An examination of environmental conditions, cultural traditions, social patterns, building conventions, and aesthetic intentions that have influenced the architecture and planning of communities of South Texas, the Southwest, and the North Mexican borderlands. (Formerly ARC 6123. Credit cannot be earned for both ARC 6003 and ARC 6123.) Differential Tuition: $165.

ARC 6013. Theories and Philosophies of Regionalism. (3-0) 3 Credit Hours.
A survey of the discourse of architectural regionalism. Includes consideration of regionalist theory and practice in the twentieth century, regional planning, critical regionalism, bioregionalism, sustainability, and issues such as modernity, globalization, cultural identity, authenticity, place, and tradition. (Formerly ARC 5213. Credit cannot be earned for both ARC 6013 and ARC 5213.) Differential Tuition: $165.

ARC 6126. Advanced Design Studio. (0-14) 6 Credit Hours.
Prerequisites: Completion of, or concurrent enrollment in, ARC 5173 and ARC 5733. An introduction to advanced architectural design, including the role of research, program preparation, and technological integration in architectural design. Differential Tuition: $330.

ARC 6136. Advanced Topics Studio. (0-14) 6 Credit Hours.
Prerequisite: ARC 6126. An advanced architectural design studio, which allows faculty and students to explore a range of architecture-related topics in a studio setting. Content varies. (Formerly titled "Advanced Design Studio II") Differential Tuition: $330.

ARC 6146. Advanced Technical Studio. (0-14) 6 Credit Hours.
Prerequisites: ARC 6136, graduate standing and consent of instructor. An advanced architectural design studio, which includes the integration of building materials, services, and systems, technical documentation and comprehensive design. (Formerly titled "Advanced Design Studio III") Differential Tuition: $330.

ARC 6243. Advanced Design Visualization. (0-6) 3 Credit Hours.
Advanced exploration of graphic processes and techniques utilized in the design of the built environment. Differential Tuition: $165.

ARC 6223. Master's Research Preparation. (3-0) 3 Credit Hours.
Prerequisite: Consent of instructor. An advanced study aimed at supporting the development of a Master's Thesis or Professional Report for the Master of Science in Architecture degree. This course builds on scholarly documentation, research analysis and contemporary research practice issues. Differential Tuition: $165.

ARC 6413. Sustainable Preservation Technology. (1-4) 3 Credit Hours.
A survey of techniques of preservation: methods of analysis, history of materials, and technology used in old buildings. Includes emphasis on buildings as integrated sets of subsystems and how these are affected by the processes of material deterioration, conservation, and techniques of intervention. Differential Tuition: $165.

ARC 6423. Architectural Conservation Theory. (3-0) 3 Credit Hours.
An advanced study and critical analysis of current design theory and techniques for conservation of historic sites. Differential Tuition: $165.

ARC 6433. Research Methods. (3-0) 3 Credit Hours.
An examination of theories and methods in architectural research. Includes a critical review of theoretical perspectives and considers a range of research methods and techniques used in architectural research. (Formerly COA 6433. Credit cannot be earned for both ARC 6433 and COA 6433.) Differential Tuition: $165.

ARC 6443. World Heritage Management. (3-0) 3 Credit Hours.
Principles and practices for managing cultural properties with a focus on World Heritage properties. Includes surveys of international documents applicable to the management of cultural heritage sites globally and study of documentation, planning, community engagement, public interpretation, design/conservation treatments, and universal values, as well as UNESCO World Heritage process and purpose. Differential Tuition: $165.

ARC 6453. Cultural Landscapes and Urban Conservation. (3-0) 3 Credit Hours.
Advanced study and critical analysis of contemporary design theory, methods and approaches for conservation of cultural landscapes, of historic cities and historic urban landscapes. Differential Tuition: $165.

ARC 6463. Heritage Tourism Planning and Design. (3-0) 3 Credit Hours.
Course introduces the theory, practice and current issues of cultural heritage tourism planning and design as a socio-cultural phenomenon. Topics include motives and behaviors of heritage tourists, resources and attractions, plus public interpretation and management policy. Explores connection of cultural heritage tourism to sustainable community development. Differential Tuition: $165.

ARC 6473. Material Assessment and Conservation. (3-0) 3 Credit Hours.
Prerequisite: Consent of instructor. An in-depth study of sustainable preservation technology to include building material and finishes in construction, use, application and installation techniques, methods of evaluation and study of material deterioration, current practices for remediation and replacement. Differential Tuition: $165.
ARC 6493. Architectural Transformations. (3-0) 3 Credit Hours.
Seminar course that considers design strategies and approaches in the
redevelopment and redesign of existing buildings and landscapes. Covers
topics such as adaptive use, and new design within historic contexts.
Differential Tuition: $165.

ARC 6513. Sustainable Tourism Development. (3-0) 3 Credit Hours.
An advanced study of the environmental, economic, and socio-cultural
aspects of sustainable tourism development, and the basic concepts and
theories of sustainability in tourist destinations. Topics include sense of
place, identity, community participation, sustainable design of city spaces
and tourist places. Emphasize on sustainable tourism potentials, tourism
futures and marketing tourism destinations. Differential Tuition: $165.

ARC 6523. Architecture, Spectacle and Tourism. (3-0) 3 Credit Hours.
Course includes consideration of the relationship between politics,
popular culture, and the built environment, tourism consumption,
experience and commodification, place image and tourism, sense of
place – genius loci, new politics of spectacle, and tourism places, spaces
and change. Differential Tuition: $165.

ARC 6816. Study Abroad: Advanced Design Studio. (0-14) 6 Credit Hours.
Prerequisite: Consent of instructor. An advanced architecture design

ARC 6823. Study Abroad: Advanced Architectural History/Theory. (3-0) 3
Credit Hours.
Prerequisite: Consent of instructor. An advanced study in architectural
history/theory associated with a study abroad program; involves field
trips. Differential Tuition: $165.

ARC 6833. Study Abroad: Advanced Architectural Representation. (0-6) 3
Credit Hours.
Prerequisite: Consent of instructor. A graduate level drawing and other
media course associated with a study abroad program; involves field
trips. Differential Tuition: $165.

ARC 6921. Professional Report. (0-0) 1 Credit Hour.
Prerequisites: ARC 6943 and the approval of Graduate Advisor of Record.
The directed architectural research course is offered only for the Master
of Science in Architecture students who have completed 9 semester
credit hours of ARC 6943 Professional Internship. Credit will be awarded
upon completion of the report. Enrollment is required each term in which
the report is in progress. Differential Tuition: $55.

ARC 6923. Professional Report. (0-0) 3 Credit Hours.
Prerequisites: ARC 6943 and the approval of Graduate Advisor of Record.
The directed architectural research course is offered only for the Master
of Science in Architecture students who have completed 9 semester
credit hours of ARC 6943 Professional Internship. Credit will be awarded
upon completion of the report. Enrollment is required each term in which
the report is in progress. Differential Tuition: $165.

ARC 6931. Master’s Project Preparation. (0-4) 1 Credit Hour.
Prerequisites: ARC 5173 and ARC 6126. The course involves the research
and preparation of a proposal for an independent design project. The
grade report for the course is either “CR” (satisfactory performance) or
“NC” (unsatisfactory performance). (Formerly ARC 6933. Credit cannot be
earned for both ARC 6931 and ARC 6933.) Differential Tuition: $55.

ARC 6943. Professional Internship. (0-0) 3 Credit Hours.
Prerequisites: Consent of instructor. Supervised professional practice
experience with public agencies or private firms. Individual conferences
and written reports required. May be repeated for credit, but not more
than 3 credit hours will apply to the Master of Architecture degree. With
the approval of Graduate Advisor of Record, up to 9 credit hours may
be applied to the Master of Science in Architecture degree. Differential
Tuition: $165.

ARC 6951. Independent Study. (0-0) 1 Credit Hour.
Prerequisites: Permission in writing (form available) from the instructor
and the Graduate Advisor of Record. Independent reading, research,
discussion, and/or writing under the direction of a faculty member. For
students needing specialized work not normally or not often available
as part of the regular course offerings. May be repeated for credit, but
not more than 6 hours, regardless of discipline, will apply to the Master
of Architecture degree or the Master of Science in Architecture degree.
Differential Tuition: $55.

ARC 6953. Independent Study. (0-0) 3 Credit Hours.
Prerequisites: Permission in writing (form available) from the instructor
and the Graduate Advisor of Record. Independent study course for the purpose of taking the Comprehensive Examination. The grade report for the course is either “CR” (satisfactory performance on the Comprehensive Examination) or “NC” (unsatisfactory performance on the Comprehensive Examination). Credit earned in ARC 6961 may not be counted toward the Master of Science in Architecture degree. May be repeated once. Differential Tuition: $55.

ARC 6961. Comprehensive Examination. (0-0) 1 Credit Hour.
Prerequisites: Permission of the architecture Graduate Advisor of Record.
Independent study course for the purpose of taking the Comprehensive Examination. The grade report for the course is either “CR” (satisfactory performance on the Comprehensive Examination) or “NC” (unsatisfactory performance on the Comprehensive Examination). Credit earned in ARC 6961 may not be counted toward the Master of Science in Architecture degree. May be repeated once. Differential Tuition: $55.

ARC 6973. Special Topics. (3-0) 3 Credit Hours.
An organized course offering the opportunity for specialized study not
normally or not often available as part of the regular course offerings. Special Topics courses may be repeated for credit when topics vary, but
not more than 6 semester credit hours of ARC 6973 or 12 hours of ARC
6976 will apply to the Master of Architecture degree or the Master of

ARC 6976. Special Topics. (6-0) 6 Credit Hours.
An organized course offering the opportunity for specialized study not
normally or not often available as part of the regular course offerings. Special Topics courses may be repeated for credit when topics vary, but
not more than 6 semester credit hours of ARC 6973 or 12 hours of ARC
6976 will apply to the Master of Architecture degree or the Master of

ARC 6981. Master’s Thesis. (0-0) 1 Credit Hour.
Prerequisites: ARC 6983 and consent of instructor. May be repeated
for credit, but not more than 6 hours will apply to the Master of Science
in Architecture degree. Credit will be awarded upon completion of the
thesis. Enrollment is required each term in which the thesis is in progress.
(Formerly COA 6981.) Differential Tuition: $55.
ARC 6982. Master's Thesis. (0-0) 2 Credit Hours.
Prerequisites: ARC 6323 and consent of instructor. May be repeated for credit, but not more than 6 hours will apply to the Master of Science in Architecture degree. Credit will be awarded upon completion of the thesis. Enrollment is required each term in which the thesis is in progress. Differential Tuition: $110.

ARC 6983. Master's Thesis. (0-0) 3 Credit Hours.
Prerequisites: ARC 6323 and consent of instructor. May be repeated for credit, but not more than 6 hours will apply to the Master of Science in Architecture degree. Credit will be awarded upon completion of the thesis. Enrollment is required each term in which the thesis is in progress. (Formerly COA 6983.) Differential Tuition: $165.

ARC 6991. Master's Project. (0-2) 1 Credit Hour.
Prerequisites: ARC 6996 and consent of instructor. A comprehensive study focusing on an independent design proposal and the complete representation of the project. May be repeated, but not more than 6 hours will apply to the Master of Architecture degree. Credit will be awarded upon completion of the project. Enrollment is required each term in which the project is in progress. Differential Tuition: $55.

ARC 6996. Master's Project. (0-14) 6 Credit Hours.
Prerequisite: ARC 6931. A comprehensive study focusing on an independent design proposal and the complete representation of the project. Credit will be awarded upon completion of the project. Enrollment is required each term in which the project is in progress. Differential Tuition: $330.

ARC 7011. Doctoral Seminar in Architecture. (1-0) 1 Credit Hour.
Organized lectures and seminar presentations to facilitate the development of doctoral students’ research skills and knowledge of current and emerging research. Will include presentations of current research by faculty and invited guests who are experts in various aspects of research in building performance, and advanced graduate students who are about to complete their dissertation research. May be repeated for credit. Differential Tuition: $55.

ARC 7211. Doctoral Research. (0-0) 1 Credit Hour.
Prerequisites: Doctoral student standing and consent of the student's Dissertation Committee. Research work carried out by the student under the supervision of their Dissertation Committee. May be repeated for credit, but not more than 15 hours may be applied to the Doctoral degree. Differential Tuition: $55.

ARC 7212. Doctoral Research. (0-0) 2 Credit Hours.
Prerequisites: Doctoral student standing and consent of the student's Dissertation Committee. Research work carried out by the student under the supervision of their Dissertation Committee. May be repeated for credit, but not more than 15 hours may be applied to the Doctoral degree. Differential Tuition: $110.

ARC 7213. Doctoral Research. (0-0) 3 Credit Hours.
Prerequisites: Doctoral student standing and consent of the student's Dissertation Committee. Research work carried out by the student under the supervision of their Dissertation Committee. May be repeated for credit, but not more than 15 hours may be applied to the Doctoral degree. Differential Tuition: $165.

ARC 7311. Doctoral Dissertation. (0-0) 1 Credit Hour.
Prerequisites: Successful defense of comprehensive exam and consent of the student's Dissertation Committee. Dissertation work carried out by the student under the supervision of their Dissertation Committee. May be repeated for credit, but not more than 15 hours may be applied to the Doctoral degree. Differential Tuition: $55.

ARC 7312. Doctoral Dissertation. (0-0) 2 Credit Hours.
Prerequisites: Successful defense of comprehensive exam and consent of the student's Dissertation Committee. Dissertation work carried out by the student under the supervision of their Dissertation Committee. May be repeated for credit, but not more than 15 hours may be applied to the Doctoral degree. Differential Tuition: $110.

ARC 7313. Doctoral Dissertation. (0-0) 3 Credit Hours.
Prerequisites: Successful defense of comprehensive exam and consent of the student's Dissertation Committee. Dissertation work carried out by the student under the supervision of their Dissertation Committee. May be repeated for credit, but not more than 15 hours may be applied to the Doctoral degree. Differential Tuition: $165.

School of Architecture and Planning

Urban and Regional Planning (URP) Courses

URP 5213. Social Justice in the City. (3-0) 3 Credit Hours.
Prerequisite: Graduate standing or consent of instructor. Examines spatial inequality particularly in distressed communities. Emphasis is placed on residential segregation, the deconcentration of poverty, and policies and programs that perpetuate spatial inequalities and promote the geographies of opportunity. Differential Tuition: $165.

URP 5223. Community Development Finance. (3-0) 3 Credit Hours.
Prerequisite: Graduate standing or consent of instructor. Provides a general understanding of economic development and real estate finance. Students learn about a developer's pro forma income and expense statement, calculating debt service and the return on investment, discounted cash flow analysis, underwriting practices, deal structuring, and financing project gaps. Programs such as CDBG, new market tax credits, the low-income housing tax credit program, and historic rehabilitation tax credits are introduced. Real world case studies are explored throughout the course to understand how federal, state, and local government funding sources can be used with private sector resources to finance community-based projects. Differential Tuition: $165.

URP 5233. GIS for Urban Studies. (3-0) 3 Credit Hours.
Prerequisite: Graduate standing or consent of instructor. Provides a basic understanding of spatial analysis using geographic information systems. Emphasis is placed on analyzing urban issues with GIS tools. Topics include mapping density and change, measuring geographic distributions, and analyzing patterns and clusters. Differential Tuition: $165.

URP 5313. Urban Housing Policy and Analysis. (3-0) 3 Credit Hours.
Prerequisite: Graduate standing or consent of instructor. An examination of the evolution of housing and neighborhood design and planning with emphasis on sustainable planning and design methods, and solutions. (Formerly ARC 5313. Credit cannot be earned for both URP 5313 and ARC 5313. Formerly titled “Housing Design and Neighborhood Planning.”) Differential Tuition: $165.

URP 5333. Introduction to Urban and Regional Planning. (3-0) 3 Credit Hours.
Prerequisite: Graduate standing or consent of instructor. This course explores the theory and practice of land use planning in local, regional, and state-level planning in the United States. This course deals with the institutional environment in which planning occurs, and the methods planners must know to create and implement a comprehensive plan. It will cover the topics of zoning and subdivision regulations, long-range comprehensive plan, and basic principles of functional plans, area plans, site plans, and form-based codes. (Formerly ARC 5333. Credit cannot be earned for both URP 5333 and ARC 5333.) Differential Tuition: $165.
URP 5343. History and Theory of Urban and Regional Planning. (3-0) 3 Credit Hours.
Prerequisite: Graduate standing or consent of instructor. This course reviews the origins and evolution of thought and action in planning, including post-colonial perspectives. Students have the opportunity to explore theory in planning contexts for practical application and research. (Formerly ARC 5343. Credit cannot be earned for both URP 5343 and ARC 5343.) Differential Tuition: $165.

URP 5353. Structure and Function of Cities and Regions. (3-0) 3 Credit Hours.
Prerequisite: Graduate standing or consent of instructor. A study of the social, political, economic, and changing physical design, form, and infrastructure of cities and regions. (Formerly ARC 5353. Credit cannot be earned for both URP 5353 and ARC 5353.) Differential Tuition: $165.

URP 5363. Urban Planning Methods I. (3-0) 3 Credit Hours.
Prerequisite: Graduate standing or consent of instructor. Introduction to research design in urban planning and basic exploratory analytic tools. Topics include: data gathering and management, demographic and employment analysis and forecasting, literature gathering and synthesis, visualization, database graphics, and GIS for applications in urban and regional planning with an emphasis on how these inform question formation. (Formerly ARC 5363. Credit cannot be earned for both URP 5363 and ARC 5363. Formerly titled "Intermediate Urban Planning Methods.") Differential Tuition: $165.

URP 5373. Site Planning and Design. (3-0) 3 Credit Hours.
Prerequisite: Graduate standing or consent of instructor. This course will introduce students to site planning as both a design activity and also as a nexus of principles and issues that are central to the profession of urban planning. Through this course, students will have an opportunity to learn how to use various planning software to conduct land suitability and site analysis, and build-out analysis. For the final project, students will develop a site plan visualizing the arrangements of buildings, structure, infrastructure, and landscape based on local zoning, subdivision, and land development ordinances. (Formerly ARC 5373. Credit cannot be earned for both URP 5373 and ARC 5373.) Differential Tuition: $165.

URP 5383. Planning and Housing for Rural Communities. (3-0) 3 Credit Hours.
Prerequisite: Graduate standing or consent of instructor. A survey of the comprehensive planning of small towns and housing in rural areas. Includes consideration of growth management techniques. (Formerly ARC 5383. Credit cannot be earned for both URP 5383 and ARC 5383.) Differential Tuition: $165.

URP 5393. Urban Planning Methods II. (3-0) 3 Credit Hours.
Prerequisite: Graduate standing or consent of instructor. Design and implementation of quantitative models in urban planning to answer relevant research questions. Emphasis on connecting method to question. Topics include descriptive statistics, difference of means testing, correlation, basic spatial statistics, regression analysis, and effectively communicating analytic results. (Formerly titled "Advanced Urban Planning Methods.") Differential Tuition: $165.

URP 5413. Planning Practice and Ethics. (3-0) 3 Credit Hours.
Prerequisite: Graduate standing or consent of instructor. This course explores how planners work, including legal foundations, ethical challenges, and practical issues. Students also have the opportunity to practice project management and organizational communication. Differential Tuition: $165.

URP 5423. Graphic Communication for Planners. (3-0) 3 Credit Hours.
Prerequisite: Graduate standing or consent of instructor. This course is designed for graduate students in urban planning who are interested in graphic communications. The course goal is to obtain skills in graphic production that enable planners to communicate their ideas and plans to the public. Differential Tuition: $165.

URP 5433. Transportation Planning. (3-0) 3 Credit Hours.
Prerequisite: Graduate standing or consent of instructor. This survey of transportation planning includes foundations, practical techniques, and disruptions, emphasizing emerging and sustainable transportation modes. Differential Tuition: $165.

URP 5443. Community Development. (3-0) 3 Credit Hours.
Prerequisite: Graduate standing or consent of instructor. Introduction to contemporary trends in urban development and redevelopment, focusing on planning and development techniques used to develop or revitalize urban and regional areas. Differential Tuition: $165.

URP 5453. Urban and Regional Sustainability. (3-0) 3 Credit Hours.
Prerequisite: Graduate standing or consent of instructor. Through this course, students will have the opportunity to acquire background knowledge necessary for developing plans and policies to promote sustainable urban and regional growth and preserve natural areas. This course will cover a wide range of state, regional, and local-level growth management techniques and land preservation policies. Differential Tuition: $165.

URP 5463. Environmental Planning and Assessment. (3-0) 3 Credit Hours.
Prerequisite: Graduate standing or consent of instructor. This course will examine important parts of the legal basis of environmental planning and policy in the US. Then it will examine the causes and effects of air, water, and land pollution, and evaluate the planning and policy responses. In addition, it will survey and evaluate the application of planning tools and strategies to protect the natural environment, conserve natural resources, and mitigate climate change to create sustainable green communities. Differential Tuition: $165.

URP 5473. Introduction to Health Planning. (3-0) 3 Credit Hours.
Prerequisite: Graduate standing or consent of instructor. This course provides a comprehensive introduction to fundamental concepts, principles, and methods of health planning aimed at the provision of health services, health-supportive facilities and the design of healthy communities. Differential Tuition: $165.

URP 5483. Planning Workshop. (2-2) 3 Credit Hours.
Prerequisite: Graduate standing or consent of instructor. A seminar/workshop involving an application of theory and practice relating to an urban or regional scale project. May be repeated for credit. Differential Tuition: $165.

URP 5493. Planning and Economic Development. (3-0) 3 Credit Hours.
Prerequisite: Graduate standing or consent of instructor. An introduction to economic development as a critical element of neighborhood, community, regional, and national planning. The course addresses current economic development practices and theory. Differential Tuition: $165.

URP 5513. Public Participation and Qualitative Analysis. (3-0) 3 Credit Hours.
Prerequisite: Graduate standing or consent of instructor. This course involves methods of facilitating public input and analyzing textual data. Topics include: Online and in-person involvement, integrating input to plans, co-production, and evaluation with case study, observational, and content analysis techniques. Differential Tuition: $165.
**URP 6933. Planning Professional Report.** (3-0) 3 Credit Hours.
Prerequisites: URP 6943 and approval of the urban and regional planning Graduate Advisor of Record. The directed planning research course is offered only for nonthesis option students who have completed URP 6943 Professional Internship. May be repeated for credit, but not more than 6 hours may be applied to the Master’s degree. Differential Tuition: $165.

**URP 6943. Professional Internship.** (0-0) 3 Credit Hours.
Prerequisites: Graduate standing, 18 semester credit hours of graduate work, and consent of instructor. Supervised professional practice experience with public agencies or private firms. Individual conferences and written reports required. May be repeated for credit, but not more than 6 hours will apply to the Master of Science degree in Urban and Regional Planning. Differential Tuition: $165.

**URP 6951. Independent Study.** (0-0) 1 Credit Hour.
Prerequisites: Graduate standing and permission in writing (form available) from the instructor and the Graduate Advisor of Record. Independent reading, research, discussion, and/or writing under the direction of a faculty member, for students needing specialized work not normally or not often available as part of the regular course offerings. May be repeated for credit, but not more than 6 hours, regardless of discipline, will apply to the Master of Science degree in Urban and Regional Planning. Differential Tuition: $55.

**URP 6953. Independent Study.** (0-0) 3 Credit Hours.
Prerequisites: Graduate standing and permission in writing (form available) from the instructor and the Graduate Advisor of Record. Independent reading, research, discussion, and/or writing under the direction of a faculty member, for students needing specialized work not normally or not often available as part of the regular course offerings. May be repeated for credit, but not more than 6 hours, regardless of discipline, will apply to the Master of Science degree in Urban and Regional Planning. Differential Tuition: $165.

**URP 6961. Comprehensive Examination.** (0-0) 1 Credit Hour.
Prerequisites: Graduate standing and permission from the urban and regional planning Graduate Advisor of Record to take the comprehensive examination. Independent study course for the purpose of taking the Comprehensive Examination. The grade report for the course is either “CR” (satisfactory performance on the Comprehensive Examination) or “NC” (unsatisfactory performance on the Comprehensive Examination). Credit earned in URP 6961 may not be counted toward the Master of Science degree. May be repeated once. Differential Tuition: $55.

**URP 6973. Special Topics.** (3-0) 3 Credit Hours.
Prerequisite: Graduate standing or consent of instructor. An organized course offering the opportunity for specialized study not normally or not often available as part of the regular course offerings. Special Topic courses may be repeated for credit when topics vary, but not more than 6 semester credit hours of URP 6973 or 12 hours of URP 6976 will apply to the Master of Science degree in Urban and Regional Planning. Differential Tuition: $165.

**URP 6976. Special Topics.** (6-0) 6 Credit Hours.
Prerequisite: Graduate standing or consent of instructor. An organized course offering the opportunity for specialized study not normally or not often available as part of the regular course offerings. Special Topic courses may be repeated for credit when topics vary, but not more than 6 semester credit hours of URP 6973 or 12 hours of URP 6976 will apply to the Master of Science degree in Urban and Regional Planning. Differential Tuition: $330.

**URP 6981. Master’s Thesis.** (0-0) 1 Credit Hour.
Prerequisites: Graduate standing and permission from the urban and regional planning Graduate Advisor of Record. May be repeated for credit, but not more than 6 hours will apply to the Master of Science degree in Urban and Regional Planning. Credit will be awarded upon completion of the thesis. Enrollment is required each term in which the thesis is in progress. Differential Tuition: $55.

**URP 6983. Master’s Thesis.** (0-0) 3 Credit Hours.
Prerequisites: Graduate standing and permission from the urban and regional planning Graduate Advisor of Record. May be repeated for credit, but not more than 6 hours will apply to the Master of Science degree in Urban and Regional Planning. Credit will be awarded upon completion of the thesis. Enrollment is required each term in which the thesis is in progress. Differential Tuition: $165.