

DEPARTMENT OF ARCHITECTURE

The Department of Architecture supports the education of future professionals in the practice of architecture and interior design. The graduate programs of the Department of Architecture 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 Department and College of Architecture, Construction and Planning take advantage of their 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)

Master of Architecture Degree – The Professional Program

The Department of Architecture 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 offered by institutions with U.S. regional accreditation, 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, Department of Architecture 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 M.Arch. 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.

M.Arch. 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 Architecture, Construction and Planning website (<http://cacp.utsa.edu/academic-programs/department-of-architecture>) for applicable dates when the review of applications will begin and for more information about the College and its programs.

M.Arch. 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 Preparation will satisfy the comprehensive examination requirement. Required coursework consists of:

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

| | |
|----------|---|
| ARC 5133 | Professional Architectural Practice and Ethics |
| ARC 5173 | Architectural Theory and Criticism |
| ARC 5193 | Principles of Global Architecture: Place, Context & Culture |
| ARC 5733 | Advanced Building Technology and Sustainability |
| ARC 6126 | Advanced Design Studio |
| ARC 6136 | Advanced Topics Studio |
| ARC 6146 | Advanced Technical Studio |
| ARC 6931 | Master's Project Preparation |
| ARC 6996 | Master's Project |

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

| | |
|----------|---|
| ARC 5203 | History and Theory of Preservation |
| ARC 5533 | Contemporary Materials in Architecture and Design |
| ARC 5603 | Advanced Seminar in Architectural History |
| ARC 5713 | Environmental Architecture and Sustainability |
| ARC 5813 | History and Theory of Urban Form |
| ARC 6823 | Study Abroad: Advanced Architectural History/Theory |

C. 12 semester credit hours of electives. No more than 6 semester credit hours of electives from outside of the College of Architecture, Construction and Planning will apply toward the Master of Architecture degree.

Total Credit Hours 52

The M.Arch. 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.

M.Arch. 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 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 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 Architecture, Construction and Planning website (<http://cacp.utsa.edu/academic-programs/department-of-architecture>) for applicable dates when the review of applications will begin and for more information about the College and its programs.

M.Arch. 3 Degree Requirements

The M.Arch. 3 program requires **up to** 40 semester credit hours of preparatory studies and 52 semester credit hours of the M.Arch. 2 program sequence for this degree, 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.

The M.Arch. 3 program in architecture consists of Preparatory Studies, Performance Evaluation, and M.Arch. 2 program.

A. Preparatory Studies

Up to 40 semester credit hours consisting of the following: 40

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| ARC 5003 | Architectural Principles |
| ARC 5011 | Introduction to Architecture and Design |
| ARC 5156 | Introductory Design Studio I |
| ARC 5166 | Introductory Design Studio II |

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|----------|---|
| ARC 5176 | Introductory Design Studio III |
| ARC 5623 | History of Modern Architecture |
| ARC 5913 | Introduction to Construction Materials and Concepts |
| ARC 5923 | Principles of Structures |
| ARC 5933 | Structures |
| ARC 5943 | Principles of Environmental Systems |
| ARC 5953 | Environmental Systems |

B. Performance Evaluation

Upon completion of preparatory studies, each student is subject to a performance evaluation intended to determine readiness to enter the M.Arch. 2 program sequence. The performance evaluation format is determined by the M.Arch. Graduate Program Committee. Normally, failure to pass the performance evaluation requires additional coursework or other work to remedy deficiencies or areas of weakness before entering the M.Arch. 2 program sequence.

C. M.Arch. 2 Program Sequence

Degree candidates must complete the 52 semester credit hours of the M.Arch. 2 sequence. 52

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.

M.S. Arch. 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
- Samples of expository writing and/or portfolio for non-thesis option
- 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 Architecture, Construction and Planning website (<http://cacp.utsa.edu/academic-programs/department-of-architecture>) for applicable dates when the review of applications will begin and for more information about the College and its programs.

M.S. Arch. 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:

A. 9 semester credit hours of the following required courses, followed by Master's Thesis (ARC 6983 minimum 6 credit hours) or Professional Report (ARC 6923) and Internship (ARC 6943):

| | | |
|----------|-------------------------------|---|
| ARC 6323 | Master's Research Preparation | 9 |
| ARC 6433 | Research Methods | |

One of the required technology courses below:

| | |
|----------|--|
| ARC 5543 | Advanced Digital Design and Fabrication Technologies in Architecture |
|----------|--|

or

| | |
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| ARC 5733 | Advanced Building Technology and Sustainability |
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or

| | |
|----------|-------------------------------------|
| ARC 6413 | Sustainable Preservation Technology |
|----------|-------------------------------------|

B. The following "capstone" coursework must be completed with either the Thesis (6 hours) or Non-Thesis Option (12 hours) described below.

Thesis Option Requirements: All candidates for the Master of Science degree in Architecture with a thesis option must complete 6 semester credit hours of ARC 6983 Master's Thesis (includes thesis defense).

Non-Thesis Option Requirements: All candidates for the Master of Science degree in Architecture with a non-thesis option must complete 9 semester credit hours consisting of ARC 6943 Professional Internship and 3 semester credit hours of ARC 6923 Professional Report.

C. Comprehensive Examination

Degree candidates in the thesis option and non-thesis option are required to pass a comprehensive examination, and enroll in ARC 6961 Comprehensive Examination if no other courses are being taken that term. Comprehensive examinations are given with approval of the Graduate Advisor to students who:

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

D. Electives (18 credit hours for thesis or 12 credit hours for non-thesis). To be selected in consultation with thesis committee chair or research advisor.

| | |
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| Total Credit Hours | 33 |
|--------------------|----|

M.S. Arch. Degree Concentrations

M.S. Arch. Degree - Concentration in Sustainable Architecture

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

| | | |
|----------|-------------------------------|----|
| ARC 6323 | Master's Research Preparation | 12 |
| ARC 6433 | Research Methods | |
| ARC 6983 | Master's Thesis | |

B. Comprehensive Examination

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

| | | |
|----------|---|---|
| ARC 5713 | Environmental Architecture and Sustainability | 6 |
| ARC 5733 | Advanced Building Technology and Sustainability | |

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

| | |
|----------|--|
| ARC 5723 | Applications in Sustainable Design |
| ARC 5743 | Building Performance Modeling and Simulation |
| ARC 5753 | Advanced Daylighting Design and Analysis |
| ARC 5763 | Post-Occupancy Evaluation of Buildings |
| ARC 5773 | Environmental Life Cycle Assessment of Buildings |

E. Electives (9 semester credit hours). To be selected in consultation with Thesis Committee chair.

| | |
|--------------------|----|
| Total Credit Hours | 33 |
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M.S. Arch. Degree - Concentration in Historic Preservation

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

| | | |
|----------|-------------------------------|----|
| ARC 6323 | Master's Research Preparation | 12 |
| ARC 6433 | Research Methods | |
| ARC 6983 | Master's Thesis | |

B. Comprehensive Examination

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

| | | |
|----------|--|---|
| ARC 5203 | History and Theory of Preservation | 9 |
| ARC 5423 | Legal and Economic Aspects of Preservation | |
| ARC 6413 | Sustainable Preservation Technology | |

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

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|----------|---|
| ARC 5233 | Architectural Surveys and Measured Drawings |
| ARC 5403 | Historic Preservation Seminar |
| ARC 5613 | American Architecture |
| ARC 6003 | Morphology of the Architecture of the Southwest |
| ARC 6423 | Architectural Conservation Theory |

E. Electives (6 semester credit hours). To be selected in consultation with Thesis Committee chair.

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| Total Credit Hours | 33 |
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- Graduate Certificate in High-Performance Design and Sustainability (p. 3)
- Graduate Certificate in Historic Preservation (p. 4)

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: 6

| | |
|----------|---|
| ARC 5713 | Environmental Architecture and Sustainability |
| ARC 5733 | Advanced Building Technology and Sustainability |

B. 6 to 9 semester credit hours (consisting of either the studio or nonstudio option) of approved elective courses selected from the following list (or any additional elective approved in consultation with the Certificate Program Coordinator): 6-9

| | |
|----------|--|
| ARC 5723 | Applications in Sustainable Design |
| ARC 5743 | Building Performance Modeling and Simulation |
| ARC 5753 | Advanced Daylighting Design and Analysis |
| ARC 5763 | Post-Occupancy Evaluation of Buildings |
| ARC 5773 | Environmental Life Cycle Assessment of Buildings |
| ARC 5163 | Current Issues and Topics in Contemporary Architecture |
| ARC 6136 | Advanced Topics Studio |
| ARC 6973 | Special Topics |

C. 0 to 3 semester credit hours of approved elective courses selected from the following list (or any additional elective approved in consultation with the Certificate Program Coordinator): 0-3

| | |
|----------|-------------------------------------|
| ARC 6413 | Sustainable Preservation Technology |
| ARC 6513 | Sustainable Tourism Development |
| CE 5643 | Sustainable Energy Systems |

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|----------|---|
| CSM 5243 | Sustainable Construction and Delivery |
| ES 5153 | Urban Environmental Planning and Sustainability |
| ES 6053 | Sustainability and Renewable Energy |
| GRG 5563 | Applied Sustainability |
| URP 5453 | Urban and Regional Sustainability |

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.

| | |
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| A. 6 semester credit hours of required courses: | 6 |
| ARC 5203 History and Theory of Preservation | |
| ARC 6423 Architectural Conservation Theory or ARC 6413 Sustainable Preservation Technology | |
| B. 9 semester credit hours (consisting of either the studio or nonstudio option) of approved elective courses selected from the following list (or any additional elective approved in consultation with the Certificate Program Coordinator): | 9 |
| ARC 5233 Architectural Surveys and Measured Drawings | |
| ARC 5403 Historic Preservation Seminar | |
| ARC 5423 Legal and Economic Aspects of Preservation | |
| ARC 5813 History and Theory of Urban Form | |
| ARC 6003 Morphology of the Architecture of the Southwest | |
| ARC 6013 Theories and Philosophies of Regionalism | |
| ARC 6136 Advanced Topics Studio (with studio option) | |
| ARC 6413 Sustainable Preservation Technology (if not taken to meet requirement in section A) | |
| ARC 6423 Architectural Conservation Theory (if not taken to meet requirement in section A) | |
| ARC 6433 Research Methods | |
| ARC 6443 International Charters, Guidelines and Historic Site Management | |
| ARC 6453 Cultural Landscape Conservation Theory | |
| ARC 6463 Heritage Tourism Planning and Design | |
| ARC 6473 Material Assessment and Conservation | |
| ARC 6493 Architectural Transformations | |
| ARC 6513 Sustainable Tourism Development | |
| Total Credit Hours | 15 |

Architecture (ARC) Courses

ARC 5003. Architectural Principles. (2-2) 3 Credit Hours.

Prerequisite: Enrollment in the M.Arch. 3 program. An introduction to the basic principles and skills associated with architectural design. Course Fees: SAP1 \$25; STSA \$15.

ARC 5011. Introduction to Architecture and Design. (1-0) 1 Credit Hour.

Prerequisite: Enrollment in the M.Arch. 3 program. A lecture course introducing ideas and concepts associated with architecture and design. Course Fees: SAP1 \$25.

ARC 5113. Design and Leadership. (3-0) 3 Credit Hours.

An in-depth study of design as a form of leadership in the emerging global environment. Includes consideration of leadership qualities to affect change through design and practice. Course Fees: SAP1 \$25; STSA \$15.

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.") Course Fees: SAP1 \$25; STSA \$15.

ARC 5156. Introductory Design Studio I. (0-14) 6 Credit Hours.

Prerequisite: Enrollment in the M.Arch. 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.) Course Fees: SAP1 \$25; STSA \$30.

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. Course Fees: SAP1 \$25; STSA \$15.

ARC 5166. Introductory Design Studio II. (0-14) 6 Credit Hours.

Prerequisites: ARC 5156 and enrollment in the M.Arch. 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, programming, organizational concepts, building-to-site relations, and tectonics. Course Fees: SAP1 \$25; STSA \$30.

ARC 5173. Architectural Theory and Criticism. (3-0) 3 Credit Hours.

A survey of contemporary architectural theory and criticism from 1950 to the present. May be repeated for credit once when topics vary. (Formerly COA 5173. Credit cannot be earned for both ARC 5173 and COA 5173.) Course Fees: SAP1 \$25; STSA \$15.

ARC 5176. Introductory Design Studio III. (0-14) 6 Credit Hours.

Prerequisites: ARC 5166 and enrollment in the M.Arch. 3 program. Architectural design as a theoretically informed and creative process. 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 of increasing complexity considering architectural order, precedent, urban and non-urban contexts, building performance, structure and detailing. Continues investigation of traditional and digital media. Course Fees: SAP1 \$25; STSA \$30.

ARC 5193. Principles of Global Architecture: Place, Context & Culture. (3-0) 3 Credit Hours.

A study of global, historical, and cross-cultural architectural principles. 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. Course Fees: SAP1 \$25; STSA \$15.

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. Course Fees: SAP1 \$25; STSA \$15.

ARC 5233. Architectural Surveys and Measured Drawings. (3-0) 3 Credit Hours.

A survey of documentation and interpretation of sites and buildings and graphic recording techniques. Course Fees: SAP1 \$25; STSA \$15.

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. Course Fees: SAP1 \$25; STSA \$15.

ARC 5423. Legal and Economic Aspects of Preservation. (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. Course Fees: SAP1 \$25; STSA \$15.

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. Course Fees: SAP1 \$25; STSA \$15.

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. Course Fees: SAP1 \$25; STSA \$15.

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. Course Fees: SAP1 \$25; STSA \$15.

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. Course Fees: SAP1 \$25; STSA \$15.

ARC 5623. History of Modern Architecture. (3-0) 3 Credit Hours.

Prerequisite: Enrollment in the M.Arch. 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. Course Fees: SAP1 \$25; STSA \$15.

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. Course Fees: SAP1 \$25; STSA \$15.

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. Course Fees: SAP1 \$25; STSA \$15.

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. Course Fees: SAP1 \$25; STSA \$15.

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.) Course Fees: SAP1 \$25; STSA \$15.

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. Course Fees: SAP1 \$25; STSA \$15.

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.) Course Fees: SAP1 \$25; STSA \$15.

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. Course Fees: SAP1 \$25; STSA \$15.

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. Course Fees: SAP1 \$25; STSA \$15.

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

An introduction to the principles, types, and methods of post-occupancy evaluation of new and existing buildings. Includes a study of the POE model, implementation of POE, methods of measuring performance, user behavior, and the use of POE as a tool for understanding patterns of use in buildings. Course Fees: SAP1 \$25; STSA \$15.

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

An introduction to the principles, and assessment methods used in the environmental LCA of new and existing buildings. Includes a study of the relationship between product life cycle and environmental impact, resource conservation, and pollution prevention; interpretation of LCA results, integration of LCA in building design and environmental rating systems. Course Fees: SAP1 \$25; STSA \$15.

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. Course Fees: SAP1 \$25; STSA \$15.

ARC 5913. Introduction to Construction Materials and Concepts. (3-0) 3 Credit Hours.

Prerequisite: Enrollment in the M.Arch. 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. Course Fees: SAP1 \$25; STSA \$15.

ARC 5923. Principles of Structures. (3-0) 3 Credit Hours.

Prerequisite: Enrollment in the M.Arch. 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.") Course Fees: SAP1 \$25; STSA \$15.

ARC 5933. Structures. (2-2) 3 Credit Hours.

Prerequisites: ARC 5923 and enrollment in the M.Arch. 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.") Course Fees: SAP1 \$25; STSA \$15.

ARC 5943. Principles of Environmental Systems. (3-0) 3 Credit Hours.

Prerequisite: Enrollment in the M.Arch. 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.") Course Fees: SAP1 \$25; STSA \$15.

ARC 5953. Environmental Systems. (2-2) 3 Credit Hours.

Prerequisites: ARC 5943 and enrollment in the M.Arch. 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.") Course Fees: SAP1 \$25; STSA \$15.

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.) Course Fees: SAP1 \$25; STSA \$15.

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.) Course Fees: SAP1 \$25; STSA \$15.

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. Course Fees: SAP1 \$25; STSA \$30.

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.") Course Fees: SAP1 \$25; STSA \$30.

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.") Course Fees: SAP1 \$25; STSA \$30.

ARC 6223. Digital Design. (2-2) 3 Credit Hours.

Prerequisite: Consent of instructor. Project-driven lecture/laboratory course exploring advanced issues associated with 3-D modeling, animation, photo-realistic visualization, and computer-aided manufacturing. Considers the role these processes play in architectural and interior design. Course Fees: SAP1 \$25; STSA \$15.

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. Course Fees: SAP1 \$25; STSA \$15.

ARC 6323. 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. Course Fees: SAP1 \$25; STSA \$15.

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. Course Fees: SAP1 \$25; STSA \$15.

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. Course Fees: SAP1 \$25; STSA \$15.

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.) Course Fees: SAP1 \$25; STSA \$15.

ARC 6443. International Charters, Guidelines and Historic Site Management. (3-0) 3 Credit Hours.

A survey of international charters, guidelines and laws applicable to the management of cultural heritage sites globally. Includes study of documentation, planning, community engagement, public interpretation, design/ conservation treatments, and universal values, as well as UNESCO World Heritage process and purpose. Course Fees: SAP1 \$25; STSA \$15.

ARC 6453. Cultural Landscape Conservation Theory. (3-0) 3 Credit Hours.

Advanced study and critical analysis of contemporary design theory, methods and values for conservation of cultural landscapes and historic urban landscapes. Course Fees: SAP1 \$25; STSA \$15.

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. Course Fees: SAP1 \$25; STSA \$15.

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. Course Fees: SAP1 \$25; STSA \$15.

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. Course Fees: SAP1 \$25; STSA \$15.

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. Course Fees: SAP1 \$25; STSA \$15.

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. Course Fees: SAP1 \$25; STSA \$15.

ARC 6816. Study Abroad: Advanced Design Studio. (0-14) 6 Credit Hours.

Prerequisite: Consent of instructor. An advanced architecture design studio associated with a study abroad program. Course Fees: SAP1 \$25; STSA \$15.

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. Course Fees: SAP1 \$25; STSA \$15.

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. Course Fees: SAP1 \$25; STSA \$15.

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. Course Fees: SAP1 \$25; STSA \$5.

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. Course Fees: SAP1 \$25; STSA \$15.

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.) Course Fees: SAP1 \$25; STSA \$5.

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. Course Fees: SAP1 \$25; STSA \$15.

ARC 6951. Independent Study. (0-0) 1 Credit Hour.

Prerequisites: Permission in writing (form available) of 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. Course Fees: SAP1 \$25; STSA \$5.

ARC 6952. Independent Study. (0-0) 2 Credit Hours.

Prerequisites: Permission in writing (form available) of 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. Course Fees: SAP1 \$25; STSA \$10.

ARC 6953. Independent Study. (0-0) 3 Credit Hours.

Prerequisites: Permission in writing (form available) of 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. Course Fees: SAP1 \$25; STSA \$15.

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. Course Fees: SAP1 \$25; STSA \$5.

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 Science in Architecture degree. Course Fees: SAP1 \$25; STSA \$15.

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 Science in Architecture degree. Course Fees: SAP1 \$25; STSA \$30.

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.) Course Fees: SAP1 \$25; STSA \$5.

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. Course Fees: SAP1 \$25; STSA \$10.

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.) Course Fees: SAP1 \$25; STSA \$15.

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. Course Fees: SAP1 \$25; STSA \$5.

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. Course Fees: SAP1 \$25; STSA \$30.