

ARCHITECTURE

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Overview

The College of Architecture and Planning offers a pre-professional Bachelor of Science in Architecture (BSArch) degree and the professional Master of Architecture (MArch) degree which is fully accredited by the National Architectural Accrediting Board (NAAB).

Architecture, MArch

The Master of Architecture is offered to students who have completed a pre-professional architecture degree, as well as to students who have completed an unrelated undergraduate or graduate degree. Students holding a pre-professional degree will be evaluated individually for advanced standing in the MArch program, commensurate with their previous educational experiences.

Our program prepares students for entry into the architecture profession and licensure. Our mission is to lead in the discovery, communication and application of knowledge in the discipline of architecture by integrating theory and practice. In this collaborative educational model, environmental, economic, social, cultural, aesthetic and ethical concerns are fundamental.

The curriculum responds to and aligns with the evolving nature of professional practice including collaborative work environments, critical thinkers, problem-solving team players, builders and leaders with excellent communication skills. Recognizing that the practice of architecture is global, we provide students with international perspectives and experiences giving them a competitive edge when they enter the profession.

Students whose undergraduate degree was not a design related degree will take a minimum of three years to complete the Master of Architecture. Students who have an undergraduate design related degree may receive credit for courses previously taken and can typically complete the program in two years depending on advanced standing given. The program provides the skills and bodies of knowledge nationally specified for graduate study in architecture and is fully accredited by the National Architectural Accrediting Board (NAAB).

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 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 term, an eight-year term with conditions, or a two-year term of continuing accreditation, or a three-year term of initial accreditation, depending on the extent of its conformance with established education standards.

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

The University of Colorado Denver, Department of Architecture offers the following NAAB-accredited degree:

- Four-Studio Track Master of Architecture—Preprofessional Bachelor's Degree + 60 credit hours in the Master of Architecture Program
- Six-Studio Track Master of Architecture—Non-Preprofessional Bachelor's Degree + 105 credit hours in the Master of Architecture Program

(For Undergraduate Programs and information please refer to the [Undergraduate](#) catalog.)

Programs

- Architecture, MArch (<http://catalog.ucdenver.edu/cu-denver/graduate/schools-colleges-departments/college-architecture-planning/architecture/architecture-march/>)

(For Undergraduate Programs and information please refer to the [Undergraduate](#) catalog.)

Faculty

Professors:

Amir Ameri, PhD, Cornell University
Julee Herdt, MArch, Southern California Institute of Architecture
Michael K. Jenson, PhD, University of Edinburgh
Laurence K. Loftin III, MArch, University of Virginia
Marc Swackhamer, MArch, Rice University
Ekaterini Vlahos, MArch, University of Colorado Denver

Associate Professors:

Osman Attmann, PhD, Georgia Institute of Technology
Christopher Koziol, PhD, University of Colorado Denver
Erik Sommerfeld, MArch, University of Colorado Denver

Assistant Professors:

Assia Crawford, MArch, Newcastle University
Sarah Hearne, PhD, University of California
Kevin Hirth, MArch, Harvard Graduate School of Design
José Ibarra, MArch, Princeton
Leyuan Li, MArch, Rice
Matthew Shea, MArch, University of Colorado Denver

Visiting Assistant Professors:

Lior Galili, MArch II, Harvard GSD
Alex Li, MArch, Harvard GSD

Instructors:

Jo VandenBurg, MArch, University of Colorado Denver

Visiting Teaching Fellow:

Will Koning, MArch, University of Colorado, Denver

Additional information about faculty in this department is available on the college website. (<https://architectureandplanning.ucdenver.edu/>)

Architecture (ARCH) Courses

ARCH 5110 - Design Studio I (6 Credits)

The first of two elemental design studios focused on the language of design, organizational and spatial systems and principles as well as on analog and digital methods of visualizing architectural ideas and forms. Restriction: Restricted to Graduate Architecture students within the College of Architecture and Planning. Max hours: 6 Credits.

Grading Basis: Letter Grade

Restriction: Restricted to Architecture graduate students within the College of Architecture and Planning

ARCH 5120 - Design Studio II (6 Credits)

The second of two elemental design studios focused on translating organizational and spatial systems, principles and concepts into architectural systems. Through a number of small scaled design exercises students learn how organizational and spatial systems can be leveraged in the design of their buildings. Prereq: ARCH 5110 and ARCH 5510. Max hours: 6 Credits.

Grading Basis: Letter Grade

Restriction: Restricted to Architecture graduate students within the College of Architecture and Planning

ARCH 5130 - Design Studio III (6 Credits)

The first of the two analytical design studios addresses how design ideas are formed through the analysis of the program in terms of action and perception and how to transform those ideas into formal strategies and specific architectural experiences. Prereq: ARCH 5120. Max hours: 6 Credits.

Grading Basis: Letter Grade

Restriction: Restricted to Architecture graduate students within the College of Architecture and Planning

ARCH 5140 - Design Studio IV (6 Credits)

The second of the two analytical studios will build upon ideas developed in the previous studio concerning how the analysis of the program in terms of action and perception inform the formal strategies and the design of specific architectural experiences. Prereq: ARCH 5130. Max hours: 6 Credits.

Grading Basis: Letter Grade

Restriction: Restricted to Architecture graduate students within the College of Architecture and Planning

ARCH 5210 - Introduction to Architecture (3 Credits)

Introduces important ways of looking at architecture and acquaints students with the various perspectives that they will later find in the rest of the curriculum. Restriction: Restricted to Architecture graduate students within the College of Architecture and Planning. Max hours: 3 Credits.

Grading Basis: Letter Grade

Restriction: Restricted to Architecture graduate students within the College of Architecture and Planning

ARCH 5220 - History and Theory Architecture I (3 Credits)

Introduces world architecture and urbanism from prehistory to the Italian Renaissance. The course helps students understand the various cultural, technological, philosophical, and aesthetic ideas that helped shape buildings through history. Buildings and settlements on all continents and in all of the major world cultures are discussed. Restriction: Restricted to graduate and doctoral students. Max hours: 3 Credits.

Grading Basis: Letter Grade

Restriction: Restricted to graduate and doctoral students.

ARCH 5230 - History and Theory Architecture II (3 Credits)

Examines world architecture and urbanism from the Italian Renaissance to the present. Helps students understand the various cultural, technological, philosophical and aesthetic ideas that helped shape buildings through history. Buildings and settlements on all continents and in all of the major world cultures are discussed. Restriction: Restricted to graduate and doctoral students. Max hours: 3 Credits.

Grading Basis: Letter Grade

Restriction: Restricted to graduate and doctoral students.

Typically Offered: Fall.

ARCH 5240 - History and Theory Architecture III (3 Credits)

This course traces the history of Architecture from the mid-19th century to the early 21st century. The various theories and formal languages that shaped the history of Architecture within the specified period will be explored through the close examination of a select group of buildings and the specific cultural, social, political, and economic contexts of their design and construction. Restriction: Restricted to students with graduate standing. Max hours: 3 Credits.

Grading Basis: Letter Grade

Restriction: Restricted to students with graduate standing.

Typically Offered: Spring.

ARCH 5310 - Building Construction I (3 Credits)

The first of a two-course sequence that provides an overview of the structure, systems, assemblies and processes that make a building. Provides a broad view of building technology and an understanding of the interrelationship of all the parts. Restriction: Restricted to Architecture graduate students within the College of Architecture and Planning. Max hours: 3 Credits.

Grading Basis: Letter Grade

Restriction: Restricted to Architecture graduate students within the College of Architecture and Planning

ARCH 5320 - Building Construction II (3 Credits)

This course focuses on principles and processes of building construction, and introduces major constructional systems. It stresses the relationship between architectural concepts and building technology and assemblies. Restriction: Restricted to Architecture graduate students within the College of Architecture and Planning. Max hours: 3 Credits.

Grading Basis: Letter Grade

Restriction: Restricted to Architecture graduate students within the College of Architecture and Planning

ARCH 5330 - Sustainable Systems I (3 Credits)

The first course in the sustainable systems sequence introduces concepts and design methods of energy-efficient environmental control in buildings including thermal and moisture loads, heating, ventilation and air conditioning equipment and systems, and active and passive thermal strategies. Restriction: Restricted to graduate students within the College of Architecture and Planning. Max hours: 3 Credits.

Grading Basis: Letter Grade

Restriction: Restricted to graduate students within the College of Architecture and Planning

ARCH 5340 - Sustainable Systems II (3 Credits)

The second course in the sustainable systems sequence introduces concepts and design methods of plumbing, power distribution, renewable electricity, artificial illumination, daylighting, acoustics, vertical transportation, fire protection, and telecommunication systems in buildings with a focus on energy and resource efficiency. Restriction: Graduate level students. Max hours: 3 Credits.

Grading Basis: Letter Grade

Restriction: Graduate level students.

ARCH 5350 - Structures I (3 Credits)

The first course in the structures sequence introduces the analysis and design of structural elements and focuses on the principles of statics and the strength of materials. Topics include stress determination, deflection and the behaviors of tension, compression and shear in various structural elements. Restriction: Restricted to Architecture graduate students within the College of Architecture and Planning. Max hours: 3 Credits.

Grading Basis: Letter Grade

Restriction: Restricted to Architecture graduate students within the College of Architecture and Planning

ARCH 5360 - Structures II (3 Credits)

Focuses on the relationship between architectural concepts and the selection of structural systems. Addresses the qualitative and quantitative analysis of reinforced concrete, steel and wood structural systems and members. Restriction: Restricted to Architecture graduate students within the College of Architecture and Planning. Max hours: 3 Credits.

Grading Basis: Letter Grade

Restriction: Restricted to Architecture graduate students within the College of Architecture and Planning

ARCH 5410 - Professional Practice (3 Credits)

Introduces the essential elements of professional practice through topics such as internship, licensing, services, modes of practice, fees, marketing, documents, specification and production procedures. Examines traditional and emerging forms of practice. Restriction: Restricted to Architecture graduate students within the College of Architecture and Planning. Max hours: 3 Credits.

Grading Basis: Letter Grade

Restriction: Restricted to Architecture graduate students within the College of Architecture and Planning

ARCH 5420 - BIM: Principles & Practices (3 Credits)

Introduces basic aspects of building information modeling (BIM) concepts, software, development, management and delivery for architectural projects. Restriction: Restricted to Architecture graduate students within the College of Architecture and Planning. Max hours: 3 Credits.

Grading Basis: Letter Grade

Restriction: Restricted to Architecture graduate students within the College of Architecture and Planning

ARCH 5430 - Social Context of Design (3 Credits)

Focuses on the ethical, social, cultural and psychological principles, which people bring to the perception and design of the built environment. Its major topics include: ethical values; cultural patterns and values; social, cultural and personal ritual; and pre-design and programming. Prereq: Graduate ARCH students only. Max hours: 3 Credits.

Grading Basis: Letter Grade

Restriction: Restricted to Architecture graduate students within the College of Architecture and Planning

ARCH 5450 - Sustainable Design Practices (3 Credits)

This course explores sustainable principles and practices as it relates to the design, construction of both the building and its site. Restriction: Restricted to Architecture graduate students within the College of Architecture and Planning. Max hours: 3 Credits.

Grading Basis: Letter Grade

Restriction: Restricted to Architecture graduate students within the College of Architecture and Planning

ARCH 5510 - Architectural Graphics (3 Credits)

This course explores the development of graphic skills emphasizing drawing as a means to design. It includes investigation of drawing types and methods; diagramming of ideas and systems; informative, exploratory and developmental sketching. Restriction: Restricted to Graduate Architecture students within the College of Architecture and Planning. Max hours: 3 Credits.

Grading Basis: Letter Grade

Restriction: Restricted to Architecture graduate students within the College of Architecture and Planning

ARCH 6150 - Design Studio V (6 Credits)

The first of two reflective studios will assume reflective/critical stance towards programmatic issues or rather cultural presuppositions and critically explore the ways in which architecture can play a critical as well as an affirmative role within the broader cultural context. Prereq: ARCH 5140. Coreq: ARCH 6151. Max hours: 6 Credits.

Grading Basis: Letter Grade

Restriction: Restricted to Architecture graduate students within the College of Architecture and Planning

ARCH 6170 - Design Studio VI (6 Credits)

This is the second of two reflective studios, which focuses on the comprehensive design of an architectural project including considerations of structural systems, environmental systems, life safety concerns, regulatory considerations, wall sections, building assemblies and significant detail. Prereq: ARCH 6150. Coreq: ARCH 6171. Repeatable. Max Hours: 12 Credits.

Grading Basis: Letter Grade

Repeatable. Max Credits: 12.

Coreq: ARCH 6171 Restriction: Restricted to ARCH graduate students within the College of Architecture and Planning

ARCH 6171 - Integration Seminar (3 Credits)

In this seminar students will develop and document the technical aspects of their Design Studio VI design projects including, life safety, mechanical, electrical, plumbing, conveyance, accessibility systems and material assemblies. Prereq: ARCH 6150, ARCH 6151. Coreq: ARCH 6170. Repeatable. Max Hours: 6 Credits.

Grading Basis: Letter Grade

Repeatable. Max Credits: 6.

Coreq: ARCH 6170 Restriction: Restricted to ARCH graduate students within the College of Architecture and Planning

ARCH 6180 - Furniture Design (3 Credits)

Students learn how to design and build furniture in the College's woodshop. Topics include ergonomics, properties of materials, principles and techniques of joinery and techniques of hand and machine tools. Cross-listed with ARCH 3709. Restriction: Restricted to Architecture graduate students within the College of Architecture and Planning. Max hours: 3 Credits.

Grading Basis: Letter Grade

Restriction: Restricted to Architecture graduate students within the College of Architecture and Planning

ARCH 6185 - Digital Design & Fabrication (3 Credits)

An introductory class to Computer Aided Design (CAD) and Computer aided manufacturing (CAM). Students explore how these technologies apply to the field of architecture with a focus is on parametric/algorithmic design approaches and mass customization manufacturing techniques. Restriction: Restricted to Architecture graduate students within the College of Architecture and Planning. Max hours: 3 Credits.

Grading Basis: Letter Grade

Restriction: Restricted to Architecture graduate students within the College of Architecture and Planning

ARCH 6190 - Special Topics in Design Studies (3 Credits)

Various topics in design, according to current faculty and student interests. Restriction: Restricted to Architecture graduate students within the College of Architecture and Planning. Repeatable. Max Hours: 9 Credits.

Grading Basis: Letter Grade

Repeatable. Max Credits: 9.

Restriction: Restricted to Architecture graduate students within the College of Architecture and Planning

ARCH 6195 - Aspen Summer Workshop (6 Credits)

Three weeks with three world class architecture firms in Roaring Fork Valley. The firms lead students through a unique design project that develops and challenges their observational, conceptual, and visualization abilities. Drawing as a means of seeing, understanding and creating dominates the process/ethic of the course. Restriction: Restricted to Architecture graduate students within the College of Architecture and Planning. Max hours: 6 Credits.

Grading Basis: Letter Grade

Restriction: Restricted to Architecture graduate students within the College of Architecture and Planning

Typically Offered: Summer.

ARCH 6198 - Essentials of Biomimicry (3 Credits)

Biomimicry is the conscious emulation of nature's genius that can be applied to the fields of design, engineering, medicine, transportation, and social interaction. This class will be geared towards designers and will give an overview of the discipline, the (3) Essential Elements, the human-nature connection, The Biomimicry Thinking Methodology, and Life's Principles. Prereq: ARCH 5110. Max hours: 3 Credits.

Grading Basis: Letter Grade

Prereq: ARCH 5110.

Typically Offered: Spring.

ARCH 6205 - Urban Housing (3 Credits)

This course examines housing trends and patterns; supply and demand factors; housing policies; housing challenges (e.g., inequitable distribution, special needs, segregation/discrimination, and homelessness); sociological, demographic, and economic considerations; and the roles of planners and the public and private sectors. Restriction: Restricted to graduate students. Cross-listed with LDAR 6755 and URPL 6405. Max hours: 3 Credits.

Grading Basis: Letter Grade

Restriction: Restricted to students with graduate standing.

ARCH 6210 - A History of American Architecture (3 Credits)

This course traces the history of architecture in North America from the early colonial settlements in the late 17th century to the corporate architecture of the late 20th century. The various formal languages and theories that have shaped the history of American architecture will each be discussed through the close examination of a select group of buildings within their specific cultural, social, political, and economic contexts. Restriction: Restricted to Graduate students. Cross-listed with ARCH 4610. Max hours: 3 Credits.

Grading Basis: Letter Grade

Restriction: Restricted to students with graduate standing.

ARCH 6212 - A History of Modern Architecture (3 Credits)

This course traces the various theoretical and formal developments in European and American Architecture from the end of the 19th century through the 20th century. The works of a select group of architects will be examined and discussed in relation to the diverse body of goals and objectives, ideas and ideals that constituted the Modern movements in architecture. Restriction: Restricted to Graduate students. Cross-listed with ARCH 4612. Max hours: 3 Credits.

Grading Basis: Letter Grade

Restriction: Restricted to students with graduate standing.

ARCH 6220 - A History of Theoretical Discourse on Architecture (3 Credits)

This course traces the history of theoretical discourse on architecture from the Renaissance to the present. It explore the genealogy of current theoretical stances and critical methodologies in the discipline of Architecture through the close reading of a select group of historic and contemporary texts. Prereq: ARCH 5230. Restriction: Graduate level students. Cross-listed with ARCH 4220. Max hours: 3 Credits.

Grading Basis: Letter Grade

Prereq: ARCH 5230. Restriction: Graduate level students.

ARCH 6222 - Contested Terrains (3 Credits)

Explores the different processes, factors and forces and determines and influences occupation, land use and built form through the phenomena of conflict and contestation. Design is inherently located within the disputes and discourses involving landscape as location and resource. Restriction: Graduate level students. Max hours: 3 Credits.

Grading Basis: Letter Grade

Restriction: Graduate level students.

ARCH 6230 - Preservation Theory and Practice (3 Credits)

The practice of historic preservation has evolved in a specific policy context. This introductory course introduces basic American institutions and laws associated with preservation as well as standards, definitions, and practices associated with these. Cross-listed with HIPR 6010.

Restriction: Restricted to Architecture graduate students within the College of Architecture and Planning. Max hours: 3 Credits.

Grading Basis: Letter Grade

Restriction: Restricted to Architecture graduate students within the College of Architecture and Planning

ARCH 6231 - Regionalisms & the Vernacular (3 Credits)

This class explores the history of the built environment from the perspective of evolutionary change; peoples attempting to meet utilitarian needs, respond to environmental forces, societal expectations, and aesthetic aspirations through design. The course looks closely at vernacular structures in a global context. Cross-listed with HIPR 6110.

Restriction: Restricted to Architecture graduate students within the College of Architecture and Planning. Max hours: 3 Credits.

Grading Basis: Letter Grade

Restriction: Restricted to Architecture graduate students within the College of Architecture and Planning

ARCH 6233 - Historic Buildings in Context (3 Credits)

This course covers the concept of "historic significance" and develops skills in understanding and professionally utilizing this concept. Procedures and skills are introduced. Restriction: Restricted to Graduate Students in the College of Architecture and Planning. Cross-listed with HIPR 6210. Max hours: 3 Credits.

Grading Basis: Letter Grade

Restriction: Restricted to graduate CAP students.

ARCH 6256 - Community Development (3 Credits)

This course introduces community development, examining planners' and other stakeholders' roles in the field; key theories and practices; community dynamics; community-based organizations; asset-based development; social equity; and the influence of local physical and economic factors on community development. Cross-listed with URPL 6400. Restriction: Restricted to Architecture graduate students within the College of Architecture and Planning. Max hours: 3 Credits. Grading Basis: Letter Grade

Restriction: Restricted to Architecture graduate students within the College of Architecture and Planning

ARCH 6257 - Community Engaged Design Practice (3 Credits)

Obtain real-world pre-design and conceptual design experience in complex urban environments focusing on evolving trends in sustainability. Using digital trans-disciplinary learning students will develop comprehensive sustainable strategies that draw from their own sustainable philosophy developed during this class. Cross-listed with LDAR 6635 and LDAR 4435. Restriction: Restricted to graduate students within the College of Architecture and Planning. Max hours: 3 Credits. Grading Basis: Letter Grade

Restriction: Restricted to graduate students within the College of Architecture and Planning

ARCH 6259 - The Art of Traditional Design (3 Credits)

Introduction to Philosophy, History and Design Methods of Traditional Design derived from Greek precedents developed through the Renaissance and later the Beaux Arts. The course will emphasize this influence on the Architecture of the United States. Restriction: Restricted to graduate students within the College of Architecture and Planning. Max hours: 3 Credits.

Grading Basis: Letter Grade

Restriction: Restricted to graduate students within the College of Architecture and Planning

ARCH 6261 - Urban Design Economics and Equity (3 Credits)

Explores the economics of urban design through its relationship with private-sector real estate development, public-sector infrastructure, and budgetary/fiscal constraints on design implementation while emphasizing the critical role of urban design in advocating for social equity, affordable housing, and related issues. Restriction: Graduate level students. Cross-listed with URBN 6625 and URPL 6395. Max hours: 3 Credits.

Grading Basis: Letter Grade

Restriction: Graduate level students.

ARCH 6270 - City Design Fundamentals (3 Credits)

Investigates the historical roots, spatial patterns, and physical forms of cities and their evolution over time; the environmental, cultural, and economic forces influencing city design; and urban design as the nexus of the planning and design professions in contemporary city-building. Cross-listed with URPL 6350 and URBN 6525. Restriction: Restricted to graduate students within the College of Architecture and Planning. Max hours: 3 Credits.

Grading Basis: Letter Grade

Restriction: Restricted to graduate students within the College of Architecture and Planning

ARCH 6290 - Special Topics in Cultural Studies (3 Credits)

Various topics in cultural studies, according to current faculty and student interests. Restriction: Restricted to Architecture graduate students within the College of Architecture and Planning. Repeatable. Max hours: 21 Credits.

Grading Basis: Letter Grade

Repeatable. Max Credits: 21.

Restriction: Restricted to Architecture graduate students within the College of Architecture and Planning

ARCH 6293 - Architect as Advocate (3 Credits)

This course will encourage students to become advocates for the profession by investigating the activities of advocates who have initiated and realized significant architectural opportunities. Students will then develop a proposal in which they practice becoming an Architect as Advocate. Prereq: ARCH 5110 and 5120 or ARCH 2111 and ARCH 2121. Max hours: 3 Credits.

Grading Basis: Letter Grade

Prereq: ARCH 5110 and 5120 or ARCH 2111 and ARCH 2121.

Typically Offered: Fall.

ARCH 6310 - Greenbuilding Tech (3 Credits)

This seminar will advance the student's knowledge of environmental building and construction methods through studies in material resources, innovative green systems, alternate green technology, energy efficiency, and affordability in "green architectural design." Restriction: Restricted to Architecture graduate students within the College of Architecture and Planning. Max hours: 3 Credits.

Grading Basis: Letter Grade

Repeatable. Max Credits: 3.

Restriction: Restricted to Architecture graduate students within the College of Architecture and Planning

ARCH 6313 - LEED Certification, Greenbuilding Seminar (3 Credits)

This RIGOROUS course will use the LEED Certification process to provide a framework for assessing building performance and meeting sustainability goals, following the 1st step in a two stage Professional Accreditation process, focusing on LEED GA, Green Associate Accreditation. Restriction: Restricted to Architecture graduate students within the College of Architecture and Planning. Max hours: 3 Credits.

Grading Basis: Letter Grade

Restriction: Restricted to Architecture graduate students within the College of Architecture and Planning

ARCH 6351 - Building Conservation (3 Credits)

This course emphasizes the relationship between knowledge acquisition, professional judgement, and design modification. Topics include: 1) Historic Building Types & Methods, 2) Field and Lab Methods of Building Assessment, and 3) Management of Building Rehabilitation. The course takes an integrative approach to the scientific, aesthetic, managerial and legal dimensions of preservation. Restriction: Restricted to Architecture graduate students within the College of Architecture and Planning. Max hours: 3 Credits.

Grading Basis: Letter Grade

Restriction: Restricted to Architecture graduate students within the College of Architecture and Planning

ARCH 6352 - Documentation, Analysis, Representation (3 Credits)

This methods course focuses on skills development in in-situ documentation of the historic environment. The course includes modules on: a) historic records, b) archaeological evidence, c) building and site measurement, d) photographic & Photometric methods, e) geo-spatial data, f) graphic representation, and g) reporting formats. Restriction: Restricted to graduate students in the College of Architecture and Planning. Cross-listed with HIPR 6310. Max hours: 3 Credits.

Grading Basis: Letter Grade

Restriction: Restricted to Graduate Level students in the College of Architecture and Planning.

ARCH 6355 - Urban Conservation: Context for Reuse (3 Credits)

Human habitats (especially cities) are dynamic. The preservationist cannot freeze cities in a static representation of the past. The course deals with philosophical and political contexts, but emphasizes the role of strategic design intervention in the shaping of evolving cities. Restriction: Graduate level students. Cross-listed with HIPR 6410. Max hours: 3 Credits.

Grading Basis: Letter Grade

Restriction: Graduate level students.

ARCH 6356 - Adaptive Reuse: Business and Practice (3 Credits)

Existing buildings and infrastructure afford challenges and opportunities for reuse. This course explores the business, and financial aspects of adapting the built environment for contemporary uses. The course is suitable for designers, planners, historians and social scientists. Restriction: Restricted to majors within the College of Architecture and Planning. Cross-listed with HIPR 6220. Max hours: 3 Credits.

Grading Basis: Letter Grade

Restriction: Restricted to graduate majors within the College of Architecture and Planning.

ARCH 6370 - Introduction To Design Build (3 Credits)

Introduction to Design Build project delivery methods important to architects. Lecture, research on the industry and an individual student project are the methods used to introduce ethical questions, role of the architect, owner, consultant and subcontractors. Work leads to studio project or case study. Restriction: Restricted to Architecture graduate students within the College of Architecture and Planning. Max hours: 3 Credits.

Grading Basis: Letter Grade

Restriction: Restricted to Architecture graduate students within the College of Architecture and Planning

ARCH 6373 - Construction in Design Build (3 Credits)

Using a single project, students fully explore the design phase, estimating, scheduling and project management skills in traditional construction. Course is concurrent with an advanced studio and builds a project on a site. Restriction: Restricted to Architecture graduate students within the College of Architecture and Planning. Max hours: 3 Credits.

Grading Basis: Letter Grade

Restriction: Restricted to Architecture graduate students within the College of Architecture and Planning

ARCH 6375 - Green Tech Eco-Furniture Fabrication I (3 Credits)

Green Tech I is the first of two courses that are a "real build" course in which students advance their knowledge of environmental design through full-scale construction of architectural elements, furnishings, accessories, finishes, outdoor gear, or even clothing. Coreq: ARCH 6376. Restriction: Restricted to Architecture graduate students within the College of Architecture and Planning. Cross-listed with ARCH 3804. Max hours: 3 Credits.

Grading Basis: Letter Grade

Coreq: ARCH 6376 Restriction: Restricted to Architecture graduate students within the College of Architecture and Planning

ARCH 6376 - Green Tech Eco-Furniture Fabrication II (3 Credits)

Green Tech II is the second of two courses that is a "real build" course in which students advance their knowledge of environmental design through full-scale construction of architectural elements, furnishings, accessories, finishes, outdoor gear, or even clothing. Students must be enrolled in both Green Tech I and Green Tech II in the same semester. Coreq: ARCH 6375. Restriction: Restricted to Architecture graduate students within the College of Architecture and Planning. Cross-listed with ARCH 3806. Max hours: 3 Credits.

Grading Basis: Letter Grade

Coreq: ARCH 6375 Restriction: Restricted to Architecture graduate students within the College of Architecture and Planning

ARCH 6377 - EcoFAB: Furniture Design and Fabrication for Small-Scale Residential Architecture (3 Credits)

This unique, quick-paced seminar focuses on small-scale residential design, from tiny-homes, to prefab, and movable residences. Students learn Small Home design, methods, and techno-systems, then using green materials, they design and fabricate architectural elements and furniture for enhancing small-scale living. Restriction: Restricted to ARCH graduate students. Cross-listed with ARCH 3807. Max hours: 3 Credits.

Grading Basis: Letter Grade

Restriction: Restricted to Architecture graduate students within the College of Architecture and Planning

ARCH 6390 - Special Topics in Technology (3 Credits)

Various topics in technology, according to current faculty and student interests. Restriction: Restricted to Architecture graduate students within the College of Architecture and Planning. Repeatable. Max hours: 18 Credits.

Grading Basis: Letter Grade

Repeatable. Max Credits: 18.

Restriction: Restricted to Architecture graduate students within the College of Architecture and Planning

ARCH 6413 - Construction Leadership (3 Credits)

The final course is an integrated architecture, engineering, and construction business course bringing together executives, principals, and managers to current industry topics and provide students opportunities to apply management and leadership principles from the various fields to case study projects. Cross-listed with CVEN 5238. Restriction: Restricted to Architecture graduate students within the College of Architecture and Planning. Max hours: 3 Credits.

Grading Basis: Letter Grade

Restriction: Restricted to Architecture graduate students within the College of Architecture and Planning

ARCH 6470 - ACE Mentoring (3 Credits)

Graduate students work with professional architects, designers, and engineers mentoring students in selected local high schools to learn problem solving, graphics and model making to produce a design project. Student mentors develop lesson plans, outcomes and keep a weekly journal. Cross-listed with LDAR 6470 and URPL 6850. Restriction: Restricted to Architecture graduate students within the College of Architecture and Planning. Max hours: 3 Credits.

Grading Basis: Satisfactory/Unsatisfactory

Restriction: Restricted to Architecture graduate students within the College of Architecture and Planning

ARCH 6471 - Managing Quality & Risks (3 Credits)

A lecture and seminar on approaches to risk management including contracts, insurance, financial analysis, dispute resolution and client relationships. Utilizing case study approach, quality assurance will be defined and studied in the design and building phase of workings. Restriction: Restricted to Architecture graduate students within the College of Architecture and Planning. Max hours: 3 Credits.

Grading Basis: Letter Grade

Restriction: Restricted to Architecture graduate students within the College of Architecture and Planning

ARCH 6472 - Architecture in a Single Source Project Delivery (3 Credits)

Directed to the practice of architecture with design build and other single source delivery systems. This course examines requirements of codes, zoning, building systems and legal questions for the architect. Restriction: Restricted to Architecture graduate students within the College of Architecture and Planning. Max hours: 3 Credits.

Grading Basis: Letter Grade

Restriction: Restricted to Architecture graduate students within the College of Architecture and Planning

ARCH 6473 - Research Tools & Methods (3 Credits)

Introduces the thesis in architecture and establishes the scholarly basis for the research and construction of a Master's Thesis project. This course will provide the student with the research practices and methodologies to develop the scholarship and products required to produce a Thesis Project Proposal. Completion of this course is a prerequisite for the student to submit the Thesis Proposal for departmental approval to continue with the remaining 9 credits of thesis work. Cross-listed with LDAR 6949. Restriction: Restricted to Architecture graduate students within the College of Architecture and Planning. Max hours: 3 Credits.

Grading Basis: Letter Grade

Restriction: Restricted to Architecture graduate students within the College of Architecture and Planning

ARCH 6490 - Special Topics in Professional Studies (3 Credits)

Various topics in professional studies according to current faculty and student interests. Restriction: Restricted to Architecture graduate students within the College of Architecture and Planning. Repeatable. Max Hours: 18 Credits.

Grading Basis: Letter Grade

Repeatable. Max Credits: 18.

Restriction: Restricted to Architecture graduate students within the College of Architecture and Planning

ARCH 6530 - The Classical Elements (3 Credits)

Classical Elements provides skills for the Classical Studio (optional) and prepares students to apply for Certificate in Classical Architecture from the Institute of Classical Architecture and Art (optional). The course addresses the basic vocabulary, proportional systems, and theory of classical architecture. Restriction: Restricted to Architecture graduate students within the College of Architecture and Planning. Max hours: 3 Credits.

Grading Basis: Letter Grade

Restriction: Restricted to Architecture graduate students within the College of Architecture and Planning

Typically Offered: Fall.

ARCH 6550 - Digital Portfolio Design (3 Credits)

This course introduces students to the Graphic Design Concepts and the Digital Applications used to create both Printed and Web-based Portfolios. Students must have completed ARCH 5110 and have a working knowledge of Photoshop. Restriction: Restricted to Architecture graduate students within the College of Architecture and Planning. Max hours: 3 Credits.

Grading Basis: Letter Grade

Restriction: Restricted to Architecture graduate students within the College of Architecture and Planning

ARCH 6560 - Architecture Photography (3 Credits)

Emphasizes and understanding of light, composition, color and problem solving, with a particular goal of applying these skills to the photography of architectural exteriors and interiors. For students who have access to adjustable 35 mm digital cameras. Restriction: Restricted to Architecture graduate students within the College of Architecture and Planning. Max hours: 3 Credits.

Grading Basis: Letter Grade

Restriction: Restricted to Architecture graduate students within the College of Architecture and Planning

ARCH 6570 - Sketching As Seeing (3 Credits)

Sketching promotes seeing, and seeing promotes thinking. This course is designed to help you think & see by the regular practice of sketching & the discipline of keeping a sketchbook. Restriction: Restricted to Architecture graduate students within the College of Architecture and Planning. Max hours: 3 Credits.

Grading Basis: Letter Grade

Restriction: Restricted to Architecture graduate students within the College of Architecture and Planning

ARCH 6590 - Special Topics in Representational Studies (3 Credits)

Various topics in representational studies, according to current faculty and student interests. Prereq: ARCH 5510. Repeatable. Max hours: 15 Credits.

Grading Basis: Letter Grade

Repeatable. Max Credits: 15.

Restriction: Restricted to Architecture graduate students within the College of Architecture and Planning

Typically Offered: Fall, Spring, Summer.

ARCH 6710 - Architecture in Other Cultures (3 Credits)

Various studies of architecture and urbanism in foreign countries. Restriction: Restricted to Architecture graduate students within the College of Architecture and Planning. Max hours: 12 Credits.

Grading Basis: Letter Grade

Repeatable. Max Credits: 12.

Restriction: Restricted to Architecture graduate students within the College of Architecture and Planning

Typically Offered: Summer.

ARCH 6755 - Rome: Architecture & Urbanism (3 Credits)

The objective of this course is to provide a broad overview of the city's major architectural sites, topography, infrastructure and systems of urban design and organization through the study of the rich palimpsest of buildings, piazzas and landscapes from antiquity to the present day. Coreq: ARCH 6760. Restriction: Restricted to ARCH graduate students. Cross-listed with ARCH 3693. Max hours: 3 Credits.

Grading Basis: Letter Grade

Coreq: ARCH 6760. Restriction: Restricted to ARCH graduate students.

Additional Information: Global Education Study Abroad.

ARCH 6760 - Rome: Documentation, Analysis and Design (3 Credits)

With graphic representation as the primary mode of inquiry, this course is an intensive study of a single building, piazza or landscape within the rich urban fabric of Rome. The graphical inquiry will be supported by pre-departure research and onsite observation and presentations. Coreq: ARCH 6755. Restriction: Restricted to ARCH graduate students. Cross-listed with ARCH 3694. Max hours: 3 Credits.

Grading Basis: Letter Grade

Coreq: ARCH 6755. Restriction: Restricted to ARCH graduate students.

Additional Information: Global Education Study Abroad.

ARCH 6840 - Independent Study (1-3 Credits)

Studies initiated by students or faculty and sponsored by a faculty member to investigate a special topic or problem related to architecture. Restriction: Graduate level students. Repeatable. Max hours: 9 Credits.

Grading Basis: Letter Grade

Repeatable. Max Credits: 9.

Restriction: Graduate level students.

ARCH 6930 - Architecture Internship (3 Credits)

Designed to provide professional practice experience. The internship is composed of eight hours per week working in a practicing professional's office during the regular semester. Students must complete the second-year level before taking this course. Restriction: Graduate level students. Max hours: 3 Credits.

Grading Basis: Satisfactory/Unsatisfactory

Restriction: Graduate level students.

ARCH 6931 - Architecture Internship (3 Credits)

Designed to provide professional practice experience. The internship is composed of eight hours per week working in a practicing professional's office during the regular semester. Students must complete the second-year level before taking this course. Restriction: Graduate level students. Max hours: 3 Credits.

Grading Basis: Satisfactory/Unsatisfactory

Restriction: Graduate level students.

ARCH 7840 - Independent Study (1-3 Credits)

Max hours: 3 Credits.

Grading Basis: Letter Grade

Restriction: Restricted to graduate majors within the College of Architecture and Planning.