Architecture

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The Study of Architecture

Architectural Education

The purpose of studying architecture is to learn how to make physical changes to our surroundings that enhance the quality of the built environment and our experience of life. Within this broad purpose, architectural study and practice include the tasks of providing shelter and environmental protection, providing appropriate settings for human activities, and creating forms that are aesthetically pleasing and supportive of social well-being. In the context of rapid urbanization, climate change, transforming economies, emerging technologies, growing inequalities, and other challenges, the potential impact and value of architectural design has never been greater.

The Department of Architecture includes the Interior Architecture Program (http://catalog.uoregon.edu/archive/2018-2019/aaa/interiorarchitecture) and maintains close ties with other departments in the College of Design. Architecture faculty members believe that the interdisciplinary cooperation of environmentally concerned fields is important to the study of architecture and continually seek new ways to learn from one another.

A central part of architectural education is the design studio, where students learn by doing through experience with the design of buildings. This kind of learning is demanding, and students are expected to be committed and able to work independently and responsibly toward program and course objectives. In the design studio, continuous evaluation and response are the basic learning modes.

The department sets high standards for student performance. Advanced students often work together in courses and as collaborators with faculty members in research investigations through independent-study courses.

Preparation

Architecture is an inclusive art, bringing together a variety of disciplines. Students should prepare themselves in the following fields:

1. Social sciences
2. Natural sciences
3. Humanities
4. Fine arts

Students are also encouraged to travel and broaden their experiences related to environmental design.

Design Camp

The College of Design offers a summer career exploration program for college-bound students at the school's facilities in the White Stag Block in downtown Portland. Students explore architecture, product design, and the digital arts in the city and in the studio. Information about Design Camp may be obtained on the website or by calling the College of Design in Portland.

Guest Instructors, Lecturers, and Critics

The Department of Architecture has an extensive program of visiting instructors, lecturers, and critics who are brought to the school each year. The program includes the Pietro Belluschi Distinguished Visiting Professor in Architectural Design.

Careers

Although most students prepare for professional registration and internship with practicing architects, others choose careers in allied fields such as construction management, environmental policy development, urban and community planning, architectural programming, and facilities management.

Accreditation

In the United States, most state registration boards require a degree from an accredited professional degree program as a prerequisite for licensure. The National Architectural Accrediting Board (NAAB), which is the sole agency authorized to accredit U.S. professional degree programs in architecture, recognizes three types of degrees: the bachelor of architecture, the master of architecture, and the doctor of architecture. Doctor of architecture and master of architecture degree programs may consist of a preprofessional undergraduate degree and a professional graduate degree that, when earned sequentially, constitute an accredited professional education. However, the preprofessional degree is not, by itself, recognized as an accredited degree.

At the University of Oregon, both the bachelor of architecture (BArch) and the master of architecture (MArch) degree programs are accredited by NAAB. The next accreditation review for these programs is 2021.

The postprofessional master of science in architecture (MS) degree program and the PhD degree program are not accredited. Admission to these programs is restricted to applicants who already hold a NAAB-accredited degree or the international equivalent.

The Architecture Curriculum

The professional curriculum in architecture has two principal objectives:

1. broad inquiry into the integrative nature of environmental design and
2. a comprehensive professional education that develops the ability to design built environments ranging from intimate personal spaces to cities.

Curriculum requirements are published in the *UO Catalog* and in the department's online curriculum guides, which include sample course sequences. Grading policies, an explanation of how students' progress is monitored through the program, and other advising information is available through the online Student Handbook. Academic advising is offered through the College of Design's Student Services and the School of Architecture and Environment's professional advisor. Students are encouraged to consult their advisor for specific information.

Professional Curriculum

The professional curriculum of the bachelor of architecture (BArch) program and the master of architecture (MArch) programs, Track I and Track II, include required architectural design studios and architectural

subject courses. In addition, each program's curriculum is supplemented by professional electives.

Architectural Design

The architectural design studio is a social and interactive workplace where students work cooperatively with their peers under the guidance of faculty members with frequent input from practicing architects and experts as well as representatives of communities served by the studio's design explorations. Through design projects, students learn to respond to complex environmental and cultural contexts through the exploration of architectural form. Introductory studios emphasize creativity, design communication skills, and critical thinking fundamental to the design process; intermediate studios emphasize integration of architectural subjects with design; advanced studios emphasize comprehensive integration of these elements. Student performance in all design studios is graded on a pass/no pass basis and evaluated through final reviews, written evaluations, and exit interviews with faculty members.

Design credit may be earned only through participation in design studios. BArch and MArch Track I students are required to complete 64 design studio credits. MArch Track II students are required to complete 40 design studio credits.

Architectural Subjects

Subject courses develop theory, knowledge, and skills in architecture and related disciplines, with an emphasis on learning architectural subjects in the context of design. This course work develops design skills and examines the influences of place, human activity, spatial order, structure, construction, environmental control, professional practice, and history on the practice of architecture.

Residence Requirements

For transfer students to earn the bachelor of architecture or master of architecture degree, the following minimum course work must be successfully completed in residence:

Code	Title	Credits
ARCH 485/585	Advanced Architectural Design I	8
ARCH 486/586	Advanced Architectural Design II	8
Design: two additional terms of architectural design		12
Architecture subjects		30
Upper-division, writing-intensive, general electives that delve into the literature of academic subjects outside the subject areas of architecture and interior architecture (undergraduates only)		16

Leave of Absence

University Policy

Graduate students should see the Continuous Enrollment statement in the **Graduate School** section of this catalog. Undergraduate students should contact the UO admissions office to learn how withdrawal from the university affects residency status.

Departmental Policy

Undergraduate and graduate students may interrupt the course of study for various reasons. In order for the department to plan for maximum use of resources, students must file a leave-of-absence form with the department indicating the expected date of return. Leave-of-absence status is renewable. Undergraduates may accumulate up to a total of two years of leave; they must file a departmental leave-of-absence agreement and submit a reenrollment card to the Office of the Registrar. Graduate students may accumulate up to a total of one year of leave; they must file a Graduate School leave-of-absence form, available online, and a departmental agreement, available on the department website. If the limits on accumulated leave are exceeded or the leave-of-absence terms of agreement are not met, major status may be revoked. Students who do not file a leave-of-absence agreement form with the department cannot be guaranteed access to design studio courses the year they return.

Computer Literacy Requirement

Introductory architecture courses presume knowledge of computer operations, general-use software, and Internet communications. Students lacking preparation may draw on resources at the College of Design Technology Services, the University Teaching and Learning Center, the Library and Learning Commons, or Information Technology services. By the end of their first year in the bachelor's or master's program, students are expected to have achieved basic literacy in computer graphics as an integrated tool for architectural design—diagramming, two-dimensional drawing, image processing, three-dimensional modeling, accurate sun casting, parametric modeling, and presentation methods. Students must have an awareness of building information modeling, digital fabrication, building performance analysis software, and geographic information systems.

Students are required to have a high-speed laptop computer and a specified complement of software. Each year the department reviews its software and hardware recommendations. Minimum hardware specifications and software requirements (https://blogs.uoregon.edu/designtech) are posted on the department website.

Mathematics and Physics Literacy Requirement

Students are required to pass a diagnostic examination to show that they have a working knowledge of prerequisite math and physics subjects prior to enrolling in Structural Behavior (ARCH 461) or Structural Behavior (ARCH 561). Students who do not take (or do not pass) the examination are required to take a weeklong review course offered during the week prior to the start of fall term. In some cases, based on examination results, students may only be required to attend certain days of the review course.

Off-Campus Study

Students may participate in off-campus study programs hosted by the Department of Architecture, the Historic Preservation Program, the Department of Landscape Architecture, and Global Education Oregon.

Portland, Oregon

The department maintains an extension of its NAAB-accredited professional and postprofessional graduate programs at the University of Oregon in Portland, where advanced graduate and undergraduate architecture students may study. Students in the master of science or master of architecture Track II programs may complete all studies in residence in Portland or take courses in Eugene and Portland.

The University of Oregon's Portland facility, housed in the historic White Stag Block, includes studio spaces, classrooms, a fabrication shop, a computing lab, review rooms, and a library. Portland students also have access to the resources on the Eugene campus, including scholarships and financial aid. Through provisions of the Oregon University System,

students in Portland may enroll in courses and use libraries at other state-system universities.

Portland is an ideal laboratory for the exploration and study of real problems in urban design and architecture. Civic and regional issues are actively studied and tested in the design studios, in courses, and through research opportunities. The school maintains strong ties with Portland's professional community of architects, planners, and developers. Additional enrichment is provided through the department's sponsorship of professional and public events. Students may take advantage of Portland's status as a major center for architectural and interior design services by seeking practicum experience or internships in local firms and organizations. The program provides interested students with opportunities to contribute to urban design projects for government agencies and nonprofit organizations in the Portland area. More information is available through the department's offices in Portland or Eugene and the department website.

Rome, Italy

The Department of Architecture and the Department of the History of Art and Architecture offer an interdisciplinary summer program in Rome, housed in the historic center of the city. Students experience the layers of history and vibrant design culture through the art, architecture and urban design of the city. Rome serves as the laboratory for courses in the areas of architectural design, media, art history, and architectural history. Students live in apartments within walking distance of the facility. Architecture and interior architecture majors who have successfully completed at least four design studios are eligible to take the studio component.

Vancouver, British Columbia

This architecture and urban design program offered in the spring and based on Granville Island—one of the "world's great public spaces"—in the heart of this multicultural, dynamic metropolis and seaport. Emily Carr University of Art and Design is the host institution for the program, with design studio and support facilities located in their Granville Island buildings. Student housing is located in Vancouver's colorful West End and at Jericho Beach, along the West Point Grey waterfront. Students follow an integrated, design-based curriculum of four coordinated courses: an architectural design studio, a kinetic architecture seminar, an urban design and programming seminar, and an advanced 3-D digital modeling course.

Vicenza, Italy

This architecture program, offered in the spring, is based in the town of Vicenza in the Veneto region of Italy. The program is housed in the heart of Vicenza, where students have access to studio and seminar spaces, a library, and student lounge. The curriculum includes studio, media, and seminar courses designed for advanced architecture, interior architecture, and landscape architecture majors.

Barcelona, Spain

This summer urban design program in the Catalan city of Barcelona offers students insight into the measurement and design of urban relationships. Students use sensors and mapping to understand cities from the scale of human experience, integrating existing and newly acquired data sets to inform design insights. These methods are supported by interaction with local experts in planning, urban ecology, architecture, robotic engineering, transit, and landscape architecture. Cultural context is provided through trips to Granada to study different neighborhoods and the Alhambra. In Barcelona, students live, work, and research in the city's newly planned three-by-three-block, pedestrian-friendly *Superilles*, designed to create a refuge from air pollution, traffic congestion, and sound pollution.

Stuttgart, Germany

A small number of Oregon students change places for a semester with students in the architecture programs at the University of Stuttgart, one of the strongest technical universities in Germany. BArch students in their third or fourth year and MArch Track I and II students who have a full year of study remaining after the exchange year are eligible. German language proficiency is required.

Tokyo, Japan

Students may spend an exchange semester studying architecture in Tokyo, Japan, at Meiji University, one of the most prominent private institutions in Japan. Graduate students enroll in English-taught courses in the International Program in Architecture and Urban Design. Undergraduate students enroll in courses taught in Japanese. Several classes of Meiji architecture students have visited the University of Oregon for short-term collaborations.

Brac, Croatia

The historic preservation field school is ideally situated in a heritage-rich region of the Dalmatian Coast of Croatia. Set primarily on the island of Brac near three World Heritage sites, the program focuses on the study of the last four centuries of sustainable practices in a remote vernacular setting. The program focuses predominantly on the sustainability and conservation of local stone-structure design.

Danish International Studies Program

Architecture and interior architecture students travel to Copenhagen to participate in the program. Summer, fall, and academic-year options are offered. Credits are automatically transferred and financial aid is available. Instruction is in English.

Hong Kong, China

A short-term summer program and a semester exchange program are offered at the University of Hong Kong, where English instruction makes Asia accessible. Students study the challenges of an ultradense metropolis and experience futuristic skyscrapers and public transit.

National University of Singapore

With its Malay, Chinese, Indian, and Western cultural influences, Singapore provides a wealth of architectural diversity. Architectural styles range from traditional Chinese temples to ultramodern buildings. This exchange program allows you to take courses (taught in English) in design and other fields at one of the top universities in the Asia-Pacific Region.

Registering for Study-Abroad Courses

Students in University of Oregon study-abroad programs enroll in courses with subject codes that are unique to individual programs. Upon completion of a program, the credits earned are transferred to fulfill the appropriate degree requirements. See Study Abroad (http://catalog.uoregon.edu/archive/2018-2019/supplementaryprograms/abroad) in the **Supplementary Academic Programming** section of this catalog for more information.

Faculty

Kyu-Ho Ahn, associate professor (interior architecture). BFA, 1992, Hong-Ik; MFA, Iowa State. NCIDQ certificate. (2008)

G. Z. Brown, professor (design, environmental control systems, effect of energy and material conservation on architectural form). BA, 1964, MA, 1966, Michigan State; MBA, 1971, Akron; MArch, 1974, Yale; reg. architect, Oregon; fellow, American Institute of Architects. (1977)

Virginia Cartwright, associate professor (design, Finnish architecture, lighting). AB, 1975, California, Berkeley; MArch, 1981, Oregon. (1986)

Nancy Yen-Wen Cheng, associate professor (design, digital media). BA, 1983, Yale; MArch, 1990, Harvard; reg. architect, Massachusetts (inactive); NCARB certificate. (1996)

Donald B. Corner, professor (design, construction systems, housing production). BA, 1970, Dartmouth College; MArch, 1974, California, Berkeley; reg. architect, Massachusetts. (1979)

Howard Davis, professor (design, urban vernacular architecture, culturally sustainable urban districts); director, graduate studies. BS, 1968, Cooper Union; MS, 1970, Northwestern; MArch, 1974, California, Berkeley; Association of Collegiate Schools of Architecture Distinguished Professor. (1986)

Mark Donofrio, associate professor (design, structures, interdisciplinary design). BA, 2004, Illinois, Chicago; MArch, 2006, Illinois, Urbana-Champaign; reg. architect, Illinois. (2010)

Stephen F. Duff, associate professor (design; structures, construction, and design-build; naval architecture). BA, 1985, Washington (Seattle); MArch, 1988, MS, 1993, California, Berkeley. (1994)

Ihab Elzeyadi, professor (design, environmental control systems). BArch, 1988, Graduate Diploma in Architectural Engineering, 1990, Ain Shams University; MS, 1996, Pennsylvania State; PhD, 2001, Wisconsin, Milwaukee; reg. architect, reg. engineer, Egypt. (2001)

Michael E. Fifield, professor (design, housing, urban design). BA, 1973, California, Berkeley; MArch, 1980, California, Los Angeles; reg. architect, Oregon, Arizona, Idaho; NCARB certificate; fellow, American Institute of Architects; member, American Institute of Certified Planners. (1998)

Gerald Gast, associate professor (urban and architectural design, urban studies). BArch, 1967, MArch, 1969, Illinois; reg. architect, California. (1994)

Donald Genasci, professor (history and theory, architecture and urban design). BArch, 1963, Oregon; Dipl. in Urban Design, 1965, Architecture Association; MA, 1974, Essex; reg. architect, Oregon, NCARB certificate; Architects' Registration Council of the United Kingdom. (1977)

Mark Gillem, professor (urban design, social and cultural factors in design). BArch, 1989, Kansas; MArch, 1996, PhD, 2004, California, Berkeley; reg. architect, California, South Dakota; NCARB certificate; member, American Institute of Architects, American Institute of Certified Planners. (2005)

James W. Givens, senior instructor (design, design theory and process). BArch, 1985, MArch, 1989, Oregon. (1986)

Esther Hagenlocher, associate professor (architecture, interior architecture). Certificate of Profession—Cabinet Maker, 1987, Technical College, Stuttgart; DiplIng, 1994, State Academy of Art and Design, Stuttgart; MArch, 1998, University College, London; reg. architect, Germany (inactive). (2004)

Peter A. Keyes, associate professor (design, housing research and building technology, community design). AB, 1978, Harvard; MArch, 1983, Columbia; reg. architect, New York (inactive). (1990)

Solmaz Mohammadzadeh Kive, assistant professor (interior, history and theory). MArch, 2005, Shahid Beheshti; MArch, 2010, McGill; reg. architect, Tehran. (2017)

Alison G. Kwok, professor (design, environmental control systems). BA, 1977, Knox; MEd, 1980, Hawaii; MArch, 1990, PhD, 1997, California, Berkeley; reg. architect, California, Oregon; NCARB certificate; certified passive house consultant. (1998)

Nico Larco, professor (design, urban design, suburban development). BA, BArch, 1996, Cornell; MArch, MCUP, 2001, California, Berkeley; reg. architect, Massachusetts, NCARB certificate. (2005)

Erin Moore, associate professor (design, technology, media). BA, 1996, Smith; MArch, 2003, California, Berkeley; reg. architect, Arizona; NCARB certificate. (2008)

Brook Muller, associate professor (design theory, environmentally responsive architecture); associate dean for academic affairs. BA, 1987, Brown; MArch, 1992, Oregon. (2004)

Hans Joachim Neis, associate professor (urban and architectural design and theory). DiplIng, Darmstadt, 1976; MArch, 1979, MCP, 1980, PhD, 1989, California, Berkeley; reg. architect, urban designer, Germany. (2000)

Kevin Nute, professor (design history and theory, time-sensitive buildings). BA, 1981, BArch, 1985, Nottingham; PhD, 1993, Cambridge. (2000)

Otto P. Poticha, adjunct associate professor (design, architectural practice, community involvement in physical change). BS, 1958, Cincinnati; reg. architect, California, Colorado, Illinois (inactive), New Mexico, Oregon, Virginia (inactive), Washington, Washington, D.C. (inactive); NCARB certificate; fellow, American Institute of Architects. (1962)

Siobhan Rockcastle, assistant professor (design, lighting, environmental psychology); director, Baker Lighting Laboratory. BArch, 2008, Cornell; SMArchS, 2011, Massachusetts Institute of Technology; PhD, 2017, École polytechnique fédérale de Lausanne. (2017)

John S. Rowell, associate professor (design, construction, building enclosure). BS, 1984, British Columbia; MArch, 1990, Oregon; reg. architect, Washington, Oregon, California; NCARB certificate; member, American Institute of Architects. (1996)

Judith E. Sheine, professor (design, history and theory, housing). AB, 1975, Brown; MArch, 1979, Princeton; reg. architect, California. (2012)

Philip Speranza, assistant professor (design, design communications). BS, 1997, Virginia; MArch, 2002, Columbia; reg. architect, California, New York. (2011)

Robert L. Thallon, associate professor (design, media, construction). BA, 1966, California, Berkeley; MArch, 1973, Oregon; reg. architect, Oregon, California. (1979)

Roxi Thoren, associate professor. See **Landscape Architecture**.

James T. Tice, professor (urban design, architectural history and theory). BArch, 1968, MArch, 1970, Cornell; reg. architect, California. (1990)

Glenda Fravel Utsey, associate professor (design, site-specific process and skill development, settlement patterns). BArch, 1971, MLA, 1977, Oregon. (1981)

Kevin G. Van Den Wymelenberg, associate professor; director, Energy Studies in Buildings Laboratory. BS, 2000, Wisconsin, Milwaukee; MArch, 2002, PhD, 2012, Washington (Seattle). (2015)

Daisy-O'lice Ida Williams, associate professor (design, design communications); BS, 2002, MArch, 2005, Florida A&M. (2011)

Jenny Young, professor (design, programming, health-care facilities). BA, 1970, Vassar; MArch, 1974, California, Berkeley; reg. architect, Oregon. (1982)

Linda K. Zimmer, associate professor (design, media, behavioral factors). BIArch, 1982, Kansas State; MIArch, 1990, Oregon; NCIDQ certificate; member, Institute of Business Designers. (1990)

Courtesy

Edward Allen, courtesy professor (technical teaching program). BArch, 1962, Minnesota; MArch, 1964, California, Berkeley; reg. architect, Massachusetts. (2001)

Emeriti

Wilmot G. Gilland, professor emeritus. AB, 1955, MFA, 1960, Princeton; reg. architect, California, Oregon; Fellow, American Institute of Architects. (1969)

Arthur W. Hawn, professor emeritus. BA, 1961, MA, 1964, Washington State; Fellow, Interior Design Educators Council. (1967)

Earl E. Moursund, professor emeritus. BS, 1949, Texas; MArch, 1951, Cranbrook Academy of Art; reg. architect, Texas. (1955)

Gary W. Moye, associate professor emeritus. BArch, 1967, Oregon; MArch, 1968, Pennsylvania; reg. architect, Pennsylvania, New York, Oregon. (1976)

Donald L. Peting, associate professor emeritus; assistant dean, architecture and allied arts. BArch, 1962, Illinois; MArch, 1963, California, Berkeley; reg. architect, Oregon, Washington. (1963)

James A. Pettinari, professor emeritus. BArch, 1966, Minnesota; MArch, 1970, Pennsylvania; reg. architect, Minnesota; NCARB certificate. (1975)

Guntis Plesums, professor emeritus. BArch, 1961, Minnesota; MArch, 1964, Massachusetts Institute of Technology; reg. architect, Oregon, New York. (1969)

John S. Reynolds, professor emeritus. BArch, 1962, Illinois; MArch, 1967, Massachusetts Institute of Technology; reg. architect, Oregon; fellow, American Institute of Architects; Association of Collegiate Schools of Architecture Distinguished Professor. (1967)

Michael D. Utsey, associate professor emeritus. BArch, 1967, Texas; MEvD, 1971, Yale; reg. architect, Oregon. (1967)

The date in parentheses at the end of each entry is the first year on the University of Oregon faculty.

- **Bachelor of Architecture** (p. 5)
- **Minor** (p. 6)

Undergraduate Studies

Undergraduate programs include the bachelor of architecture (BArch) degree and the minor in architecture. The five-year professional BArch degree program is highly structured the first two years and more flexible the last three. This flexibility allows each student to establish a study sequence according to individual interests and needs. Transfer students should be aware that an accelerated program is normally possible only for students who transfer from an NAAB-accredited architecture program.

Prospective applicants who have a four-year undergraduate degree in any field must apply to the graduate program (see Graduate Admission).

Major Requirements: 231 credits

The bachelor's degree program includes requirements for a liberal education.

General-Education Requirements for Professional School Majors

Code	Title	Credits
Select one of the following:		8
WR 121 & WR 122	College Composition I and College Composition II	
WR 121 & WR 123	College Composition I and College Composition III	
General-Education Electives		
ARH 314	History of World Architecture I	4
ARH 315	History of World Architecture II	4
Select one approved group-satisfying arts and letters course		4
Select three approved group-satisfying social science courses		12
PHYS 201–202	General Physics	8
Select one approved group-satisfying science course		4
Additional Requirements		
Elective courses outside the ARCH or IARC subject codes [1,2]		16
Select two courses that satisfy multicultural requirements from different categories, if not met in other courses [3]		9
Total Credits		69

1. Art history (ARH) courses at the 300 level or above taken beyond the art history requirement (see footnote 2) may be applied toward the upper-division, general-education elective requirements.
2. These courses delve into the literature of academic subjects outside the subject areas of architecture and interior architecture. The upper-division electives may not be courses in service, weekend seminar, human development, or leisure studies. They must be taken in residence at the University of Oregon.
3. Some general-education electives may fulfill multicultural requirements.

Professional BArch Requirements: 144 credits

Code	Title	Credits
Introductory Architectural Design Studios		
ARCH 283–284	Architectural Design I-II	12
ARCH 383–384	Architectural Design III-IV	12
Intermediate Architectural Design Studios		
ARCH 484	Architectural Design (repeatable studio for all professional-degree students; BArch students must complete four terms of ARCH 484) [1]	24
Advanced Architectural Design Studios		
ARCH 485–486	Advanced Architectural Design I-II	16
General Theory		
ARCH 201	Introduction to Architecture	4
Architectural Design Theory and Practice		
ARCH 202	Design Skills	3
ARCH 222	Introduction to Architectural Computer Graphics	4
ARCH 423	Media for Design Development: [Topic]	3
Architectural Design Theory and Practice		
ARCH 430	Architectural Contexts: Place and Culture	4
ARCH 440	Human Context of Design	4
ARCH 450	Spatial Composition	4
Building Technology		
ARCH 461	Structural Behavior	4
ARCH 462	Wood and Steel Building Systems	4
ARCH 470	Building Construction	4
ARCH 471	Building Enclosure	4
ARCH 491–492	Environmental Control Systems I-II	8
Approved advanced technology course [2]		4
Professional Practice		
ARCH 417	Context of the Architectural Profession	4
Architectural History		
ARH 314	History of World Architecture I	4
ARH 315	History of World Architecture II	4
Two additional architectural history courses taught either in the Department of the History of Art and Architecture or the School of Architecture and Environment [3]		8
Subject Area Electives [4]		6
Total Credits		144

1. One may be Interior Design (IARC 484) or Site Planning and Design (LA 489).
2. Approved advanced technology courses vary by term; visit department website for full list.
3. Approved architectural history courses vary by term; visit department website for full list.
4. Approved subject area electives vary by term; visit department website for full list. One 3-credit (minimum) subject area elective must be an approved design arts course (not technology or media).

A sample plan for the bachelor of architecture degree (http://architecture.uoregon.edu/programs/b.arch) is available on the department website.

Minor Requirements: 26 credits

Code	Title	Credits
ARCH 201	Introduction to Architecture	4
ARCH 484	Architectural Design (only required for interior architecture and landscape architecture majors) [1]	6
Electives (see table below; any students outside of interior architecture and landscape architecture must take 22 credits of electives)		16
Total Credits		26

1. ARCH 484 Architectural Design is a course that may not be taken by students outside of the Department of Architecture, with the exception of landscape architecture students.

Electives

Code	Title	Credits
DSGN 321	Inclusive Urbanism	4
ARCH 407	Seminar: [Topic] (Renaissance Architecture)	1-6
ARCH 407	Seminar: [Topic] (Sustainable Urbanism)	1-6
ARCH 409	Practicum: [Topic] (Off-Campus Experience)	1-6
ARCH 430	Architectural Contexts: Place and Culture	4
ARCH 439	Minimal Dwelling	3
ARCH 440	Human Context of Design	4
ARCH 450	Spatial Composition	4
ARCH 491	Environmental Control Systems I	4
ARCH 492	Environmental Control Systems II	4

It is possible to take other architecture courses and apply them to the minor with the permission of the instructor.

Undergraduates who are enrolled in any major may apply to the minor. Completed applications including a statement of support from the student's major advisor are submitted to the Department of Architecture office. Applicants must make an appointment with the architecture advisor to discuss their plan of study. Because the department's first obligation is to its majors, it cannot guarantee availability of courses for minors. Minors may register if space is available after the needs of majors have been met. Space for enrollment in the minor program is limited.

Undergraduate Admission

Interest in the program exceeds the capacity of the department. Approximately equal numbers of first-year and transfer (including change-of-major) applicants are admitted to the first year of the bachelor of architecture program each year. A smaller number of applicants from other NAAB-accredited or recognized programs are admitted as advanced transfer students. Prospective students should review application requirements posted online during the fall, well before application deadlines (see Application Deadlines in the **Admissions** section of this catalog). January 15 is the deadline for completion of both the department and university applications. Admission notices for fall term are e-mailed around April 1.

Admission to the BArch major program is through a selective review that focuses on three attributes: creative potential, academic capability, and potential for contribution to the program through diversity of background, experience, maturity, or demonstrated motivation. Students are expected to submit specific materials supporting each of these attributes (academic records, essays, recommendations, and a portfolio of creative work). Applicants need not have prior course work in building design, but they are encouraged to seek a broad foundation in the visual arts (e.g., drawing, painting, sculpture, graphic design). Experience with crafts and construction may also demonstrate evidence of creative potential.

Prospective applicants may find information about the program and application requirements on the department website (http://architecture.uoregon.edu).

- **Master of Architecture** (p. 7)
- **Master of Science** (p. 8)
- **Doctor of Philosophy** (p. 9)
- **Certificate in Ecological Design** (p. 10)
- **Certificate in Technical Teaching in Architecture** (p. 10)

Graduate Studies

There are three graduate degree programs in architecture: the professional master of architecture (MArch) degree, the postprofessional master of science in architecture (MS) degree, and the doctor of philosophy (PhD) degree. Graduate certificate programs (http://architecture.uoregon.edu/programs/certificates) sponsored by the department include ecological design, museum studies, new media and culture, Oregon leadership in sustainability, and technical teaching in architecture. Students interested in pursuing a concurrent master's degree in interior architecture (http://architecture.uoregon.edu/programs/concurrent) may find information about the combined degree requirements and application procedures on the Department of Architecture website.

Students enrolled in the master of science degree program must take a minimum of 45 graduate credits, of which 30 must be in architecture and 9 must be at the 600 level. The PhD degree program consists of a minimum of 66 graduate-level credits, including at least 50 credits in the Department of Architecture. These degree programs do not have a graded-credit requirement, although students who enroll for graded credits must maintain a 3.00 minimum GPA. Additional requirements for each program are listed below.

Professional Master of Architecture Degree Requirements

The professional, NAAB-accredited master of architecture (MArch) degree program prepares students for careers in architectural practice and careers in allied professions that contribute to shaping the built environment.

The department offers two tracks of study, both of which lead to the MArch degree. Track I typically takes ten terms to complete and requires 144 credits. Track II is a six-term advanced placement program that requires approximately 87 credits (the exact number determined on the basis of individual evaluation of prior course work at the time of admission).

Track I students typically complete all or most of the MArch degree program requirements at the University of Oregon, and begin the program the summer before their first full academic year of study. Students with bachelor's degrees (BA, BS) other than a preprofessional degree in architecture must apply to the Track I program.

Students with degrees in related design disciplines (e.g., landscape architecture, interior architecture, environmental design, or architecture degrees from programs at schools that are not accredited) may be given advanced standing, up to a maximum of three terms of studio credit for equivalent prior studio work. Track I students may apply to transfer to Portland after completing the introductory design studio sequence in Eugene.

Track II is for applicants who have a four-year preprofessional degree in architecture from an institution where the four-year degree is part of a "four plus two" NAAB-accredited degree program. Students admitted into Track II begin their studies fall term. Applicants who have a four-year preprofessional degree in an environmental design discipline and an equivalent amount of professional studio and course work may be considered for Track II. Track II students must fulfill the same professional curriculum requirements as the Track I program, but are admitted with advanced standing in studio and subject-area courses. The extent of this advanced standing is determined by the department before beginning the program. This preliminary evaluation of course waivers is provisional, pending satisfactory completion of three terms in residence.

MArch Track I

Code	Title	Credits
Introductory Architectural Design Studios		
ARCH 680 & ARCH 681 & ARCH 682	Introductory Graduate Design and Introductory Graduate Design and Introductory Graduate Design	18
Intermediate Architectural Design Studios		
ARCH 584	Architectural Design (repeatable studio for all professional-degree students) [1]	30
Advanced Architectural Design Studios		
ARCH 585 & ARCH 586	Advanced Architectural Design I and Advanced Architectural Design II	16
Design Media and Communication		
ARCH 523	Media for Design Development: [Topic]	3
ARCH 611	Graduate Design Process	3
An additional course to be chosen in consultation with an advisor		2
Architectural Design Theory and Practice		
ARCH 530	Architectural Contexts: Place and Culture	4
ARCH 540	Human Context of Design	4
ARCH 550	Spatial Composition	4
Building Technology		
ARCH 561	Structural Behavior	4
ARCH 562	Wood and Steel Building Systems	4
ARCH 570	Building Construction	4
ARCH 571	Building Enclosure	4
ARCH 591 & ARCH 592	Environmental Control Systems I and Environmental Control Systems II	8
Advanced building technology elective		4
Professional Practice		
ARCH 517	Context of the Architectural Profession	4
Architectural History		12
Approved 500- or 600-level courses in architectural history [2]		

Architectural Electives	16
Approved 500- or 600-level courses in architecture or allied fields	
Total Credits	144

1 LA 589 Site Planning and Design, IARC 584 Interior Design, or IARC 586 Furniture Design may be substituted for one of the required ARCH 584 Architectural Design studios.

2 Students must take at least one course in each of the following historical periods: ancient, Renaissance, and modern.

Of the required 144 credits, 15 credits must be applied to an advanced study cluster (http://architecture.uoregon.edu/current/m.arch-cluster) or 16 credits must be applied to a specialization or 12 credits must be applied to one of the department's graduate certificate programs. Students who complete a concurrent master's degree in an allied field may be exempt from this requirement. This work may include an independent research project.

MArch Track I Sample Plan of Study

MArch Track II

Code	Title	Credits
Intermediate Architectural Design Studios		
ARCH 584	Architectural Design (repeatable studio for all professional-degree students) [1]	18
ARCH 683	Graduate Architectural Design: Track II	6
Advanced Architectural Design Studios		
ARCH 585 & ARCH 586	Advanced Architectural Design I and Advanced Architectural Design II	16
Design Media and Communication		
ARCH 611	Graduate Design Process	3
ARCH 523	Media for Design Development: [Topic]	3
An additional course to be chosen in consultation with an advisor		2
Architectural Design Theory and Practice		
ARCH 530	Architectural Contexts: Place and Culture	4
ARCH 540	Human Context of Design	4
ARCH 550	Spatial Composition	4
Building Technology		
ARCH 561	Structural Behavior	4
ARCH 562	Wood and Steel Building Systems	4
ARCH 570	Building Construction	4
ARCH 571	Building Enclosure	4
ARCH 591 & ARCH 592	Environmental Control Systems I and Environmental Control Systems II	8
Professional Practice		
ARCH 517	Context of the Architectural Profession	4
Architectural History		12
Approved 500- or 600-level courses in architectural history [2]		
Architectural Electives		
Approved 500- or 600-level courses in allied fields		
Total Credits		100

1 LA 589 Site Planning and Design, IARC 584 Interior Design, or IARC 586 Furniture Design may be substituted for one of the required ARCH 584 Architectural Design studios.

2 Students must take at least one course in each of the following historical periods: ancient, Renaissance, and modern.

Of the required 87 credits done in residence, 15 credits must be applied to an advanced study cluster (http://architecture.uoregon.edu/current/m.arch-cluster) or 16 credits must be applied to a specialization or 12 credits must be applied to one of the department's graduate certificate programs. Students who complete a concurrent master's degree in an allied field may be exempt from this requirement. This work may include an independent research project.

Students admitted into the Track II program are expected to have completed professional courses in building technology, architectural history, architectural design, and other subject areas in their undergraduate degree program. Students with insufficient preparation may be admitted with deficiencies. Satisfaction of the specific deficiencies may require additional course work for the degree. Students intending to enroll in the Track II program in Portland may be required to fulfill deficiencies on the Eugene campus before they may commence study in Portland.

MArch Track II Sample Plan of Study (https://cpb-us-e1.wpmucdn.com/blogs.uoregon.edu/dist/e/14815/files/2017/07/Track-II-Architecture-Final-2kok9nw.pdf)

Postprofessional Master of Science Degree Requirements

The master of science degree program provides an opportunity for advanced study and contribution to knowledge in the field through the thesis. It leads to the master of science in architecture (MS) as a postprofessional degree and applicants must have, or expect to complete, a professional degree in architecture to be eligible for the MS program. Students complete a minimum of four terms in residence and are required to complete 9 credits in ARCH 503 Thesis or Terminal Project (ARCH 619). Students in this program are expected to develop an individual research topic in one or more of the following areas of faculty research:

1. Building environments: quality, function and aesthetics
2. Sustainable cities and settlements, livable communities, urban design, housing design
3. Green technologies, high-performance envelopes, net-zero buildings, eco-districts
4. Craft and fabrication: green building materials and products
5. Behavioral factors: cultural, social, and economic sustainability
6. Raising levels of occupant and community member perception, performance, and health
7. Design modeling, simulations, and communications
8. Architectural and urban history, preservation, adaptive reuse

The postprofessional MS curriculum focuses on individual research that draws from professional and general university courses and consultation with the student's advisor and thesis committee. For more information about the thesis, see the **Graduate School** section of this catalog.

Doctor of Philosophy Requirements

The PhD degree program focuses on sustainable design, addressing the needs of the profession as society faces the environmental impact of its cities. It prepares students for careers at universities and other institutions engaged in research related to sustainable design, such as national research laboratories, industry research and development, public agencies, and nongovernment organizations. PhD students address research topics that encompass spatial, environmental, historical, social, political, technical, and economic factors. In addition to a rigorous understanding of building performance, aspects of sustainable community development, and broader social processes and policies, each student is expected to demonstrate an understanding of theory and research in a related focus area. Completion of the program requires demonstrated excellence through original contributions to the field. Depending on background and research goals, students can expect to complete the degree in three to six years, with four to five years being most typical. There is a minimum residency of two years of full-time graduate work at the Eugene campus.

The program supports advanced study in the following areas:

- Design and policy for sustainable cities and livable communities
- Design for climate change and adaptation
- Cultural, social, and economic sustainability
- Net-zero building and eco-district design
- Resource forecasting and simulation of place and building performance
- Energy-efficient, adaptive reuse of existing buildings
- Indoor environmental quality and occupant health
- High-performance building envelopes and green technologies
- Life-cycle building analysis design and modeling

Students are required to satisfy university PhD requirements explained in the **Graduate School** section of this catalog and on the Graduate School website. Degree requirements include the following:

- Five required theory and research courses that address qualitative and quantitative studies of environmental and building design and the planning processes that shape them
- 4 credits of supervised college teaching
- Additional course work in two focus areas, one within the department and one in a different department or program to develop knowledge of a second discipline that supports the student's research (e.g., anthropology, architectural history, biology, ecology, education, landscape architecture, planning theory, urban geography). Courses are selected in consultation with a faculty advisor
- A written comprehensive exam followed by an oral comprehensive exam upon completion of course work, typically at the end of the second year. After the student has passed both the written and oral comprehensive exams, he or she will be advanced to candidacy
- A dissertation proposal typically submitted the term following the comprehensive exams, but at least within three terms of the exams. The student forms a dissertation committee that must approve the proposal following a scheduled public proposal presentation and before undertaking the dissertation
- A public presentation and defense of the dissertation research followed by final approval by the dissertation committee

The required 84 credits are distributed as follows:

Doctor of Philosophy Degree Requirements

Code	Title	Credits
Research and Investigation [1]		
ARCH 601	Research: [Topic]	8
ARCH 620	Research Methods in Sustainable Design	2-6
PPPM 656	Quantitative Methods	4
ARCH 678	Advanced Research in Sustainable Design	2-6
ARCH 695	Advanced Dissertation Proposal Development	4-6
Primary Inside Focus Area [2]		
ARCH 608	Colloquium: [Topic]	1
ARCH 617	Built Environment Design and Theory	4
ARCH 633	History of Sustainable Design	4
Advanced electives (500 level and above)		13
Secondary Outside Focus Area [3]		
Courses at the 600 level		16
Supervised College Teaching		
ARCH 602	Supervised College Teaching	1-6
or ARCH 661	Teaching Technical Subjects in Architecture	
Dissertation		
ARCH 603	Dissertation [4]	18

1 A minimum of 24 credits required.

2 A minimum of 22 credits required.

3 A minimum of 16 graduate credits required.

4 A minimum of 18 credits required.

Graduate Admission

MArch Admission

The master of architecture degree allows students to complete a professional degree leading to licensure. Students with a nonrelevant undergraduate degree are eligible for the three-year master of architecture Track I degree. The program is studio-based, with a full complement of professional courses and opportunities to focus on an area of special interest. Students may take advantage of numerous on- and off-campus opportunities for expanding their academic experience. An array of foreign-study programs and internships are offered, in addition to various opportunities to work directly with communities.

Prospective applicants may find information about the program tracks and application requirements on the department website (https://archenvironment.uoregon.edu/architecture/apply/MArch).

PhD Admission

Students interested in applying to the PhD program (https://archenvironment.uoregon.edu/architecture/grad/phd) in the Department of Architecture are encouraged to contact prospective advisors to discuss research interests. Before applying, prospective students should review additional information about the PhD program, including a typical course of study, the PhD Handbook (https://archenvironment.uoregon.edu/sites/archenvironment1.uoregon.edu/files/uo_arch_phd_handbook_8_september_20172.pdf), and funding (https://archenvironment.uoregon.edu/architecture/grad/funding).
Admission to the PhD degree program is through a highly selective review that focuses on the applicants' prior academic and professional preparation and their demonstrated potential to make original research

contributions and contribute to the teaching and research mission of the department. Prospective doctoral students must have earned a professional master of architecture degree, a postprofessional graduate degree in architecture, or a professional degree in architecture and a graduate degree in a related field.
Students admitted to the program must already hold either a master's degree in architecture from an accredited program or have an accredited professional degree in architecture and a master's degree in a related field. A current architectural license and design practice may be applied in lieu of a professional degree in architecture; however, a master's degree in a related field would still be required in this scenario.
Prospective applicants may find information about the program and application requirements on the department website (https://archenvironment.uoregon.edu/architecture/apply/phd).

Graduate Employee and Research Appointments

A number of graduate employee teaching or research fellowships (GEs) are available to well-qualified graduate students. MS or MArch Track II applicants with previous education in architecture or an allied field are encouraged to apply for GE positions. MArch Track I students are typically selected in the second or third year of their degree program. Information about the GE application process is available on the department and Graduate School websites.

- **Certificate in Museum Studies**
- **Certificate in New Media and Culture**

Certificate in Ecological Design

The certificate in ecological design is an interdisciplinary program focused on the development of a practical framework for the integration of the built environment with local and regional natural systems. It is available to all graduate students within the College of Design. Participating students develop an in-depth understanding of the relationships between ecological processes, issues of cultural and social sustainability, and urban development and form, as well as how allied design and planning disciplines approach these relationships.

Students must complete a minimum of 24 credits in approved ecological design subject courses. Of these, 11–12 credits must come from a list of foundation courses; 12–13 additional credits are selected by students from a list of approved electives. A maximum of 12 credits may be counted for both the certificate and a graduate degree program, but required courses for the degree will not satisfy certificate electives.
For most architecture and interior architecture students, this certificate requires 12 credits in addition to their degree requirements. Some students may need to complete prerequisites to develop subject proficiency for approved electives. More information on course requirements and application to the certificate program may be found online, aaa.uoregon.edu/certificates/ecological-design.

Certificate in Technical Teaching in Architecture

The Technical Teaching Certificate program prepares graduate students in the fields of architecture and interior architecture for teaching positions on building technology in academic and professional settings. Building technology includes subjects such as structural design, construction materials and processes, and environmental control systems. Students investigate curricula, tools, and strategies for teaching and concentrate on improving their comprehensive knowledge of the technical subjects. It is designed for graduate students enrolled in the postprofessional MS programs in architecture and interior architecture, but graduate students in the professional MArch Track I and II programs may apply. Individuals who hold a master's degree and at least one professional degree in architecture or interior architecture may apply to this certificate program without being concurrently enrolled in a master's program at the University of Oregon.

Certificate candidates must demonstrate advanced proficiency in at least one technical subject area (structures, construction, or environmental control) and have the background necessary to teach at the introductory level in the other two. This requirement may be fulfilled by submitting a portfolio documenting professional experience or prior course work to the technology faculty, or it can be met by completing a sequence of advanced courses. A minimum of 24 credits is required for the certificate. A maximum of 12 credits may be counted for both the certificate and a graduate degree program, but required courses for the degree will not satisfy certificate electives. More information on course requirements and application to the certificate program may be found online, architecture.uoregon.edu/programs/techteaching.

Courses

ARCH 196. Field Studies: [Topic]. 1-3 Credits.
Repeatable.

ARCH 198. Workshop: [Topic]. 1-3 Credits.
Repeatable.

ARCH 199. Special Studies: [Topic]. 1-5 Credits.
Repeatable.

ARCH 201. Introduction to Architecture. 4 Credits.
Offers a structure of principles for making places for people. Examines places, design procedures, and the use of archtiectural principles in general.

ARCH 202. Design Skills. 3 Credits.
Introduction to basic design processes, methods, and media.
Prereq: ARCH 201 or IARC 204; coreq: ARCH 283.

ARCH 222. Introduction to Architectural Computer Graphics. 4 Credits.
Introduces basic skills and literacy with the computer for architectural illustration, drafting, and design.
Prereq: ARCH 202.

ARCH 283. Architectural Design I. 6 Credits.
Design studio projects and exercises introducing fundamental concepts and considerations in environmental design. Teaches knowledge and skills needed in subsequent studios and professional course work. Sequence with ARCH 284.
Prereq: ARCH 201 or IARC 204; coreq: ARCH 202.

ARCH 284. Architectural Design II. 6 Credits.
Design studio projects and exercises introducing fundamental concepts and considerations in environmental design. Teaches knowledge and skills needed in subsequent studios and professional course work. Sequence with ARCH 283.
Prereq: ARCH 202, 283; coreq: ARCH 222.

ARCH 383. Architectural Design III. 6 Credits.
Studio projects. Integration of issues of context, activity support, spatial order, construction, structure, and environmental control. Emphasis on schematic concept formation and subsequent architectural development. Sequence with ARCH 384.
Prereq: ARCH 284.

ARCH 384. Architectural Design IV. 6 Credits.
Studio projects. Integration of issues of context, activity support, spatial order, construction, structure, and environmental control. Emphasis on schematic concept formation and subsequent architectural development. Sequence with ARCH 383.
Prereq: ARCH 383 and 222.

ARCH 399. Special Studies: [Topic]. 1-6 Credits.
Repeatable.

ARCH 400M. Temporary Multilisted Course. 1-5 Credits.
Repeatable.

ARCH 401. Research: [Topic]. 1-6 Credits.
Repeatable.

ARCH 403. Thesis. 1-9 Credits.
Repeatable.

ARCH 405. Reading and Conference: [Topic]. 1-6 Credits.
Repeatable.

ARCH 406. Special Problems: [Topic]. 1-6 Credits.
Repeatable.

ARCH 407. Seminar: [Topic]. 1-6 Credits.
Repeatable.

ARCH 408. Workshop: [Topic]. 1-6 Credits.
Repeatable.

ARCH 409. Practicum: [Topic]. 1-6 Credits.
Repeatable.

ARCH 410. Experimental Course: [Topic]. 1-6 Credits.
Repeatable.

ARCH 417. Context of the Architectural Profession. 4 Credits.
Introduction to the professional practice of architecture and related careers. Examines the professional, legal, and regulatory environment; firm organization and management; marketing; contractual issues; and the construction process.
Prereq: ARCH 484 or IARC 484 or LA 489.

ARCH 423. Media for Design Development: [Topic]. 3 Credits.
Instruction in media for design process. Techniques for problem and context analysis, generating concepts, developing form, and testing proposals. Subject emphasis varies with instructor. Repeatable.
Prereq: ARCH 202.

ARCH 424. Advanced Design-Development Media: [Topic]. 3 Credits.
Advanced instruction in specific media techniques for architectural analysis and design. Subject emphasis varies with instructor. Repeatable.
Prereq: ARCH 423.

ARCH 430. Architectural Contexts: Place and Culture. 4 Credits.
How the design of buildings interacts with physical and cultural contexts of human traditions, landscape, settlements, cities, and suburbs. Historical and contemporary examples.
Prereq: ARCH 284 or architectural minor status.

ARCH 431. Community Design. 3 Credits.
Multidisciplinary examination of the history, theory, and practice in the design and development of meaningful and sustainable neighborhoods. Special focus selected by faculty. Open to all majors. Offered alternate years.
Prereq: junior standing.

ARCH 435. Principles of Urban Design. 4 Credits.
Introduction to theory and practice of urban design, comparative studies of neighborhood conservation, central city regeneration, growth policies and prospects for restructuring cities, metropolitan regions.

ARCH 436. Theory of Urban Design I. 3 Credits.
Examines the cultural and formal ideas that underlie American and European urban design. Ancient Greek to 1700.
Prereq: ARCH 430.

ARCH 437. Theory of Urban Design II. 3 Credits.
Examines the cultural and formal ideas that underlie American and European urban design. 1700 to the present.

ARCH 438. Housing Prototypes. 3 Credits.
An examination of modern housing prototypes (1920s to the present) with an emphasis on understanding the many and varied factors involved in the production of quality housing. Open to all majors.
Prereq: Junior standing.

ARCH 439. Minimal Dwelling. 3 Credits.
Examination of the design of small dwelling units for a variety of users. Offered alternate years.
Prereq: junior standing.

ARCH 440. Human Context of Design. 4 Credits.
Theoretical principles, case studies, and technical skills for assessing user needs, developing building programs, applying research findings to design, and evaluating performance of the built environment.
Prereq: ARCH 284 or architectural minor status.

ARCH 450. Spatial Composition. 4 Credits.
Architectural space as a means to measure existence and expand awareness. Focus on compositional principles in architecture and methods for analyzing and generating spatial organizations.
Prereq: ARCH 284 or architectural minor status.

ARCH 457. The Facade. 3 Credits.
Ideas related to facade as primary surface of architectural representation. Emphasizes the facade as a mediator between internal and external building needs.
Prereq: ARCH 450.

ARCH 458. Types and Typology. 3 Credits.
Critical introduction to theory of typology that categorizes urban and architectural forms by formal characteristics and cultural meaning. Lectures cover basic concepts, historical development, and case studies.
Prereq: ARCH 384, 450.

ARCH 461. Structural Behavior. 4 Credits.
Develops a basic understanding of structural systems or elements and their implications for architectural form. Lectures, laboratories, and case studies investigate structure in historical and contemporary buildings.
Prereq: PHYS 201, 202; passing score on diagnostic examination.

ARCH 462. Wood and Steel Building Systems. 4 Credits.
Historical development of materials. Analyzes elements, connections, and systems of wood, steel, and concrete structures from the perspective of construction process, spatial and structural design.
Prereq: ARCH 461.

ARCH 470. Building Construction. 4 Credits.
Provide an understanding of the basic materials and methods of architecture with emphasis on the design, construction and performance of primary structure.
Prereq: ARCH 284 or architectural minor status.

ARCH 471. Building Enclosure. 4 Credits.
Selection, design, detailing, and performance evaluation of building envelopes: wood, metals, glass, concrete, and masonry veneers and roofing.
Prereq: ARCH 462, 470, 491.

ARCH 480. Supervised Design Teaching. 1-3 Credits.
Supervised assistance with desk critiques and tasks related to studio teaching. Written application required. Repeatable for a maximum of 3 credits.
Prereq: ARCH 384.

ARCH 484. Architectural Design. 6 Credits.
Design projects requiring comprehensive and integrative study over a wide range of project options. Individual criticism, group discussions, lectures and seminars by visiting specialists, public review of projects. Repeatable.
Prereq: ARCH 384.

ARCH 485. Advanced Architectural Design I. 8 Credits.
In-depth work on complex design projects and design development beyond that normally possible in intermediate studios. Sequence.
Prereq: 24 credits in ARCH 484.

ARCH 486. Advanced Architectural Design II. 8 Credits.
In-depth work on complex design projects and design development beyond that normally possible in intermediate studios.
Prereq: ARCH 485.

ARCH 491. Environmental Control Systems I. 4 Credits.
Influence of energy source, climate, heating, cooling, lighting, acoustics, and water and waste systems on design of buildings and sites. Architectural and mechanical means to manipulate thermal environment. Sequence.
Prereq: ARCH 284 or architecture minor status.

ARCH 492. Environmental Control Systems II. 4 Credits.
Influence of energy source, climate, heating, cooling, lighting, acoustics, and water and waste systems on design of buildings and sites. Implications of lighting, acoustics, and water and waste for architectural design.
Prereq: ARCH 284 or architecture minor status.

ARCH 493M. Passive Cooling. 4 Credits.
Conceptual and quantitative investigations of passive cooling design and performance, including precedents, shading, natural ventilation, evaporative cooling, use of thermal mass, radiant cooling assisted by cold night skies, and control scheduling, supported by field investigations and introductory energy modeling. Multilisted with ENVS 493M.
Prereq: ARCH 491.

ARCH 494M. Passive Heating. 4 Credits.
Conceptual and quantitative investigations of passive solar heating design and performance, including precedents, solar resource evaluation, glazing selection and orientation, thermal mass materials and positioning, movable insulation, and control scheduling, supported by solar site surveys and modeling in EnergyPlus.Multilisted with ENVS 494M.
Prereq: ARCH 491.

ARCH 495. Daylighting. 3 Credits.
"Daylighting"—increasing the energy efficiency of a building by maximizing the amount of daylight versus electric light—as an element in architectural design. Models and photography used to study behavior of light. Case studies and prediction techniques.
Prereq: ARCH 492.

ARCH 500M. Temporary Multilisted Course. 1-5 Credits.
Repeatable.

ARCH 503. Thesis. 1-9 Credits.
Repeatable.

ARCH 507. Seminar: [Topic]. 1-6 Credits.
Repeatable.

ARCH 508. Workshop: [Topic]. 1-6 Credits.
Repeatable.

ARCH 510. Experimental Course: [Topic]. 1-6 Credits.
Repeatable.

ARCH 517. Context of the Architectural Profession. 4 Credits.
Introduction to the professional practice of architecture and related careers. Examines the professional, legal, and regulatory environment; firm organization and management; marketing; contractual issues; and the construction process.

ARCH 523. Media for Design Development: [Topic]. 3 Credits.
Instruction in media for design process. Techniques for problem and context analysis, generating concepts, developing form, and testing proposals. Subject emphasis varies with instructor. Repeatable.
Prereq: ARCH 611.

ARCH 524. Advanced Design-Development Media: [Topic]. 3 Credits.
Advanced instruction in specific media techniques for architectural analysis and design. Subject emphasis varies with instructor. Repeatable.
Prereq: ARCH 423/523.

ARCH 530. Architectural Contexts: Place and Culture. 4 Credits.
How the design of buildings interacts with physical and cultural contexts of human traditions, landscape, settlements, cities, and suburbs. Historical and contemporary examples.
Prereq: ARCH 680 or 683.

ARCH 531. Community Design. 3 Credits.
Multidisciplinary examination of the history, theory, and practice in the design and development of meaningful and sustainable neighborhoods. Special focus selected by faculty. Open to all majors. Offered alternate years.

ARCH 535. Principles of Urban Design. 4 Credits.
Introduction to theory and practice of urban design, comparative studies of neighborhood conservation, central city regeneration, growth policies and prospects for restructuring cities, metropolitan regions.

ARCH 536. Theory of Urban Design I. 3 Credits.
Examines the cultural and formal ideas that underlie American and European urban design. Ancient Greek to 1700.

ARCH 537. Theory of Urban Design II. 3 Credits.
Examines the cultural and formal ideas that underlie American and European urban design. 1700 to the present.

ARCH 538. Housing Prototypes. 3 Credits.
An examination of modern housing prototypes (1920s to the present) with an emphasis on understanding the many and varied factors involved in the production of quality housing. Open to all majors.

ARCH 539. Minimal Dwelling. 3 Credits.
Examination of the design of small dwelling units for a variety of users. Offered alternate years.

ARCH 540. Human Context of Design. 4 Credits.
Theoretical principles, case studies, and technical skills for assessing user needs, developing building programs, applying research findings to design, and evaluating performance of the built environment.
Prereq: ARCH 680 or 683.

ARCH 550. Spatial Composition. 4 Credits.
Architectural space as a means to measure existence and expand awareness. Focus on compositional principles in architecture and methods for analyzing and generating spatial organizations.
Prereq: ARCH 680.

ARCH 557. The Facade. 3 Credits.
Ideas related to facade as primary surface of architectural representation. Emphasizes the facade as a mediator between internal and external building needs.
Prereq: ARCH 450/550.

ARCH 558. Types and Typology. 3 Credits.
Critical introduction to theory of typology that categorizes urban and architectural forms by formal characteristics and cultural meaning. Lectures cover basic concepts, historical development, and case studies.
Prereq: ARCH 550 and 682 or 683.

ARCH 561. Structural Behavior. 4 Credits.
Developes basic understanding of structural systems or elements and their implications for architectural form. Lectures, laboratories, and case studies investigate structure in historical and contemporary buildings.
Prereq: passing score on diagnostic examination.

ARCH 562. Wood and Steel Building Systems. 4 Credits.
Historical development of materials. Analyzes elements, connections, and systems of wood, steel, and concrete structures from the perspective of construction process, spatial and structural design.
Prereq: ARCH 461 or 561.

ARCH 570. Building Construction. 4 Credits.
Provide an understanding of the basic materials and methods of architecture with emphasis on the design, construction and performance of primary structure.
Prereq: ARCH 680.

ARCH 571. Building Enclosure. 4 Credits.
Selection, design, detailing, and performance evaluation of building envelopes: wood, metals, glass, concrete, and masonry veneers and roofing.
ARCH 562, 570, 591.

ARCH 580. Supervised Design Teaching. 1-3 Credits.
Supervised assistance with desk critiques and tasks related to studio teaching. Written application required. Repeatable for a maximum of 3 credits.
Prereq: ARCH 681 or 683.

ARCH 584. Architectural Design. 6 Credits.
Repeatable. Design projects requiring comprehensive and integrative study over a wide range of project options. Individual criticism, group discussions, lectures and seminars by visiting specialists, public review of projects.
Prereq: ARCH 682 or 683.

ARCH 585. Advanced Architectural Design I. 8 Credits.
In-depth work on complex design projects and design development beyond that normally possible in intermediate studios. Sequence.
Prereq: 30 credits in ARCH 484/584.

ARCH 586. Advanced Architectural Design II. 8 Credits.
In-depth work on complex design projects and design development beyond that normally possible in intermediate studios.
Prereq: ARCH 485/585.

ARCH 591. Environmental Control Systems I. 4 Credits.
Influence of energy source, climate, heating, cooling, lighting, acoustics, and water and waste systems on design of buildings and sites. Architectural and mechanical means to manipulate thermal environment. Sequence.
ARCH 680 or 683.

ARCH 592. Environmental Control Systems II. 4 Credits.
Influence of energy source, climate, heating, cooling, lighting, acoustics, and water and waste systems on design of buildings and sites. Implications of lighting, acoustics, and water and waste for architectural design.
ARCH 680 or 683.

ARCH 593M. Passive Cooling. 4 Credits.
Conceptual and quantitative investigations of passive cooling design and performance, including precedents, shading, natural ventilation, evaporative cooling, use of thermal mass, radiant cooling assisted by cold night skies, and control scheduling, supported by field investigations and introductory energy modeling. Multilisted with ENVS 593M.
Prereq: ARCH 591.

ARCH 594M. Passive Heating. 4 Credits.
Conceptual and quantitative investigations of passive solar heating design and performance, including precedents, solar resource evaluation, glazing selection and orientation, thermal mass materials and positioning, movable insulation, and control scheduling, supported by solar site surveys and modeling in EnergyPlus. Multilisted with ENVS 594M.
Prereq: ARCH 591.

ARCH 595. Daylighting. 3 Credits.
"Daylighting"—increasing the energy efficiency of a building by maximizing the amount of daylight versus electric light—as an element in architectural design. Models and photography used to study behavior of light. Case studies and prediction techniques.
Prereq: ARCH 492 or 592.

ARCH 600M. Temporary Multilisted Course. 1-5 Credits.
Repeatable.

ARCH 601. Research: [Topic]. 1-6 Credits.
Repeatable.

ARCH 602. Supervised College Teaching. 1-6 Credits.
Repeatable.

ARCH 603. Dissertation. 1-9 Credits.
Repeatable.

ARCH 605. Reading and Conference: [Topic]. 1-8 Credits.
Repeatable.

ARCH 606. Special Problems: [Topic]. 1-6 Credits.
Repeatable.

ARCH 607. Seminar: [Topic]. 1-6 Credits.
Repeatable.

ARCH 608. Colloquium: [Topic]. 1-6 Credits.
Repeatable.

ARCH 609. Practicum: [Topic]. 1-6 Credits.
Repeatable.

ARCH 610. Experimental Course: [Topic]. 1-6 Credits.
Repeatable.

ARCH 611. Graduate Design Process. 3 Credits.
Foundation knowledge, concepts, and skills fundamental to design process and media subject areas.

ARCH 617. Built Environment Design and Theory. 4 Credits.
Investigation of design processes, planning, and construction of buildings and communities.
Prereq: conditional MArch or PhD standing.

ARCH 619. Terminal Project. 1-9 Credits.
Repeatable.

ARCH 620. Research Methods in Sustainable Design. 2-6 Credits.
Research methods to assess the design of buildings and communities; discussions include defining research themes, hypotheses, and developing thesis proposals.
Prereq: conditional MArch or PhD standing.

ARCH 633. History of Sustainable Design. 4 Credits.
History and theory of sustainable design practices; the evolution of codes and standards related to building design; perspectives and implementation strategies by leading ecological practitioners.
Prereq: conditional MArch or PhD standing.

ARCH 661. Teaching Technical Subjects in Architecture. 1-3 Credits.
Covers techniques for effective teaching. Focuses on one or more standard building-technology courses in architecture and interior architecture. Repeatable thrice for maximum of 12 credits.

ARCH 678. Advanced Research in Sustainable Design. 2-6 Credits.
Quantitative and qualitative techniques used in validating the design practice and research covering analytic approaches, including research design, surveys,case-study research, measurement, evaluation, and data presentation.
Prereq: conditional MArch or PhD standing.

ARCH 680. Introductory Graduate Design. 6 Credits.
Design projects and exercises intended to familiarize the student with fundamental concepts of environmental design. Emphasis on developing graphic skills and the capability for visual thinking that are essential to advanced studios. Sequence.

ARCH 681. Introductory Graduate Design. 6 Credits.
Design projects and exercises intended to familiarize the student with fundamental concepts of environmental design. Emphasis on developing graphic skills and the capability for visual thinking that are essential to advanced studios. Sequence.
Prereq: ARCH 680.

ARCH 682. Introductory Graduate Design. 6 Credits.
Design projects and exercises intended to familiarize the student with fundamental concepts of environmental design. Emphasis on developing graphic skills and the capability for visual thinking that are essential to advanced studios.
Prereq: ARCH 681.

ARCH 683. Graduate Architectural Design: Track II. 6 Credits.
Design to expand perception and response to issues in architectural design. Design as exploration of fundamental theoretical ideas. Studio projects require comprehensiveness and integrative study. Repeatable.

ARCH 695. Advanced Dissertation Proposal Development. 4-6 Credits.
Directed study for the development of dissertation proposals. Approval of faculty advisor required. Repeatable twice for a maximum of 18 credits based on development of proposal for dissertation.
Prereq: PhD standing.