

# SCHOOL OF ARCHITECTURE

The School of Architecture, founded in 1909, offers professional degree programs in both architecture and architectural engineering. The integration of these programs through shared faculty, facilities and coursework is a major strength of the School. It is one of few such integrated programs in the United States, and as such produces graduates who are particularly prepared for the interdisciplinary nature of professional practice. Additionally, a Bachelor of Science in Design Studies is offered, where the distinct paths of Design Management and Leadership, Design Thinking and Communication, and Design, Culture and Urban Studies can be pursued. The School of Architecture is a primary unit in the College of Engineering, Architecture and Technology, and therefore benefits from excellent state-of-the-art resources which significantly enhance the student experience.

Oklahoma State University graduates are recruited by the leading architectural and architectural engineering firms across the United States and beyond. School of Architecture graduates are routinely accepted into premier graduate schools in architecture and related fields. The Oklahoma State University School of Architecture is particularly proud of having among its alumni many of the leaders of the best firms in the country, an AIA Gold Medalist (the highest award given to an architect), and presidents of the American Institute of Architects (AIA), the National Architectural Accreditation Board (NAAB), and the National Council of Structural Engineering Associations (NCSEA).

## Mission and Goals

Architecture is the creative blend of the art and science of designing a setting for human life. It is unique among today's professions in that its successful practice requires a blend of traits normally often considered less than compatible: human empathy, artistic creativity, technological competence, organizational acumen, and economic awareness. In contrast to other fine arts, architecture is rarely self-generated; it is rather a creative response to a stated or perceived human need. It must, therefore, be more user-oriented than fine art alone and more humane than pure science. Its design solutions are simultaneously subjective and objective, while striving to be functionally, technically and economically sound. Yet, in a seemingly insoluble contradiction, the keenest technological and economic functionality will fall far short of becoming architecture unless it also strongly appeals to spiritual and emotional values. When one thinks of the environment, one cannot help but recall architectural images: pyramids in Egypt, Greek and Roman temples, gothic cathedrals, medieval castles, industrial cities, modern skyscrapers and dwellings, or entire cities which significantly express the culture and values of the people who live or lived there.

The mission of the School of Architecture is to cultivate a collaborative learning community focused upon critical thinking and ethical responsibility. To do so, the faculty embrace established fundamentals and encourage the exploration of emerging innovations in design. The vision of the school is to empower students to make creative contributions in the cause of architecture.

The School of Architecture endeavors to instill in each individual a sensitivity to human needs, a genuine concern for quality, integrity and high ideals, a positive attitude for life-long learning, and personal confidence in one's ability to make positive contributions to society.

The School's primary goal is to provide excellence in professional education for students preparing to enter the private practice of

architecture or architectural engineering, or affiliated disciplines. The School is proud to educate students that will become licensed professionals in their field and assume positions of leadership within the profession and society.

## Accreditation

The School of Architecture offers two separately accredited professional degree programs. The Bachelor of Architecture degree, BArch, is accredited by the NAAB. The Bachelor of Architectural Engineering degree, BArchE, is accredited by the Accreditation Board for Engineering and Technology (ABET <http://www.abet.org>) as an engineering program. Both programs require approximately five years of study to complete. 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) is the sole agency authorized to accredit U.S. professional degree programs in architecture offered by institutions with U.S. regional accreditation. NAAB recognizes three types of degrees: the Bachelor of Architecture, the Master of Architecture and the Doctor of Architecture. A program may be granted an eight-year, three-year or two-year term of accreditation, depending on the extent of its conformance with established educational standards. Doctor of Architecture and Master of Architecture degree programs may require a pre-professional undergraduate degree in architecture for admission. However, the pre-professional degree is not, by itself, recognized as an accredited degree. The Oklahoma State University School of Architecture offers the following NAAB-accredited degree programs - BArch. (154 undergraduate credits).

The next NAAB accreditation visit will occur in 2025.

The next ABET accreditation visit will occur in 2027.

## Architecture

Architecture is the complex synthesis of creatively solving problems involving both art and science through the disciplined orchestration of image-making, activity organization, technological applications, legal constraints and budgetary parameters which together express culture, enhance quality of life and contribute to the environment.

Education in architecture consists of on-campus classroom and studio courses, where the focus is on observation and experimentation, and hands-on learning. The intellectual climate stimulates inquiry, introduces principles and values, and teaches the discipline necessary to work in collaboration with others. The goal of the program is to educate future leaders within the architecture profession.

In the pre-professional portion of the architectural program (approximately two years of study), the focus is on the fundamental principles of design and technology supplemented by appropriate general education courses in English, social sciences, natural sciences, math and humanities. These courses allow students to assimilate a beginning knowledge base in architecture along with a broader liberal-based component to their education.

Students who demonstrate proficiency in this portion of the program by meeting a specific set of admission criteria are eligible for admission to the professional program in architecture.

The professional program in architecture (typically three years) builds on the knowledge acquired in the pre-professional curriculum. Students expand their design and problem-solving abilities through a sequential series of design studios informed by courses dealing with structure, systems and materials, building technology, the history

and theory of architecture, and business and project management principles. In addition students fully utilize the computer as a design and communication tool in the problem-solving process.

The design studio is the center of the School's educational program. It is the setting where students and faculty work most closely together, and where all specialized study and knowledge comes together as a synthesized study in design. The record of OSU students' achievements in the design studios is evidenced by the success in national and international architectural design competitions.

## Architectural Engineering

Architectural engineering is a profession that combines the art and science known as architecture with a detailed knowledge of fundamental and applied engineering principles. In its broadest sense, it involves the creative application of science and technology to the design of structures meant for human occupancy. Architectural engineering differs from architecture in its focus upon the design of elements, systems and procedures for buildings, rather than the design of buildings themselves. Architectural engineers practice in a wide variety of professional engineering settings such as consulting firms, architectural firms, industrial or commercial organizations and governmental agencies.

The objective of the Bachelor of Architectural Engineering program is to provide a professional education to engineering students in building-related systems. OSU graduates possess broad-based knowledge, skills and judgment that prepare them to succeed in the profession of architectural engineering or in further studies at the graduate level. The program is designed to prepare students to contribute to society as professional engineers dealing with analysis, design and related activities within the construction industry. The program utilizes the broad resources of the University and a close relationship with the architectural program to provide in-depth understanding of professional engineering and sensitivity to other qualitative concerns related to the building environment faced by architectural engineers.

The primary focus of the architectural engineering program at OSU is the safe and economical design of technical systems used in buildings. Structural systems must withstand the various forces of nature such as gravity, winds and earthquakes while also accommodating users. These systems require a working knowledge of the mechanics of materials commonly used for building structures such as steel, timber and reinforced concrete. Within the major of Architectural Engineering, the School offers the option in Structural Engineering, and an option in Construction Project Management.

In the pre-professional portion of the architectural engineering program (approximately two years of study), the focus is on the underlying scientific and mathematical principles of engineering and basic design principles supplemented by appropriate general education courses in English, social sciences, natural sciences, math and humanities. These courses allow students to assimilate a beginning knowledge base in architecture and engineering along with a broader liberal-based component to their education. Students who demonstrate proficiency in this portion of the program by meeting a specific set of admission criteria are eligible for admission to the professional program in architectural engineering.

The professional program in architectural engineering (typically two and a half years) builds on the scientific and architectural knowledge acquired in the pre-professional curriculum. Students acquire detailed technical

engineering knowledge and problem-solving abilities through a series of progressively more detailed and comprehensive courses and studios.

Each architectural engineering course builds upon the preceding architectural engineering courses to develop in the student the ability to identify and solve meaningful architectural engineering problems. The coursework is specifically sequenced and interrelated to provide design experience at each level, leading to progressively more complex, open-ended problems. This coursework includes sensitizing students to socially-related technical problems and their responsibilities as engineering professionals to behave ethically and protect public safety. The program culminates in a capstone design course in which the students integrate analysis, synthesis and other abilities they have developed throughout the earlier portions of their study.

An integral part of this educational continuum from basic knowledge through comprehensive architectural engineering design are learning experiences that facilitate the students' abilities to function effectively in both individual and team environments. Students are exposed to a wide variety of problems dealing with contemporary issues in many contexts. Moreover, the program provides every graduate with learning experiences to develop effective written and oral communication skills. State-of-the-art computational tools are introduced and used as a part of the students' problem-solving process. Finally, the students' experience in solving ever-more-challenging problems provides them the ability to continue to learn independently throughout their professional careers.

The Architectural Engineering Program Educational Objectives expected of program graduates a few years after graduation are as follows. Graduates will:

- Be successful in pursuing a graduate degree if they choose to continue their education past a Bachelor's degree.
- Be valued members of interdisciplinary design teams through collaboration during the design and construction process.
- Excel in their careers, displaying leadership, initiative, ethical character, technical ability, and engineering skills.
- Utilize their education in architectural engineering to contribute to society as licensed professional engineers.
- Maintain membership in professional organizations, have an awareness of emerging technologies in the field, and have a positive attitude towards advancing their professional skills through life-long learning.

The architectural engineering program has adopted the following student outcomes:

1. an ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics
2. an ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors
3. an ability to communicate effectively with a range of audiences
4. an ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts

5. an ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives
6. an ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions
7. an ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

The program outcomes were adopted with the concept that they would provide students with the educational experience necessary to successfully achieve the longer-term program educational objectives.

## Architectural Design Studies

The Bachelor of Science in Architectural Design Studies prepares students for a diverse range of fields in the industry and beyond. It is designed to provide a general understanding of architectural issues for those students who wish to pursue a design-related career. The purpose of this degree plan is to allow students to have the opportunity of an array of career paths available to them, beyond the roles of traditional professional practice.

There are three options within this degree: Design Management and Leadership, Design Thinking and Communication, and Design, Culture, and Urban Studies. After foundational coursework, students pursue a combination of core and elective coursework governed by their selected concentration. This degree is not accredited by NAAB, and therefore if the graduate wished to pursue professional licensure as an Architect through the Architects Registration Exam, it may only be allowable in some states depending upon the regulations of that state. The BS degree, however, could become a platform for Graduate-level studies in Business Administration, Strategic Communication, Urban Planning, etc.

## Undergraduate Curriculum

The programs in architecture and architectural engineering are approximately five years long and offer the professional degrees of Bachelor of Architecture and Bachelor of Architectural Engineering. The Bachelor of Science in Architectural Design Studies is a four-year degree plan.

Professional and liberal study electives provide extensive opportunities for educational breadth and depth. Minor plans of study are also available from the School of Architecture; the Architectural History/Theory minor (ASHT), the Architecture and Entrepreneurship minor (ASAE). A minor in Design (ASDS) is available for non-majors. A twelve-credit hour Graduate Certificate focused upon the Integrative Design of the Building Envelope is also available.

## Undergraduate Admission

Students who satisfy the University admission requirements and CEAT Admissions standards are eligible to enroll for the first two years of the program (pre-Professional School). Admissions into Design Studio I, however, is dependent upon a student's progress in the curricula, with special attention paid to position within the math and science string of Calculus, Physics, and Statics. Upon completion of the first two years, the most qualified students are selected, upon application, by the School for admission to the upper division (Professional School). Admission to the Professional School of Architecture and Architectural Engineering is based upon academic achievement and professional

potential. Admission criteria are subject to annual review by the School and may be obtained directly from the School.

Transfer students are required to furnish transcripts and course descriptions for previous classroom courses, as well as a portfolio with examples of previous studio work. Evaluation and enrollment by the School is on a course-by-course basis for all transfer students.

## General Education

All students of OSU are required to complete 40 hours of general education coursework. English composition, American History, Political Science, Social Sciences, Basic Science and Mathematics are part of the General Education requirements. Some required coursework in History and Theory of Architecture can be used for General Education (H) credit.

## Electives

Electives should be selected to comply with the appropriate undergraduate degree requirements for the program. (See 3.2 "Changes in Degree Requirements" in the "University Academic Regulations (<http://catalog.okstate.edu/university-academic-regulations/>)" section of the Catalog.) These requirements assure compliance with institutional and accreditation criteria.

## Study Abroad

The School of Architecture is committed to preparing its graduates for the professional opportunities presented by the expanding global economy. As part of this preparation, the School requires all students in the BArch and BS Architectural Design Studies degree paths to participate in one of its summer study-abroad courses of at least four weeks in length. Students study, in an organized and disciplined fashion, major examples of modern and historic architecture, including urban issues in a range of places outside the United States. Analytic and artistic sketching skills, descriptive writing, and other forms of observational research and record keeping are important in these courses of study.

Alternatively, students may elect to spend a semester abroad, which would meet the conditions of the degree plans as well. At least a year before a student plans to study a semester abroad, foreign university program and coursework must be coordinated with the School of Architecture advisors and the OSU Study Abroad Office to ensure that courses taken abroad meet the requirements of the degree plan.

Experience has shown that participation in a study-abroad program significantly increases a student's level of maturity, independent thinking, and cultural and social awareness of others. Knowing the values and accomplishments of other cultures also makes a student a better and more responsible citizen of his or her own country.

## Faculty and Facilities

School of Architecture faculty have extensive academic and professional experience as successful practicing architects and architectural engineers. The faculty is diverse: more than a third are women, and one quarter are culturally diverse.

The school moved into the Donald W. Reynolds School of Architecture Building, a newly renovated facility in 2009, which provides spacious design studios, a large expanded architectural library, a day-lighting lab, workshops, classroom facilities and many other amenities. The Donald W. Reynolds School of Architecture Building received an AIA Oklahoma Honor Award recognizing it for outstanding design in 2011.

## Computers

All School of Architecture students enrolled in either the architecture or architectural engineering programs are required to purchase a laptop computer as they enter the design studio sequence. Updated specifications for the computer and software are provided each year and posted to the School's website.

## Student Work

Projects submitted for regular class assignments may be retained by the School for archival and accreditation purposes. All work not retained for this purpose will be returned to the student.

## Student Body

Annual student enrollment is approximately 400 students.

## Academic Advising

Students admitted to CEAT and who wish to study in the School of Architecture are advised by the Architecture Academic Advisors. The College's Office of Student Academic Services also has the capability to provide advisement for all entering freshmen pre-professional architecture and architectural engineering students.

Each student is personally advised in the planning and scheduling of his or her coursework and is counseled and advised individually on matters of career choice, his or her activities at OSU, and on other academic matters. A digital academic file is created for each student at the time of initial enrollment.

## Admission to Professional School

Students applying for admission to the Professional School in Architecture or Architectural Engineering must first meet the required criteria established for each program. Applicants will be selected based upon their performance in the first and second year Architecture and Architectural Engineering curricula. Particular courses in the curricula, which have proven to be good indicators of success in these two programs, will be factored with a multiplier to increase their influence in the selection procedure. To be considered for either program, applicants must:

1. Complete a minimum of 55 credit hours of coursework (applicable to the degree plan) prior to admission to professional school.
2. Complete the following required first- and second-year courses with a grade of 'C' or better:
  - a. For the Architecture program: ARCH 1112, 1216, 2116, 2216, 2252, 2183, 2283, 2263, MATH 2114, PHYS 1114 or 2014, ENSC 2113, and ENGL 1113.
  - b. For the Architectural Engineering program: ARCH 1112, 1216, 2116, 2252, 2003, 2263, MATH 2114, PHYS 2014, ENSC 2113, ENSC 2143, ENGR 1412, and ENGL 1113.
3. Achieve a grade of "C" or better in all required ARCH prefix courses, substitutes for ARCH prefix courses, and prerequisites for ARCH prefix courses.
4. Achieve a 2.8 or higher Selection Grade Point Average. The Selection Grade Point Average (SGPA) will be calculated for each applicant by multiplying course credit hours by the multiplier, multiplying by the numerical course grade and dividing by the total factored hours. For consideration of admission to the Architecture program, several of the listed courses will have multipliers applied in the calculation of

the Selection GPA. See the School of Architecture website for the Professional School Admissions Policy and the SGPA worksheet.

## Double Degree

Applicants wishing to enter into the Professional School in both the BArch and BArchE degree programs must apply for both programs and be accepted to each, independent of the other.

A double degree in the BArch and BS Architectural Design Studies is not permitted.

## Declaration and/or Change of Program

When students apply to Professional School, they must indicate whether they are applying for the architecture program or the architectural engineering program. Further, architectural engineering applicants must indicate which degree option they wish to pursue. If changing programs, Architecture to Architectural Engineering or vice versa, a formal application and admission to the other program through the Professional School application and admission process is required.

## Taking ARCH Prefix Courses When Not Admitted to Professional School

Students not admitted to Professional Schools may not enroll in any 3000-level or higher without prior permission of the instructor and Academic Advisor.

## Transfer Students

Students wishing to transfer into Professional School of the OSU School of Architecture must apply for admission to the Professional School in the same manner as OSU students.

## Completion of Required Pre-Professional School Courses

All students applying for admission to Professional School must satisfactorily complete all required courses for consideration by the end of the spring semester of the year of application.

## Application and Notification Dates

Application for admission, readmission or transfer to the Professional School of Architecture and Architectural Engineering must be made by the last working day of April of the year of intended admission. Notification of selection decisions will normally be made soon after June 1st but not before a two-week period after Grade Reports have been received by the School—if there should be any problem with a grade that may impact acceptance to Professional School the student should contact the School immediately. Selected applicants must confirm acceptance of the offer of a position in Professional School by the date indicated in the letter of offer.

## Reapplication

Applicants not admitted may reapply for admission to Professional School the following year; such applicants do not carry any priority or disadvantage but are included in the full application pool.

## Graduation

Students will graduate with the Bachelor of Architecture or Bachelor of Architectural Engineering degree upon the successful completion

of the requirements articulated on the degree sheet. Architectural Engineering students are encouraged to complete the Fundamentals of Engineering Exam before graduation. Architecture majors are encouraged to establish an NCARB record before graduation. It is important to note that the accredited degree is the first step toward professional licensure; internship experience hours and examination are needed post-graduation for a student to become a licensed architect or licensed professional engineer.

Graduates of the Bachelor of Science in Architectural Design Studies are encouraged to enter the profession in roles supporting the creation of architecture. In some states, professional licensure is possible; each state controls its own professional licensing requirements. Graduates of the BS degree may complement their undergraduate education with advanced studies at the Master's level.

## Courses

### ARCH 1112 Introduction to Architecture

**Description:** An introduction to the professions of architecture and architectural engineering. Previously offered as ARCH 1111.

**Credit hours:** 2

**Contact hours:** Lecture: 2 Contact: 2

**Levels:** Undergraduate

**Schedule types:** Lecture

**Department/School:** Architecture

### ARCH 1216 Architectural Design Studio I

**Prerequisites:** Grade of "C" or better in ARCH 1112, or consent of instructor.

**Description:** Architectural graphics and design fundamentals. Students progressing in the Physics 1114/2014 and MATH 2144 course sequence will be given preference in enrollment. Additionally, students who have not received a grade for ARCH 1216 will be given first priority in enrollment. Students who have received a grade in this course will be admitted on a space available basis and at the discretion of the school head and architecture advisor.

**Credit hours:** 6

**Contact hours:** Lab: 12 Contact: 12

**Levels:** Undergraduate

**Schedule types:** Lab

**Department/School:** Architecture

### ARCH 2003 Architecture and Society (HI)

**Description:** Design, planning, and building considered in their social and aesthetic contexts. Some sections may be restricted to Architectural Engineering majors, see course offerings. May not be used for degree credit with ARCH 2183.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Undergraduate

**Schedule types:** Lecture

**Department/School:** Architecture

**General Education and other Course Attributes:** Humanities, International Dimension

### ARCH 2100 Architectural Studies

**Description:** Beginning studies in graphics and design in architecture. Offered for variable credit, 1-4 credit hours, maximum of 4 credit hours.

**Credit hours:** 1-4

**Contact hours:** Contact: 1-4 Other: 1-4

**Levels:** Undergraduate

**Schedule types:** Independent Study

**Department/School:** Architecture

### ARCH 2116 Architectural Design Studio II

**Prerequisites:** Grade of "C" or better in ARCH 1216.

**Description:** Students who have not received a grade for ARCH 2116 will be given first priority in enrollment. Students who have received a grade in this course will be admitted on a space available basis and at the discretion of the school head and architecture adviser. Problems in architectural design.

**Credit hours:** 6

**Contact hours:** Lab: 12 Contact: 12

**Levels:** Undergraduate

**Schedule types:** Lab

**Department/School:** Architecture

### ARCH 2183 History and Theory of Architecture I

**Description:** History and theory of the Pre-Enlightenment era of architecture in the Western world. May not be used for degree credit with ARCH 2003.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Undergraduate

**Schedule types:** Lecture

**Department/School:** Architecture

### ARCH 2203 History and Theory of Architecture Since 1900

**Prerequisites:** ARCH 2003. Grade of "C" or better.

**Description:** History and theory of world architecture in the 20th century and beyond. May not be used for degree credit with ARCH 2283.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Undergraduate

**Schedule types:** Lecture

**Department/School:** Architecture

### ARCH 2216 Architectural Design Studio III

**Prerequisites:** Grade of "C" or better in ARCH 1216 and ARCH 2116.

Students who have not received a grade for ARCH 2216 will be given first priority in enrollment. Students who have received a grade in this course will be admitted on a space available basis and at the discretion of the school head and architecture advisor.

**Description:** Problems in architectural design.

**Credit hours:** 6

**Contact hours:** Lab: 12 Contact: 12

**Levels:** Undergraduate

**Schedule types:** Lab

**Department/School:** Architecture

### ARCH 2252 Design Communication I: Visual and Graphic Acuity

**Prerequisites:** Co-requisite enrollment in ARCH 2116 or permission of instructor.

**Description:** Introduction to the communication strategies unique to the professions of architecture and architectural engineering.

**Credit hours:** 2

**Contact hours:** Lecture: 2 Contact: 2

**Levels:** Undergraduate

**Schedule types:** Lecture

**Department/School:** Architecture

### ARCH 2263 Building Systems

**Prerequisites:** Grade of "C" or better in ARCH 1216 and ARCH 2116.

**Description:** Architectural, structural, and environmental control systems.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Undergraduate

**Schedule types:** Lecture

**Department/School:** Architecture

**ARCH 2283 History and Theory of Architecture II (H)**

**Description:** A study of mankind's accomplishments exhibited in architecture from the renaissance to the present day. May not be used for degree credit with ARCH 2203.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Undergraduate

**Schedule types:** Lecture

**Department/School:** Architecture

**General Education and other Course Attributes:** Humanities

**ARCH 2890 Honors for Topics in Architecture**

**Prerequisites:** Honors student standing.

**Description:** Honors Topics course to be used as an Add on for students concurrently enrolled in other ARCH courses, or can be used as a stand-alone course. Enrichment experiences to enhance the understanding of Architectural design. Offered for variable credit, 1-3 credit hours, maximum of 3 credit hours.

**Credit hours:** 1-3

**Contact hours:** Lecture: 1-3 Contact: 1-3

**Levels:** Undergraduate

**Schedule types:** Lecture

**Department/School:** Architecture

**General Education and other Course Attributes:** Honors Credit

**ARCH 3033 Design Methods**

**Prerequisites:** ARCH 2216 or permission of instructor.

**Description:** Investigations in design problem solving.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Undergraduate

**Schedule types:** Lecture

**Department/School:** Architecture

**ARCH 3043 Structural Loadings in Architecture**

**Prerequisites:** "C" or better in ENSC 2143, and/or co-requisite enrollment in ARCH 3143.

**Description:** An exploration of types of loadings and their application in the design of building structures.

**Credit hours:** 3

**Contact hours:** Lecture: 2 Lab: 2 Contact: 4

**Levels:** Undergraduate

**Schedule types:** Lab, Lecture, Combined lecture and lab

**Department/School:** Architecture

**ARCH 3083 History and Theory of Renaissance and Baroque Architecture (H)**

**Prerequisites:** ARCH 2003. Grade of "C" or better. Or ARCH 2283. Grade of "C" or better.

**Description:** History and theory of Renaissance and Baroque architecture in the western world.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Undergraduate

**Schedule types:** Lecture

**Department/School:** Architecture

**General Education and other Course Attributes:** Humanities

**ARCH 3100 Special Topics in Architecture**

**Description:** Subjects to be selected by the faculty in architecture from advances in state-of-the-art areas. Offered for variable credit, 1-6 credit hours, maximum of 12 credit hours.

**Credit hours:** 1-6

**Contact hours:** Contact: 1-6 Other: 1-6

**Levels:** Undergraduate

**Schedule types:** Independent Study

**Department/School:** Architecture

**ARCH 3116 Architectural Design Studio IV**

**Prerequisites:** Grade of "C" or better in ARCH 2216 and admission to Professional School.

**Description:** Problems in architectural design.

**Credit hours:** 6

**Contact hours:** Lab: 12 Contact: 12

**Levels:** Undergraduate

**Schedule types:** Lab

**Department/School:** Architecture

**ARCH 3143 Structures: Analysis I**

**Prerequisites:** Grade of "C" or better in ENSC 2143.

**Description:** Structural theory for applications in architecture. Previously offered as ARCH 3243.

**Credit hours:** 3

**Contact hours:** Lecture: 2 Lab: 2 Contact: 4

**Levels:** Undergraduate

**Schedule types:** Lab, Lecture, Combined lecture and lab

**Department/School:** Architecture

**ARCH 3163 Architectural Science I: Thermal Systems and Life Safety for Architects**

**Prerequisites:** Admission to Professional School, or permission of instructor.

**Description:** A survey of the scientific and design fundamentals of thermal comfort, building physics, building performance and energy concerns, and mechanical systems for buildings as well as the basic principles of life safety. May not be used for degree credit with ARCH 4134 or ARCH 4163. Previously offered as ARCH 3134.

**Credit hours:** 3

**Contact hours:** Lecture: 2 Lab: 2 Contact: 4

**Levels:** Undergraduate

**Schedule types:** Lab, Lecture, Combined lecture and lab

**Department/School:** Architecture

**ARCH 3173 History and Theory of American Architecture**

**Prerequisites:** ARCH 2003. Grade of "C" or better. Or ARCH 2283. Grade of "C" or better.

**Description:** History and theory of American architecture from the colonial period to the present day.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Undergraduate

**Schedule types:** Lecture

**Department/School:** Architecture

**ARCH 3216 Architectural Design Studio V**

**Prerequisites:** Grade of "C" or better in ARCH 3116.

**Description:** Problems in architectural design.

**Credit hours:** 6

**Contact hours:** Lab: 12 Contact: 12

**Levels:** Undergraduate

**Schedule types:** Lab

**Department/School:** Architecture

**ARCH 3223 Structures: Timbers****Prerequisites:** Grade of "C" or better in ARCH 3323.**Description:** Analysis and design of timber structures used in architecture.**Credit hours:** 3**Contact hours:** Lecture: 2 Lab: 2 Contact: 4**Levels:** Undergraduate**Schedule types:** Lab, Lecture, Combined lecture and lab**Department/School:** Architecture**ARCH 3224 Structures: Steel II****Prerequisites:** Grade of "C" or better in ARCH 3323 and ARCH 3143.**Description:** Design and analysis of multi-story steel frames, trusses, arches, and other architectural structure components. Previously offered as ARCH 4244 and ARCH 4144.**Credit hours:** 4**Contact hours:** Lecture: 3 Lab: 2 Contact: 5**Levels:** Undergraduate**Schedule types:** Lab, Lecture, Combined lecture and lab**Department/School:** Architecture**ARCH 3252 Computer Applications in Architecture I****Prerequisites:** Grade of C or better in ARCH 2116, and concurrent enrollment in ARCH 2216.**Description:** Introduction to 2D and 3D computer topics and their application in the design process. No credit for students with credit in ARCH 3253.**Credit hours:** 2**Contact hours:** Lecture: 2 Contact: 2**Levels:** Undergraduate**Schedule types:** Lecture**Department/School:** Architecture**ARCH 3262 Design Communication II: Advanced Digital Applications****Prerequisites:** Grade of "C" or better in ARCH 2252 and ENGR 1412.**Description:** State-of-the-art applications of computers to the practice of architecture and architectural engineering. Previously offered as ARCH 4053.**Credit hours:** 2**Contact hours:** Lecture: 1 Lab: 2 Contact: 3**Levels:** Undergraduate**Schedule types:** Lab, Lecture, Combined lecture and lab**Department/School:** Architecture**ARCH 3263 Materials In Architecture****Prerequisites:** Grade of "C" or better in ARCH 2263 and admission to Professional School.**Description:** Introduction to the basic materials used in the construction of architecture and how such materials affect both the design and implementation of the systems that incorporate these materials.**Credit hours:** 3**Contact hours:** Lecture: 3 Contact: 3**Levels:** Undergraduate**Schedule types:** Lecture**Department/School:** Architecture**ARCH 3273 History and Theory of Medieval Architecture****Prerequisites:** ARCH 2003, Grade of "C" or better. Or ARCH 2183, Grade of "C" or better. Or consent of instructor.**Description:** History and theory of the architecture created between the 8th and 15th centuries in Europe, and its impact on the subsequent religious architecture of today.**Credit hours:** 3**Contact hours:** Lecture: 3 Contact: 3**Levels:** Undergraduate**Schedule types:** Lecture**Department/School:** Architecture**ARCH 3323 Structures: Steel I****Prerequisites:** Grade of "C" or better in ENSC 2113 and admission to the Professional Program or permission of school head and advisor.**Description:** Analysis and design of steel structures used in architecture.**Credit hours:** 3**Contact hours:** Lecture: 2 Lab: 2 Contact: 4**Levels:** Undergraduate**Schedule types:** Lab, Lecture, Combined lecture and lab**Department/School:** Architecture**ARCH 3343 Structures: Steel II****Prerequisites:** Grade of "C" or better in ARCH 3323 and ARCH 3043.**Description:** Analysis, design, detailing and documentation of multi-story steel structures, and other structural components used in architecture applications. Previously offered as ARCH 3224.**Credit hours:** 3**Contact hours:** Lecture: 2 Lab: 2 Contact: 4**Levels:** Undergraduate**Schedule types:** Lab, Lecture, Combined lecture and lab**Department/School:** Architecture**ARCH 3353 Advanced Graphics and Theory of Representation****Prerequisites:** Grade of "C" or better in ARCH 2252 or consent of instructor.**Description:** Manual and digital graphic techniques are explored in a project-based studio learning environment.**Credit hours:** 3**Contact hours:** Lecture: 2 Lab: 2 Contact: 4**Levels:** Undergraduate**Schedule types:** Lab, Lecture, Combined lecture and lab**Department/School:** Architecture**ARCH 3373 Design and Diversity in Urban Centers of the US****Prerequisites:** Permission of Instructor.**Description:** Field study analysis of the diverse social and cultural issues evidenced through the design of architecture in major urban centers of the United States. Previously offered as ARCH 3370.**Credit hours:** 3**Contact hours:** Lab: 6 Contact: 6**Levels:** Undergraduate**Schedule types:** Lab**Department/School:** Architecture

**ARCH 3433 Architectural Science II: Acoustics, Lighting, and Service Systems****Prerequisites:** MATH 2144, Grade of "C" or better.**Description:** A survey of scientific and design fundamentals of architectural acoustics, lighting, electrical, and signal, conveying, and plumbing systems for buildings. May not be used for degree credit with ARCH 4433.**Credit hours:** 3**Contact hours:** Lecture: 2 Lab: 2 Contact: 4**Levels:** Undergraduate**Schedule types:** Lab, Lecture, Combined lecture and lab**Department/School:** Architecture**ARCH 3473 History and Theory of Structures in Architecture (H)****Prerequisites:** "C" or better in ARCH 2003 or ARCH 2183 or ARCH 2283.**Description:** A study of the language of structural systems as manifested in architecture through the ages.**Credit hours:** 3**Contact hours:** Lecture: 3 Contact: 3**Levels:** Undergraduate**Schedule types:** Lecture**Department/School:** Architecture**General Education and other Course Attributes:** Humanities**ARCH 4073 History and Theory of Early Modern Architecture****Prerequisites:** ARCH 2003, Grade of "C" or better. Or ARCH 2283, Grade of "C" or better.**Description:** History and theory of modern architecture in the western world from the industrial revolution to the early twentieth century.**Credit hours:** 3**Contact hours:** Lecture: 3 Contact: 3**Levels:** Undergraduate**Schedule types:** Lecture**Department/School:** Architecture**ARCH 4093 Architectural Project Management****Prerequisites:** Concurrent enrollment in ARCH 4216 or ARCH 5226 or consent of instructor.**Description:** Principles of management as applied to architectural and architectural engineering projects. Previously offered as ARCH 5293.**Credit hours:** 3**Contact hours:** Lecture: 3 Contact: 3**Levels:** Undergraduate**Schedule types:** Lecture**Department/School:** Architecture**ARCH 4100 Special Topics in Architecture****Prerequisites:** Consent of instructor and head of the school.**Description:** Subjects to be selected by the faculty in architecture from advances in state-of-the-art areas. Offered for variable credit, 1-6 credit hours, maximum of 12 credit hours.**Credit hours:** 1-6**Contact hours:** Contact: 1-6 Other: 1-6**Levels:** Undergraduate**Schedule types:** Independent Study**Department/School:** Architecture**ARCH 4116 Design Studio VI****Prerequisites:** Grade of "C" or better in ARCH 3216 and ARCH 3262.**Description:** Problems in architectural design. Previously offered as ARCH 4517.**Credit hours:** 6**Contact hours:** Lab: 12 Contact: 12**Levels:** Undergraduate**Schedule types:** Lab**Department/School:** Architecture**ARCH 4123 Structures: Concrete I****Prerequisites:** Grade of "C" or better in ARCH 3323.**Description:** Analysis and design applications in architectural problems using concrete structures.**Credit hours:** 3**Contact hours:** Lecture: 2 Lab: 2 Contact: 4**Levels:** Undergraduate**Schedule types:** Lab, Lecture, Combined lecture and lab**Department/School:** Architecture**ARCH 4131 Architectural Science Lab****Prerequisites:** Enrollment by permission of instructor or academic advisor; senior standing.**Description:** Laboratory experiments for building systems. Systems may include heating, cooling, electrical, lighting, acoustics and plumbing.**Credit hours:** 1**Contact hours:** Lab: 2 Contact: 2**Levels:** Undergraduate**Schedule types:** Lab**Department/School:** Architecture**ARCH 4143 Structures: Foundations for Buildings****Prerequisites:** Grade of "C" or better in ARCH 4123.**Description:** Subsurface soil conditions and design of foundation systems and retaining walls for buildings.**Credit hours:** 3**Contact hours:** Lecture: 2 Lab: 2 Contact: 4**Levels:** Undergraduate**Schedule types:** Lab, Lecture, Combined lecture and lab**Department/School:** Architecture**ARCH 4163 Architectural Science I: Thermal Systems and Life Safety for Architectural Engineers****Prerequisites:** Admission to Professional School, or permission of instructor.**Description:** A survey of the scientific and design fundamentals of thermal comfort, building physics, building performance and energy concerns, and mechanical systems for buildings, as well as the basic principles of life safety. May not be used for degree credit with ARCH 3134, ARCH 4134, or ARCH 3163. Previously offered as ARCH 4134.**Credit hours:** 3**Contact hours:** Lecture: 2 Lab: 2 Contact: 4**Levels:** Undergraduate**Schedule types:** Lab, Lecture, Combined lecture and lab**Department/School:** Architecture



**ARCH 4173 History and Theory of Skyscraper Design (H)**

**Prerequisites:** ARCH 2003, Grade of "C" or better. Or ARCH 2283, Grade of "C" or better.

**Description:** History and theory of the development of the skyscraper in the USA from the late 19th century to the present.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Undergraduate

**Schedule types:** Lecture

**Department/School:** Architecture

**General Education and other Course Attributes:** Humanities

**ARCH 4183 History and Theory of Architecture: Cities**

**Prerequisites:** ARCH 2003, Grade of "C" or better. Or ARCH 2283, Grade of "C" or better.

**Description:** The development of cities as an aspect of architecture from ancient times to the twentieth century.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Undergraduate

**Schedule types:** Lecture

**Department/School:** Architecture

**ARCH 4203 Experimental Design Lab**

**Credit hours:** 3

**Contact hours:** Lab: 6 Contact: 6

**Levels:** Undergraduate

**Schedule types:** Lab

**Department/School:** Architecture

**ARCH 4216 Architectural Design Studio VII**

**Prerequisites:** Grade of "C" or better in ARCH 3163 and ARCH 3433 and ARCH 4116 and ARCH 4123.

**Description:** Problems in Architectural Design. May not be used for degree credit with ARCH 5226.

**Credit hours:** 6

**Contact hours:** Lab: 12 Contact: 12

**Levels:** Undergraduate

**Schedule types:** Lab

**Department/School:** Architecture

**ARCH 4224 Structures: Concrete II**

**Prerequisites:** Grades of "C" or better in ARCH 3262, ARCH 4123, and concurrent enrollment in ARCH 4143.

**Description:** Design and analysis of multi-story reinforced concrete frames used in architecture applications. Previously offered as ARCH 4225.

**Credit hours:** 4

**Contact hours:** Lecture: 3 Lab: 2 Contact: 5

**Levels:** Undergraduate

**Schedule types:** Lab, Lecture, Combined lecture and lab

**Department/School:** Architecture

**ARCH 4233 Sustainable Design in Architecture**

**Prerequisites:** Grade of "C" or better in ARCH 3134 or ARCH 3163 or ARCH 4163.

**Description:** Sustainability topics and their application to architecture.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Undergraduate

**Schedule types:** Lecture

**Department/School:** Architecture

**ARCH 4263 Architecture Seminar**

**Prerequisites:** Co-requisite enrollment in ARCH 4216 or ARCH 5226, or permission of instructor.

**Description:** Topics in architecture and architectural engineering. May not be used for degree credit with ARCH 5263.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Undergraduate

**Schedule types:** Lecture

**Department/School:** Architecture

**ARCH 4273 History and Theory of Islamic Architecture**

**Prerequisites:** ARCH 2003, Grade of "C" or better. Or ARCH 2183, Grade of "C" or better.

**Description:** Architecture of the Islamic World.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Undergraduate

**Schedule types:** Lecture

**Department/School:** Architecture

**ARCH 4283 Architecture of Asia**

**Prerequisites:** ARCH 2003 Architecture and Society.

**Description:** History and theory of the architecture of Asia.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Undergraduate

**Schedule types:** Lecture

**Department/School:** Architecture

**ARCH 4293 The Ethics of the Built Environment (H)**

**Prerequisites:** Admission to the professional program or consent of instructor.

**Description:** Analysis of basic values that determine the form of the built environment.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Undergraduate

**Schedule types:** Lecture

**Department/School:** Architecture

**General Education and other Course Attributes:** Humanities

**ARCH 4343 Structures: Concrete II**

**Prerequisites:** Grade of "C" or better in ARCH 3262 and ARCH 4123.

**Description:** Analysis, design, detailing and documentation of multi-story reinforced concrete structures, and other structural components used in architecture applications. Previously offered as ARCH 4224.

**Credit hours:** 3

**Contact hours:** Lecture: 2 Lab: 2 Contact: 4

**Levels:** Undergraduate

**Schedule types:** Lab, Lecture, Combined lecture and lab

**Department/School:** Architecture

**ARCH 4353 Computational Foundations**

**Description:** The use of advanced 3D digital design tools for architectural applications.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Undergraduate

**Schedule types:** Lecture

**Department/School:** Architecture

**ARCH 4373 Field Study in Europe I****Prerequisites:** Senior standing in architecture or consent of instructor.**Description:** On-site analysis and study of European architecture, culture, and urban design.**Credit hours:** 3**Contact hours:** Lecture: 3 Contact: 3**Levels:** Undergraduate**Schedule types:** Lecture**Department/School:** Architecture**ARCH 4374 International Field Study (HI)****Prerequisites:** Admission to Professional Program in Architecture or Architectural Engineering or approval of instructor and head of school.**Description:** On-site analysis and study of international architecture, culture and urban design.**Credit hours:** 4**Contact hours:** Lab: 8 Contact: 8**Levels:** Undergraduate**Schedule types:** Lab**Department/School:** Architecture**General Education and other Course Attributes:** Humanities, International Dimension**ARCH 4383 History and Theory of Modern Architecture in Italy****Prerequisites:** ARCH 2003, Grade of "C" or better. Or ARCH 2283, Grade of "C" or better.**Description:** History and theory of the progressive experimental architecture created in Italy in the Modern era amidst the cultural, economic, and political realities of 1909-1943.**Credit hours:** 3**Contact hours:** Lecture: 3 Contact: 3**Levels:** Undergraduate**Schedule types:** Lecture**Department/School:** Architecture**ARCH 4433 Architectural Science II: Acoustics, Lighting, and Service Systems for Architectural Engineers****Prerequisites:** MATH 2144, Grade of "C" or better.**Description:** Engineering fundamentals of architectural acoustics, lighting, electrical, and signal, conveying, and plumbing systems for buildings. May not be used for degree credit with ARCH 3433.**Credit hours:** 3**Contact hours:** Lecture: 2 Lab: 2 Contact: 4**Levels:** Undergraduate**Schedule types:** Lab, Lecture, Combined lecture and lab**Department/School:** Architecture**ARCH 4444 Structures: Analysis II****Prerequisites:** Grade of "C" or better in ARCH 3143 and ENGR 1412.**Description:** Mathematical formulation of architectural structural behavior. Matrix applications, finite element, finite differences, stability considerations, and three dimensional structural modeling.**Credit hours:** 4**Contact hours:** Lecture: 3 Lab: 2 Contact: 5**Levels:** Undergraduate**Schedule types:** Lab, Lecture, Combined lecture and lab**Department/School:** Architecture**ARCH 4991 Professional Development for Architects and Architectural Engineers****Prerequisites:** Admission to Professional School, or permission of instructor.**Description:** Professional values, culture, mentorship, and leadership development companion course to a professional experience.**Credit hours:** 1**Contact hours:** Lab: 2 Contact: 2**Levels:** Undergraduate**Schedule types:** Lab**Department/School:** Architecture**ARCH 5003 Integrative Design****Prerequisites:** Admission to the Graduate College and the Architecture Graduate Certificate Program.**Description:** Advanced Topics in Integrative Design.**Credit hours:** 3**Contact hours:** Contact: 3 Other: 3**Levels:** Graduate**Schedule types:** Independent Study**Department/School:** Architecture**ARCH 5016 Architectural Design Studio VIII****Prerequisites:** Grade of "C" or better in ARCH 4216 or permission of school head or advisor.**Description:** Problems in architectural design. May not be used with degree credit in ARCH 5117.**Credit hours:** 6**Contact hours:** Lab: 12 Contact: 12**Levels:** Graduate, Undergraduate**Schedule types:** Lab**Department/School:** Architecture**ARCH 5023 Timber and Masonry Design and Analysis****Prerequisites:** Grade of "C" or better or concurrent enrollment in ARCH 4123, or by permission of instructor.**Description:** Analysis and design of timber and masonry structures, including code requirements, analysis techniques, design of components, and detailing of architectural engineering contract documents conforming to the relevant codes.**Credit hours:** 3**Contact hours:** Lecture: 2 Lab: 2 Contact: 4**Levels:** Graduate, Undergraduate**Schedule types:** Lab, Lecture, Combined lecture and lab**Department/School:** Architecture**ARCH 5093 Real Estate Development****Prerequisites:** Admission to professional program, or consent of instructor.**Description:** Introduction to real estate development as a function of project conception, analysis, design and delivery. Same course as EEE 5200.**Credit hours:** 3**Contact hours:** Lecture: 3 Contact: 3**Levels:** Graduate, Undergraduate**Schedule types:** Lecture**Department/School:** Architecture

**ARCH 5100 Special Topics in Architecture**

**Prerequisites:** Consent of instructor and head of the school.

**Description:** Subjects to be selected by the faculty in architecture from advances in state-of-the-art areas. Offered for variable credit, 1-6 credit hours, maximum of 12 credit hours.

**Credit hours:** 1-6

**Contact hours:** Contact: 1-6 Other: 1-6

**Levels:** Graduate, Undergraduate

**Schedule types:** Independent Study

**Department/School:** Architecture

**ARCH 5117 Architectural Design Studio VIII**

**Prerequisites:** Grade of "C" or better in 4216 or permission of school head or advisor.

**Description:** Problems in architectural design. No credit for students with credit in ARCH 5116.

**Credit hours:** 7

**Contact hours:** Lab: 16 Contact: 16

**Levels:** Graduate, Undergraduate

**Schedule types:** Lab

**Department/School:** Architecture

**ARCH 5133 Advanced Energy Issues in Architecture**

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate, Undergraduate

**Schedule types:** Lecture

**Department/School:** Architecture

**ARCH 5143 Structures: Special Loadings**

**Prerequisites:** Grade of "C" or better in ARCH 4444.

**Description:** Mathematical formulations and modeling in architectural structures. Human response to vibrations. Seismic design in building.

Design for extreme winds on buildings. Approximate methods for preliminary design of architectural structures. Previously offered as ARCH 5243.

**Credit hours:** 3

**Contact hours:** Lecture: 2 Lab: 2 Contact: 4

**Levels:** Graduate, Undergraduate

**Schedule types:** Lab, Lecture, Combined lecture and lab

**Department/School:** Architecture

**ARCH 5193 Management of Architectural Practice**

**Prerequisites:** Fifth-year standing in architecture or architectural engineering or consent of instructor.

**Description:** Principles of management as applied to the private practice of architecture and architectural engineering.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate, Undergraduate

**Schedule types:** Lecture

**Department/School:** Architecture

**ARCH 5217 Architectural Design Studio IX**

**Prerequisites:** Grade of "C" or better in 5117 or consent of instructor.

**Description:** Problems in architectural design. Previously offered as ARCH 5216.

**Credit hours:** 7

**Contact hours:** Lab: 16 Contact: 16

**Levels:** Graduate, Undergraduate

**Schedule types:** Lab

**Department/School:** Architecture

**ARCH 5226 Architectural Engineering Comprehensive Design Studio**

**Prerequisites:** Grade of "C" or better in ARCH 3343, ARCH 4163, ARCH 4243, and ARCH 4433.

**Description:** Problems in architectural and architectural engineering design. May not be used for degree credit with ARCH 4216.

**Credit hours:** 6

**Contact hours:** Lab: 12 Contact: 12

**Levels:** Graduate, Undergraduate

**Schedule types:** Lab

**Department/School:** Architecture

**ARCH 5263 Advanced Architecture Technology Seminar**

**Prerequisites:** Concurrent enrollment in ARCH 4216 or ARCH 5226, or permission of instructor.

**Description:** Advanced topics in technology related to the disciplines of architecture and architectural engineering. May not be used for degree credit with ARCH 4263.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Architecture

**ARCH 5373 Field Study in Europe II**

**Prerequisites:** Senior standing in architecture or consent of instructor

**Description:** On-site analysis and study of European architecture, culture and urban design.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate, Undergraduate

**Schedule types:** Lecture

**Department/School:** Architecture

**ARCH 5493 Entrepreneurship and Architecture**

**Prerequisites:** Senior standing.

**Description:** Introduction to entrepreneurship within the context of architecture, with direct application to architectural services, activities, and products. Emphasis on implementing the entrepreneurial process in starting and sustaining new ventures that significantly shape the built environment. Same course as EEE 5493.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate, Undergraduate

**Schedule types:** Lecture

**Department/School:** Architecture

**ARCH 6000 Special Problems**

**Prerequisites:** Consent of instructor and head of school.

**Description:** Theory, research or design investigation in specific areas of study in the field of architecture and its related disciplines. Plan of study determined jointly by student and graduate faculty. Offered for variable credit, 1-15 credit hours, maximum of 15 credit hours.

**Credit hours:** 1-15

**Contact hours:** Contact: 1-15 Other: 1-15

**Levels:** Graduate

**Schedule types:** Independent Study

**Department/School:** Architecture

**ARCH 6083 History and Theory of Contemporary Architecture**

**Prerequisites:** Graduate standing or consent of instructor  
**Description:** American architecture beginning in the 16th century through the 20th century.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate, Undergraduate

**Schedule types:** Lecture

**Department/School:** Architecture

**ARCH 6113 Creative Component Research**

**Prerequisites:** Admission to graduate program.  
**Description:** Data gathering, analysis and program formulation related to creative component.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Architecture

**ARCH 6117 Graduate Design Studio**

**Prerequisites:** Admission to graduate program.  
**Description:** Problems in architectural design.

**Credit hours:** 7

**Contact hours:** Lab: 14 Contact: 14

**Levels:** Graduate

**Schedule types:** Lab

**Department/School:** Architecture

**ARCH 6203 Creative Component in Architectural Engineering**

**Description:** A design project based on a program previously developed by the student, to include a written report and supporting documents when appropriate. Must be approved by the project advisor and completed in the final semester of the graduate program.

**Credit hours:** 3

**Contact hours:** Lab: 6 Contact: 6

**Levels:** Graduate

**Schedule types:** Lab

**Department/School:** Architecture

**ARCH 6207 Creative Component in Architecture**

**Prerequisites:** ARCH 6117.  
**Description:** A design project based on a program previously developed by the student to include a written report and supportive documents when appropriate. Must be approved by the project adviser and completed in the final semester of the graduate program.

**Credit hours:** 7

**Contact hours:** Contact: 7 Other: 7

**Levels:** Graduate

**Schedule types:** Independent Study

**Department/School:** Architecture

**ARCH 6243 Structures: Analysis III**

**Prerequisites:** Grade of "C" or better in ARCH 4444 and admission to the graduate program.  
**Description:** Analysis techniques for architectural structures including stability, space frames, computer applications, guyed towers and project research.

**Credit hours:** 3

**Contact hours:** Lecture: 2 Lab: 2 Contact: 4

**Levels:** Graduate

**Schedule types:** Lab, Lecture, Combined lecture and lab

**Department/School:** Architecture

**ARCH 6343 Structures: Steel III**

**Prerequisites:** Grade of "C" or better in ARCH 3343, or by permission of instructor.

**Description:** Advanced topics in structural steel design, and steel connection design and detailing.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate, Undergraduate

**Schedule types:** Lecture

**Department/School:** Architecture

**ARCH 6543 Structures: Concrete III**

**Prerequisites:** Grade of C or better in ARCH 4224.  
**Description:** Design of prestressed concrete structures, including pre- and post-tensioning.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate, Undergraduate

**Schedule types:** Lecture

**Department/School:** Architecture

## Undergraduate Programs

- Architectural Design Studies: Design Management and Leadership, BS (<http://catalog.okstate.edu/engineering-architecture-technology/architecture/architectural-design-studies-design-management-leadership-bs/>)
- Architectural Design Studies: Design Thinking and Communication, BS (<http://catalog.okstate.edu/engineering-architecture-technology/architecture/architectural-design-studies-design-thinking-communication-bs/>)
- Architectural Design Studies: Design, Culture and Urban Studies, BS (<http://catalog.okstate.edu/engineering-architecture-technology/architecture/architectural-design-studies-design-culture-urban-studies-bs/>)
- Architectural Engineering: Construction Project Management, BEN (<http://catalog.okstate.edu/engineering-architecture-technology/architecture/architectural-engineering-construction-project-management-ben/>)
- Architectural Engineering: Structures, BEN (<http://catalog.okstate.edu/engineering-architecture-technology/architecture/architectural-engineering-structures-ben/>)
- Architecture, BAR (<http://catalog.okstate.edu/engineering-architecture-technology/architecture/bar/>)

## Minors

- Architectural Studies: Architecture and Entrepreneurship (ASAE), Minor (<http://catalog.okstate.edu/engineering-architecture-technology/architecture/architectural-studies-architecture-entrepreneurship-minor/>)
- Architectural Studies: Design (ASDS), Minor (<http://catalog.okstate.edu/engineering-architecture-technology/architecture/architectural-studies-design-minor/>)
- Architectural Studies: History and Theory (ASHT), Minor (<http://catalog.okstate.edu/engineering-architecture-technology/architecture/architectural-studies-history-theory-minor/>)

## Faculty

John Phillips—Interim Head and Professor, MArchE, PE

**Associate Dean for Academic Affairs and Professor:** Carisa Ramming,  
MArchE, PE

**Professors:** Khaled Mansy, PhD; Nathan Richardson, MArch, AIA; Seung  
Ra, MArch, RA

**Associate Professors:** Michael Rabens, PhD; Awilda Rodriguez, MArch,  
RA; Paulo Sanza, MArch, RA; Jerry L. Stivers, MArch, RA

**Assistant Professors:** Jay Yowell, MArch, AIA; Keith Peiffer, MArch,  
AIA; Christina McCoy, MArchE, SE, RA; Jared Macken, Dr. Sc.; Sarah Ra,  
MArch, AIA, NCIDQ; Alex Campbell, MCivE, PE; Bailey Brown, MArch; Blake  
Mitchell, MArch; Bodhi Hajra, PhD