

# ARCHITECTURE (ARCH)

## ARCH 10001 UNDERSTANDING ARCHITECTURE (KFA) 3 Credit Hours

The nature of the built environment, its forms and functions are explored within the cultural contexts of ecology, technology, human behavior, symbolism, art and history.

**Prerequisite:** None.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**Attributes:** Kent Core Fine Arts, Transfer Module Fine Arts

## ARCH 10011 GLOBAL ARCHITECTURAL HISTORY I (KFA) 3 Credit Hours

Global history of architecture from Neolithic times through the 16th Century.

**Prerequisite:** None.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**Attributes:** Kent Core Fine Arts, Transfer Module Fine Arts

## ARCH 10012 GLOBAL ARCHITECTURAL HISTORY II (KFA) 3 Credit Hours

Global history of architecture from the 17th Century to 2000.

**Prerequisite:** ARCH 10011 or ARTH 22007.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**Attributes:** Kent Core Fine Arts, Transfer Module Fine Arts

## ARCH 10093 WORKSHOP: VARIABLE TITLE 1-3 Credit Hours (repeated registration permitted.) Variable topics.

**Prerequisite:** Permission.

**Schedule Type:** Workshop

**Contact Hours:** 1-3 other

**Grade Mode:** Satisfactory/Unsatisfactory

## ARCH 10101 FIRST YEAR DESIGN STUDIO I 3 Credit Hours

Introduction to the fundamental principles of visual organization, structural organization, graphic communications, historical precedence and current directions in architecture. Graphic techniques include free hand drawing, and technical orthographics, axonometrics and perspectives.

**Prerequisite:** Architecture (ARCH) or Interior design (ID) majors.

**Schedule Type:** Studio

**Contact Hours:** 3 other

**Grade Mode:** Standard Letter

## ARCH 10102 FIRST YEAR DESIGN STUDIO II 3 Credit Hours

Investigations into strategies of form making through the introduction of client, type, context, site and form/space theories 2D, and 3D representation techniques and analysis of related reference architects.

**Prerequisite:** ARCH 10101.

**Schedule Type:** Studio

**Contact Hours:** 3 other

**Grade Mode:** Standard Letter

## ARCH 10111 HISTORY OF ARCHITECTURE I 3 Credit Hours

History of architecture from pre-history through the Gothic period.

**Prerequisite:** None.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

## ARCH 20101 SECOND YEAR DESIGN STUDIO I 3 Credit Hours

The introduction of a building design process that emphasizes the integration of program requirements with specific form topologies using line and plane as the primary elements to provide shape and space.

**Prerequisite:** ARCH 10102.

**Schedule Type:** Studio

**Contact Hours:** 3 other

**Grade Mode:** Standard Letter

## ARCH 20102 SECOND YEAR DESIGN STUDIO II 3 Credit Hours

The introduction of a building design process that emphasizes the integration of program requirements with form typologies that are both influenced and informed by specific site context. Line and plane and primary configural shapes are again incorporated to develop building form solutions.

**Prerequisite:** ARCH 20101.

**Schedule Type:** Studio

**Contact Hours:** 3 other

**Grade Mode:** Standard Letter

## ARCH 20112 HISTORY OF ARCHITECTURE II 3 Credit Hours

History of architecture from the Medieval era through the 19th century.

**Prerequisite:** Architecture (ARCH) or Architectural Studies (ARCS) major or Architectural Studies (ARCS) minor.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

## ARCH 20113 HISTORY OF ARCHITECTURE III 3 Credit Hours

A history of 20th century architecture.

**Prerequisite:** ARCH 20112 and Architecture (ARCH) or Architectural Studies (ARCS) major or Architectural Studies (ARCS) minor.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

## ARCH 20201 BEYOND WESTERN ARCHITECTURE 3 Credit Hours

Course introduces students to the broad realm of contributions to world architecture made by cultures and civilizations that were not in the traditional sphere of Western/European influence.

**Prerequisite:** ARCH 10111 and 20112; and Architecture (ARCH) or Architectural Studies (ARCS) major.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

## ARCH 20301 INTRODUCTION TO BUILDING STRUCTURES 3 Credit Hours

An introduction to building structures, statics, strength of materials, analysis for shear-moment-displacement, loads including dead-live-wind-earthquake and building code requirements for structural safety.

**Prerequisite:** Architecture majors only and MATH 12011 and 12012, or MATH 12002; PHY 13001 or 13011.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**ARCH 20601 COMPUTER APPLICATIONS IN ARCHITECTURE I 1-3 Credit Hours**

Course provides a basic understanding of two-dimensional CAD operations, parametric building design and building information modeling (BIM).

**Prerequisite:** Architecture (ARCH) or Architectural Studies (ARCS) or Interior Design (ID) major.

**Schedule Type:** Studio

**Contact Hours:** 15-45 other

**Grade Mode:** Standard Letter

**ARCH 20602 COMPUTER APPLICATIONS IN ARCHITECTURE II 1-3 Credit Hours**

Principles and practices of 3D digital modeling and rendering, including: production of geometric surfaces and forms using polygon construction, texturing, lighting and rendering.

**Prerequisite:** ARCH 20601 and Architecture (ARCH) or Architectural Studies (ARCS) or Interior Design (ID) major.

**Schedule Type:** Studio

**Contact Hours:** 15-45 other

**Grade Mode:** Standard Letter

**ARCH 20693 WORKSHOP: COMPUTER APPLICATIONS 1-3 Credit Hours**

(Repeatable for credit) Computer workshops are intended to provide an exposure to various fundamental computer topics and their application to architectural studies. Topics include file management, network applications, spreadsheets, raster image manipulations, two- and three-dimensional CAD and computer aided visualization.

**Prerequisite:** Architecture and Interior Design majors only.

**Schedule Type:** Workshop

**Contact Hours:** 1-3 other

**Grade Mode:** Satisfactory/Unsatisfactory

**ARCH 30001 SITE DESIGN (WIC) 1 Credit Hour**

Research component addressing technical, cultural and contextual concerns, influences and directions in site design.

**Prerequisite:** Architecture (ARCH) major and approved admission to advanced study (third year).

**Corequisite:** ARCH 30101.

**Schedule Type:** Lecture

**Contact Hours:** 1 lecture

**Grade Mode:** Standard Letter

**Attributes:** Writing Intensive Course

**ARCH 30002 URBAN DESIGN 1 Credit Hour**

(equivalent to ARCH 30012) Lecture/seminar/research component conducted concurrently with ARCH 30102 addressing design of form and space in cities through study of precedents, traditions and current directions in urban form making.

**Prerequisite:** ARCH 30101 and ARCH 30001.

**Corequisite:** ARCH 30102.

**Schedule Type:** Lecture

**Contact Hours:** 1 lecture

**Grade Mode:** Standard Letter

**ARCH 30012 URBAN DESIGN, FLORENCE, ITALY 1 Credit Hour**

(equivalent to ARCH 30002) Lecture/seminar/research component addressing design of form and space in cities through study of precedents, traditions and current directions in urban form making.

**Prerequisite:** ARCH 30101.

**Corequisite:** ARCH 30112.

**Schedule Type:** Lecture

**Contact Hours:** 1 lecture

**Grade Mode:** Standard Letter

**ARCH 30101 THIRD YEAR DESIGN STUDIO I 5 Credit Hours**

Studio investigation of the simultaneous concerns of program, site, context and materials of construction. Specific emphasis on the understanding of the goals, objectives, intentions and parameters of site/context in design, including cultural influences.

**Prerequisite:** Architecture (ARCH) majors with approved admission to advanced study (third year).

**Corequisite:** ARCH 30001.

**Schedule Type:** Studio

**Contact Hours:** 5 other

**Grade Mode:** Standard Letter

**ARCH 30102 THIRD YEAR DESIGN STUDIO II (ELR) 5 Credit Hours**

(equivalent to ARCH 30112) Studio investigation with specific emphasis on the understanding of the goals, objectives, intentions and parameters of urban design.

**Prerequisite:** ARCH 30101.

**Corequisite:** ARCH 30002.

**Schedule Type:** Studio

**Contact Hours:** 5 other

**Grade Mode:** Standard Letter

**Attributes:** Experiential Learning Requirement

**ARCH 30112 THIRD YEAR DESIGN STUDIO II-FLORENCE, ITALY (ELR) 5 Credit Hours**

(equivalent to ARCH 30102) Studio investigation with specific emphasis on understanding of the goals, objectives, intentions and parameters of urban design.

**Prerequisite:** Special approval.

**Corequisite:** ARCH 30012.

**Schedule Type:** Studio

**Contact Hours:** 5 other

**Grade Mode:** Standard Letter

**Attributes:** Experiential Learning Requirement

**ARCH 40001 SUSTAINABLE DESIGN (WIC) 1 Credit Hour**

(Cross-listed with ARCH 50001) Research component addressing precedents, traditions, current directions in conservation of natural environment. Principles and methods of ecological design in architecture and urban design.

**Prerequisite:** ARCH 30102 or ARCH 30112.

**Corequisite:** ARCH 40101.

**Schedule Type:** Lecture

**Contact Hours:** 1 lecture

**Grade Mode:** Standard Letter

**Attributes:** Writing Intensive Course

**ARCH 40002 SYSTEMS DESIGN 1 Credit Hour**

(Cross-listed with ARCH 50002) Lecture and research component addressing comprehensive integration of mechanical, electrical communications structural life safety systems and sustainable design concerns.

**Prerequisite:** ARCH 40101.

**Corequisite:** ARCH 40102.

**Schedule Type:** Lecture

**Contact Hours:** 1 lecture

**Grade Mode:** Standard Letter

**ARCH 40101 FOURTH YEAR DESIGN STUDIO I 5 Credit Hours**  
 (Cross-listed with ARCH 50101) Studio investigation of complex formal and spatial constructs addressing the comprehensive concerns of architecture. Special emphasis on understanding the conservation of the natural environment. CAD is required.  
**Prerequisite:** ARCH 30102 or ARCH 30112.  
**Corequisite:** ARCH 40001.  
**Schedule Type:** Studio  
**Contact Hours:** 5 other  
**Grade Mode:** Standard Letter

**ARCH 40102 INTEGRATED DESIGN STUDIO 5 Credit Hours**  
 (Cross-listed with ARCH 50102) Studio investigation of the comprehensive concerns and understanding of building systems integration. CAD is required.  
**Prerequisite:** ARCH 40101.  
**Corequisite:** ARCH 40002.  
**Schedule Type:** Studio  
**Contact Hours:** 5 other  
**Grade Mode:** Standard Letter

**ARCH 40301 STRUCTURAL SYSTEMS I 3 Credit Hours**  
 (Slashed with ARCH 50301) A continuation of building structures, statics strength of materials and systems analysis. Emphasis is on elastic materials allowable stresses and design for wood and steel structural members and systems.  
**Prerequisite:** ARCH 20301 and Architecture (ARCH) major with approved admission to advanced study (third year).  
**Schedule Type:** Combined Lecture and Lab  
**Contact Hours:** 6 other  
**Grade Mode:** Standard Letter

**ARCH 40302 STRUCTURAL SYSTEMS II 3 Credit Hours**  
 (Cross-listed with ARCH 50302) A continuation of building structures, statics, strength of materials and systems analysis. Emphasis is on inelastic materials, allowable stress and design for masonry and concrete structural members and systems.  
**Prerequisite:** ARCH 30301.  
**Schedule Type:** Combined Lecture and Lab  
**Contact Hours:** 3 other  
**Grade Mode:** Standard Letter

**ARCH 40401 METHODS AND MATERIALS I 3 Credit Hours**  
 (Slashed with ARCH 50401) Introduction to the origins, extraction, properties and processing of the basic materials of construction. Primary focus on wood and masonry-appropriate use and scale including code requirements, methods of construction and design consequences.  
**Prerequisite:** Architecture (ARCH) majors with approved admission to advanced study (third year).  
**Schedule Type:** Combined Lecture and Lab  
**Contact Hours:** 6 other  
**Grade Mode:** Standard Letter

**ARCH 40402 METHODS AND MATERIALS II 3 Credit Hours**  
 (Cross-listed with ARCH 50402) Continued investigation of the origins, extraction, properties and processing of the basic materials of construction. Primary focus on concrete and steel-appropriate use and scale, including allied systems and building materials, including glazing and interiors. Introduction to construction contract documents.  
**Prerequisite:** ARCH 30401.  
**Schedule Type:** Combined Lecture and Lab  
**Contact Hours:** 3 other  
**Grade Mode:** Standard Letter

**ARCH 40501 ENVIRONMENTAL TECHNOLOGY I 3 Credit Hours**  
 (Slashed with ARCH 50501) Basic principles of ecological design and architecture environmental systems including lighting, sonic and thermal systems. Interior design (ID) majors by special approval.  
**Prerequisite:** PHY 13012 and Architecture (ARCH) major with approved admission to advanced study (third year).  
**Schedule Type:** Combined Lecture and Lab  
**Contact Hours:** 4.5 other  
**Grade Mode:** Standard Letter

**ARCH 40502 ENVIRONMENTAL TECHNOLOGY II 3 Credit Hours**  
 (Cross-listed with ARCH 50502) Ecological design of large buildings. The investigation and analysis of lighting, thermal, water, electrical and waste systems in urban settings.  
**Prerequisite:** ARCH 30501.  
**Schedule Type:** Combined Lecture and Lab  
**Contact Hours:** 3 other  
**Grade Mode:** Standard Letter

**ARCH 44611 PORTFOLIO 1 Credit Hour**  
 Architectural drawings and other allied work of the student reproduced and assembled in a professional portfolio suitable for job and graduate application.  
**Prerequisite:** ARCH 40101.  
**Schedule Type:** Lecture  
**Contact Hours:** 1 lecture  
**Grade Mode:** Standard Letter

**ARCH 45210 RENAISSANCE ARCHITECTURE 3 Credit Hours**  
 (Cross-listed with ARCH 55210) History and theory of renaissance architecture from 1400 until 1600.  
**Prerequisite:** ARCH 10011 and 10012; or ARCH 10111 and 20112; or ARTH 22006 and 22007.  
**Schedule Type:** Lecture  
**Contact Hours:** 3 lecture  
**Grade Mode:** Standard Letter

**ARCH 45211 BAROQUE ARCHITECTURE 3 Credit Hours**  
 (Cross-listed with ARCH 55211) History and theory of architecture in Europe from 1600 through 1750.  
**Prerequisite:** ARCH 10011 and 10012; or ARCH 10111 and 20112; or ART 22006 and 22007.  
**Schedule Type:** Lecture  
**Contact Hours:** 3 lecture  
**Grade Mode:** Standard Letter

**ARCH 45213 20TH CENTURY ARCHITECTURAL HISTORY 3 Credit Hours**  
 (Slashed with ARCH 55213) History and theory of architecture during the 20th Century.  
**Prerequisite:** ARCH 10011 and ARCH 10012.  
**Schedule Type:** Lecture  
**Contact Hours:** 3 lecture  
**Grade Mode:** Standard Letter

**ARCH 45220 AMERICAN ARCHITECTURE: COLONIAL TO 1900 3 Credit Hours**  
 (Cross-listed with ARCH 55220) History of American architecture for Spanish, French, Dutch and English colonization through the 19th century.  
**Prerequisite:** ARCH 10011 and 10012; or ARCH 10111 and 20112; or ARTH 22006 and 22007.  
**Schedule Type:** Lecture  
**Contact Hours:** 3 lecture  
**Grade Mode:** Standard Letter

**ARCH 45230 FRANK LLOYD WRIGHT 3 Credit Hours**

(Slashed with ARCH 55230) Examination of the life, buildings and literary works of Frank Lloyd Wright with emphasis on his contributions to American art and architecture and his place in American intellectual history.

**Prerequisite:** ARCH 10011 and ARCH 10012.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**ARCH 45240 THE SKYSCRAPER 3 Credit Hours**

(Cross-listed with ARCH 55240) A study of skyscrapers from the standpoint of architectural, financial, structural, psychological, and technological considerations. Emphasis is placed on: early developments in Chicago and New York, the influence of the International Style, and current trends in ultra-high skyscrapers being built outside the US.

**Prerequisite:** Minimum C (2.000) grade in both ARCH 10111 and ARCH 20112.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**ARCH 45241 ARCHITECTURE OF WORLD'S FAIRS 3 Credit Hours**

A seminar investigating world's fairs and related expositions as a cultural phenomenon, an urban design challenge, and an opportunity to advance and popularize ideas in architecture and design.

**Prerequisite:** ARCH 10011 and ARCH 10012.

**Schedule Type:** Seminar

**Contact Hours:** 3 other

**Grade Mode:** Standard Letter

**ARCH 45291 SEMINAR: VARIABLE TOPICS IN ARCHITECTURAL HISTORY 1-3 Credit Hours**

(repeatable for a total of 3 credit hours) (Cross-listed with ARCH 55291) Content varies.

**Prerequisite:** Special approval.

**Schedule Type:** Seminar

**Contact Hours:** 1-3 other

**Grade Mode:** Standard Letter

**ARCH 45391 SEMINAR: STRUCTURES III 1-3 Credit Hours**

(Repeatable for credit) (Cross-listed with ARCH 55391) A continuation of building structures, statics, strength of materials and systems analysis. Emphasis is on complex systems, including horizontal long span and high rise structures. Computer analysis is required.

**Prerequisite:** ARCH 40302.

**Schedule Type:** Seminar

**Contact Hours:** 1-3 other

**Grade Mode:** Standard Letter

**ARCH 45491 SEMINAR: METHODS AND MATERIALS III 1-3 Credit Hours**

(Repeatable for credit) (Cross-listed with ARCH 55491) Advanced topics in methods and complex materials systems. Computer modeling and field experiences are required.

**Prerequisite:** ARCH 40402.

**Schedule Type:** Seminar

**Contact Hours:** 1-3 other

**Grade Mode:** Standard Letter

**ARCH 45591 SEMINAR: ENVIRONMENTAL TECHNOLOGY III 1-3 Credit Hours**

(Repeatable for credit) (Cross-listed with ARCH 55591) Variable topics in environmental technology-environmental design and energy conservation, advanced lighting techniques etc.

**Prerequisite:** ARCH 40502.

**Schedule Type:** Seminar

**Contact Hours:** 1-3 other

**Grade Mode:** Standard Letter

**ARCH 45601 ADVANCED COMPUTER APPLICATIONS 1-3 Credit Hours**

(Cross-listed with ARCH 55601) This course discusses advanced visualization techniques such as raytracing, radiosity and animation, and presents a variety of presentation issues and options.

**Prerequisite:** Special approval; admission to third year.

**Schedule Type:** Combined Lecture and Lab

**Contact Hours:** 1-3 other

**Grade Mode:** Standard Letter

**ARCH 45620 INTRODUCTION TO PRESERVATION 1-3 Credit Hours**

(Repeatable for a maximum of 3 credit hours) (Cross-listed with ARCH 55620) An overview of preservation including building analysis, conservation adaptive reuse economic benefits of preservation planning as a revitalizing strategy.

**Prerequisite:** Permission.

**Schedule Type:** Lecture

**Contact Hours:** 1-3 lecture

**Grade Mode:** Standard Letter

**ARCH 45621 CURRENT ISSUES IN HISTORIC PRESERVATION 1-3 Credit Hours**

(Repeatable for a maximum of 3 credit hours) (Cross-listed with ARCH 55621) course in which practicing professionals including architects, planners, developers and government officials present preservation related work.

**Prerequisite:** Permission.

**Schedule Type:** Lecture

**Contact Hours:** 1-3 lecture

**Grade Mode:** Standard Letter

**ARCH 45625 EXPLORING HISTORIC STRUCTURES 3 Credit Hours**

(Cross-listed with ARCH 55625) Provides students with the skills and opportunity to document an historic structure using methods prescribed by the Historic American Buildings Survey (HABS). Course work will cover recording, documentation and assessment of the historic structure implementing the guidelines established by the Getty Conservation Institute, including history, purpose, means, methods and field work. Architecture majors must have approved admission to the third year of study.

**Prerequisite:** Junior standing.

**Schedule Type:** Laboratory, Lecture

**Contact Hours:** 1.2 lecture, 3.6 lab

**Grade Mode:** Standard Letter

**ARCH 45627 PRESERVATION TECHNOLOGY 3 Credit Hours**

(Cross-listed with ARCH 55627) A study of historic building materials with an emphasis on causes of degradation, strategies for conservation and standards for preservation.

**Prerequisite:** Junior or Senior standing in Architecture.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**ARCH 45630 INTRODUCTION TO LANDSCAPE ARCHITECTURE 1-3 Credit Hours**

(Repeatable for a maximum of 3 credit hours) (Cross-listed with ARCH 55630) Introduction to landscape design with emphasis upon the relationship between landscape and buildings.

**Prerequisite:** None.

**Schedule Type:** Lecture

**Contact Hours:** 1-3 lecture

**Grade Mode:** Standard Letter

**ARCH 45631 SITE ANALYSIS AND DESIGN 1-3 Credit Hours**

(Repeatable for a maximum of 3 credit hours) (Cross-listed with ARCH 55631) Analysis of environmental factors as a basis for site selection and site planning.

**Prerequisite:** None.

**Schedule Type:** Lecture

**Contact Hours:** 1-3 lecture

**Grade Mode:** Standard Letter

**ARCH 45640 DEVELOPING ENVIRONMENTS FOR OLDER ADULTS 1-3 Credit Hours**

(Repeatable for a maximum of 3 credit hours) (Cross-listed with ARCH 55640) Research of existing built environments and an investigation of the planning design process for the elderly. Repeatable for a total of 3 credit hours.

**Prerequisite:** None.

**Schedule Type:** Lecture

**Contact Hours:** 1-3 lecture

**Grade Mode:** Standard Letter

**ARCH 45701 URBAN DESIGN STUDIO I 3-6 Credit Hours**

(Repeatable for a maximum of 6 credit hours) Introduction to urban design and its relationship to other design disciplines through analysis of neighborhoods and definition of comprehensive area improvement programs.

**Prerequisite:** Special approval.

**Schedule Type:** Studio

**Contact Hours:** 3-6 other

**Grade Mode:** Standard Letter

**ARCH 45703 THEORIES AND PRINCIPLES OF URBAN DESIGN 1-3 Credit Hours**

(Repeatable for a maximum of 3 credit hours) Course on the nature and utility of theory in urban design, examining the relationship between design ideologies and the theories of the environment on which they are based.

**Prerequisite:** None.

**Schedule Type:** Lecture

**Contact Hours:** 1-3 lecture

**Grade Mode:** Standard Letter

**ARCH 45704 THEORIES AND PRINCIPLES OF URBAN DESIGN II 1-3 Credit Hours**

(Repeatable for a maximum of 3 credit hours) course on the relationship between design ideologies/theories and the realities of existing spatial relationships/precedents.

**Prerequisite:** Special approval.

**Schedule Type:** Lecture

**Contact Hours:** 1-3 lecture

**Grade Mode:** Standard Letter

**ARCH 45793 WORKSHOP:URBAN DESIGN AND PLANNING 1-3 Credit Hours**

(Repeatable for a maximum of 3 credit hours) This course provides an introduction to the scope of planning and design in the making of quality urban neighborhoods, with a particular emphasis on the role of urban design, architecture and landscape design.

**Prerequisite:** None.

**Schedule Type:** Workshop

**Contact Hours:** 1-3 other

**Grade Mode:** Satisfactory/Unsatisfactory

**ARCH 46991 SEMINAR: VARIABLE TOPIC 1-3 Credit Hours**

(Repeatable for credit) Variable topic seminar.

**Prerequisite:** Approved admission to third year.

**Schedule Type:** Seminar

**Contact Hours:** 1-3 other

**Grade Mode:** Standard Letter

**ARCH 46992 FIELD STUDY (ELR) 1-3 Credit Hours**

(Repeatable for credit) (Cross-listed with ARCH 56992) Variable topic field experience.

**Prerequisite:** Approved admission to third year.

**Schedule Type:** Field Experience

**Contact Hours:** 1-3 other

**Grade Mode:** Standard Letter

**Attributes:** Experiential Learning Requirement

**ARCH 46993 WORKSHOP: VARIABLE TOPIC 1-3 Credit Hours**

(Repeatable for credit) (Cross-listed with ARCH 56993) Variable topic workshop.

**Prerequisite:** Approved admission to third year.

**Schedule Type:** Workshop

**Contact Hours:** 1-3 other

**Grade Mode:** Satisfactory/Unsatisfactory

**ARCH 46995 SPECIAL TOPICS IN ARCHITECTURE 1-3 Credit Hours**

(Repeatable for credit) (Cross-listed with ARCH 56995) Special topics in architecture.

**Prerequisite:** Approved admission to third year.

**Schedule Type:** Lecture

**Contact Hours:** 1-3 lecture

**Grade Mode:** Standard Letter-IP

**ARCH 46996 INDIVIDUAL INVESTIGATION 1-3 Credit Hours**

(Repeatable for credit) Individual investigation.

**Prerequisite:** Permission prior written agreement with faculty is required.

**Schedule Type:** Individual Investigation

**Contact Hours:** 1-3 other

**Grade Mode:** Standard Letter

**ARCH 50001 SUSTAINABLE DESIGN 1 Credit Hour**

(Cross-listed with ARCH 40001) Writing intensive and research component addressing precedents, traditions, current directions in conservation of natural environment. Principles and methods of ecological design in architecture and urban design.

**Prerequisite:** Graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 1 lecture

**Grade Mode:** Standard Letter



**ARCH 50002 SYSTEMS DESIGN 1 Credit Hour**

(Cross-listed with ARCH 40002) Lecture and research component addressing comprehensive integration of mechanical, electrical, communication, structural- and life-safety systems and sustainable design concerns.

**Prerequisite:** Graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 1 lecture

**Grade Mode:** Standard Letter

**ARCH 50093 VARIABLE TITLE WORKSHOP-ARCHITECTURE 1-6 Credit Hours**

(Repeatable for credit)

**Prerequisite:** Graduate standing.

**Schedule Type:** Workshop

**Contact Hours:** 1-6 other

**Grade Mode:** Satisfactory/Unsatisfactory

**ARCH 50101 FOURTH YEAR DESIGN STUDIO I 5 Credit Hours**

(Cross-listed with ARCH 40101) Studio investigation of complex formal and spatial constructs addressing comprehensive concerns of architecture. Special emphasis on understanding conservation of the natural environment. CAD is required.

**Prerequisite:** ARCH 30102 or ARCH 30112; Graduate standing.

**Corequisite:** ARCH 50001.

**Schedule Type:** Studio

**Contact Hours:** 5 other

**Grade Mode:** Standard Letter

**ARCH 50102 INTEGRATED DESIGN STUDIO 5 Credit Hours**

(Cross-listed with ARCH 40102) Studio investigation of the comprehensive concerns and understanding of building systems integration. CAD is required. Corequisite ARCH 50002.

**Prerequisite:** Graduate standing.

**Schedule Type:** Studio

**Contact Hours:** 5 other

**Grade Mode:** Standard Letter

**ARCH 50301 STRUCTURAL SYSTEMS I 3 Credit Hours**

(Slashed with ARCH 40301) A continuation of building structures, statics strength of materials and systems analysis. Emphasis is on elastic materials allowable stresses and design for wood and steel structural members and systems.

**Prerequisite:** ARCH 20301; and Architecture major and Graduate standing.

**Schedule Type:** Combined Lecture and Lab

**Contact Hours:** 6 other

**Grade Mode:** Standard Letter

**ARCH 50302 STRUCTURAL SYSTEMS II 3 Credit Hours**

(Cross-listed with ARCH 40302) A continuation of building structures, statics, strength of materials and systems analysis. Emphasis is on inelastic materials, allowable stress, and design for masonry and concrete structural members and systems.

**Prerequisite:** Graduate standing.

**Schedule Type:** Combined Lecture and Lab

**Contact Hours:** 3 other

**Grade Mode:** Standard Letter

**ARCH 50401 METHODS AND MATERIALS I 3 Credit Hours**

(Slashed with ARCH 40401) Introduction to the origins, extraction, properties and processing of the basic materials of construction. Primary focus on wood and masonry-appropriate use and scale including code requirements, methods of construction and design consequences.

**Prerequisite:** Graduate standing.

**Schedule Type:** Combined Lecture and Lab

**Contact Hours:** 6 other

**Grade Mode:** Standard Letter

**ARCH 50402 METHODS AND MATERIALS II 3 Credit Hours**

(Cross-listed with ARCH 40402) Continued investigation of the origins, extraction, properties and processing of the basic materials of construction. Primary focus on concrete and steel-appropriate use and scale including allied systems and building materials, including glazing and interiors.

**Prerequisite:** Graduate standing.

**Schedule Type:** Combined Lecture and Lab

**Contact Hours:** 3 other

**Grade Mode:** Standard Letter

**ARCH 50501 ENVIRONMENTAL TECHNOLOGY I 3 Credit Hours**

(Slashed with ARCH 40501) Basic principles of ecological design and architecture environmental systems including lighting, sonic and thermal systems. Interior design (ID) majors by special approval.

**Prerequisite:** PHY 13012 and Architecture (ARCH) major with approved admission to advanced study (third year).

**Schedule Type:** Combined Lecture and Lab

**Contact Hours:** 4.5 other

**Grade Mode:** Standard Letter

**ARCH 50502 ENVIRONMENTAL TECHNOLOGY II 3 Credit Hours**

(Cross-listed with ARCH 40502) Ecological design of large buildings. The investigation and analysis of lighting, thermal, water, electrical and waste systems in urban settings.

**Prerequisite:** Graduate standing.

**Schedule Type:** Combined Lecture and Lab

**Contact Hours:** 3 other

**Grade Mode:** Standard Letter

**ARCH 55101 FIFTH-YEAR DESIGN STUDIO I 6 Credit Hours**

(Cross-listed with ARCH 45101) This studio intends to investigate a new scale of environmental issues which integrate both architectural and urban planning. Included are site visits data collection design of a master plan and an architectural form response to a segment of the total conceptual plan.

**Prerequisite:** Graduate standing.

**Schedule Type:** Studio

**Contact Hours:** 6 other

**Grade Mode:** Standard Letter

**ARCH 55102 FIFTH-YEAR DESIGN STUDIO II 3-6 Credit Hours**

(Repeatable for a total of 6 credit hours) (Cross-listed with ARCH 45102) Advanced design studio emphasizing comprehensive and independent investigation-exploring and manifesting ideas through architecture using competition and hypothetical or real projects as vehicles of expression.

**Prerequisite:** Graduate standing.

**Schedule Type:** Studio

**Contact Hours:** 3-6 other

**Grade Mode:** Standard Letter

**ARCH 55210 RENAISSANCE ARCHITECTURE 3 Credit Hours**  
(Cross-listed with ARCH 45210) History and theory of Renaissance architecture from 1400 until 1600.

**Prerequisite:** Graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**ARCH 55211 BAROQUE ARCHITECTURE 3 Credit Hours**  
(Cross-listed with ARCH 45211) History and theory of architecture in Europe from 1600 through 1750.

**Prerequisite:** Graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**ARCH 55213 20TH CENTURY ARCHITECTURAL HISTORY 3 Credit Hours**

(Slashed with ARCH 45213) History and theory of 20th Century Architecture.

**Prerequisite:** Graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**ARCH 55220 AMERICAN ARCHITECTURE: COLONIAL TO 1900 3 Credit Hours**

(Cross-listed with ARCH 45220) History of American architecture from Spanish, French, Dutch and English colonization through the 19th century.

**Prerequisite:** Graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**ARCH 55230 FRANK LLOYD WRIGHT 3 Credit Hours**

(Slashed with ARCH 45230) Examination of the life, buildings and literary works of Frank Lloyd Wright with emphasis on his contributions to American art and architecture and his place in American intellectual history.

**Prerequisite:** Graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**ARCH 55240 THE SKYSCRAPER 3 Credit Hours**

(Cross-listed with ARCH 45240) A study of skyscrapers from the standpoint of architectural, financial, structural, psychological, and technological considerations. Emphasis is placed on: early developments in Chicago and New York, the influence of the International Style, and current trends in ultra-high skyscrapers being built outside the US.

**Prerequisite:** Graduate standing; minimum C (2.000) grade in both ARCH 10111 and ARCH 20112.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**ARCH 55241 ARCHITECTURE OF WORLD'S FAIRS 3 Credit Hours**  
(Slashed with ARCH 45241) A seminar investigating world's fairs and related expositions as a cultural phenomenon, an urban design challenge, and an opportunity to advance and popularize ideas in architecture and design.

**Prerequisite:** Graduate standing.

**Schedule Type:** Seminar

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**ARCH 55291 SEMINAR: VARIABLE TOPICS IN ARCHITECTURAL HISTORY 1-3 Credit Hours**

(Repeatable for a maximum of 3 credit hours) (Cross-listed with ARCH 45291) Content varies.

**Prerequisite:** Special approval and Graduate standing.

**Schedule Type:** Seminar

**Contact Hours:** 1-3 other

**Grade Mode:** Standard Letter

**ARCH 55391 SEMINAR: STRUCTURES III 1-3 Credit Hours**

(Repeatable for credit) (Cross-listed with ARCH 45391) A continuation of building structures, statics strength of materials and systems analysis. Emphasis is on complex systems including horizontal long span and high rise structures. Computer analysis is required.

**Prerequisite:** Graduate standing.

**Schedule Type:** Seminar

**Contact Hours:** 1-3 other

**Grade Mode:** Standard Letter

**ARCH 55491 SEMINAR: METHODS AND MATERIALS III 1-3 Credit Hours**

(Repeatable for credit) (Cross-listed with ARCH 45491) Advanced topics in methods and complex materials systems. Computer modeling and field experience is required.

**Prerequisite:** Graduate standing.

**Schedule Type:** Seminar

**Contact Hours:** 1-3 other

**Grade Mode:** Standard Letter

**ARCH 55591 SEMINAR: ENVIRONMENTAL TECHNOLOGY III 1-3 Credit Hours**

(Repeatable for a maximum of 3 credit hours) (Cross-listed with ARCH 45591) Variable topics in environmental technology, environmental design and energy conservation, advanced lighting techniques, etc.

**Prerequisite:** Graduate standing.

**Schedule Type:** Seminar

**Contact Hours:** 1-3 other

**Grade Mode:** Standard Letter

**ARCH 55601 ADVANCED COMPUTER APPLICATIONS 1-3 Credit Hours**

(Repeatable for a maximum of 3 credit hours) (Cross-listed with ARCH 45601) This course discusses advanced visualization techniques such as raytracing, radiosity and animation and presents a variety of presentation issues and options.

**Prerequisite:** Graduate standing.

**Schedule Type:** Combined Lecture and Lab

**Contact Hours:** 1-3 other

**Grade Mode:** Standard Letter

**ARCH 55620 INTRODUCTION TO PRESERVATION 1-3 Credit Hours**  
(Repeatable for a maximum of 3 credit hours) (Cross-listed with ARCH 45620) An overview of preservation including building analysis conservation, adaptive reuse, economic benefits of preservation planning as a revitalizing strategy. Graduate standing.

**Prerequisite:** Admission to the preservation program or permission of the instructor.

**Schedule Type:** Lecture

**Contact Hours:** 1-3 lecture

**Grade Mode:** Standard Letter

**ARCH 55621 CURRENT ISSUES IN HISTORIC PRESERVATION 1-3 Credit Hours**

(Repeatable for a maximum of 3 credit hours) (Cross-listed with ARCH 45621) Course in which practicing professionals including architects, planners, developers and government officials present preservation related work.

**Prerequisite:** Special approval and Graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 1-3 lecture

**Grade Mode:** Standard Letter

**ARCH 55625 EXPLORING HISTORIC STRUCTURES 3 Credit Hours**

(Cross-listed with ARCH 45625) This course provides students with the skills and opportunity to lead teams documenting an historic structure using methods prescribed by the Historic American Buildings Survey (HABS). Lectures will cover recording, documentation and assessment of the historic structure implementing the guidelines established by the Getty Conservation Institute, including history, purpose, means, methods, and field work.

**Prerequisite:** Graduate standing in the College of Architecture and Environmental Design.

**Schedule Type:** Laboratory, Lecture

**Contact Hours:** 1.2 lecture, 3.6 lab

**Grade Mode:** Standard Letter

**ARCH 55627 PRESERVATION TECHNOLOGY 3 Credit Hours**

(Cross-listed with ARCH 45627) A study of historic building materials with an emphasis on causes of degradation, strategies for conservation, and standards for restoration.

**Prerequisite:** Graduate standing; and minimum C (2.000) grade in both ARCH 30401 and ARCH 40402.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**ARCH 55630 INTRODUCTION TO LANDSCAPE ARCHITECTURE 1-3 Credit Hours**

(Repeatable for a maximum of 3 credit hours) (Cross-listed with ARCH 45630) Introduction to landscape design with emphasis upon the relationship between landscape and buildings.

**Prerequisite:** Graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 1-3 lecture

**Grade Mode:** Standard Letter

**ARCH 55631 SITE ANALYSIS AND DESIGN 1-3 Credit Hours**

(Repeatable for a maximum of 3 credit hours) (Cross-listed with ARCH 45631) Analysis of environmental factors as a basis for site selection and site planning.

**Prerequisite:** Graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 1-3 lecture

**Grade Mode:** Standard Letter

**ARCH 55640 DEVELOPING ENVIRONMENTS FOR OLDER ADULTS 1-3 Credit Hours**

(Repeatable for a maximum of 3 credit hours) (Cross-listed with ARCH 45640) Research of existing built environments and an investigation of the planning design process for the elderly.

**Prerequisite:** Graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 1-3 lecture

**Grade Mode:** Standard Letter

**ARCH 55707 REPRESENTATION IN DESIGN 1-3 Credit Hours**

(Repeatable for a maximum of 3 credit hours) Course on the nature of communication in design and the representational tools the designer uses to give form to abstract ideas and converse with clients and colleagues.

**Prerequisite:** Graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 1-3 lecture

**Grade Mode:** Standard Letter

**ARCH 55793 WORKSHOP IN URBAN DESIGN AND PLANNING 1-3 Credit Hours**

(Repeatable for a maximum of 3 credit hours) This course provides an introduction to the scope of planning and design in the making of quality urban neighborhoods with particular emphasis on the role of urban design, architecture and landscape design.

**Prerequisite:** Graduate standing.

**Schedule Type:** Workshop

**Contact Hours:** 1-3 other

**Grade Mode:** Satisfactory/Unsatisfactory

**ARCH 56991 SEMINAR: VARIABLE TOPIC 1-3 Credit Hours**

(Repeatable for a maximum of 3 credit hours) Variable topic seminar.

**Prerequisite:** Special approval and graduate standing.

**Schedule Type:** Seminar

**Contact Hours:** 1-3 other

**Grade Mode:** Standard Letter

**ARCH 56992 FIELD STUDY 1-3 Credit Hours**

(Repeatable for a maximum of 3 credit hours) (Cross-listed with ARCH 46992) Field experience.

**Prerequisite:** Special approval and Graduate standing.

**Schedule Type:** Field Experience

**Contact Hours:** 1-3 other

**Grade Mode:** Standard Letter

**ARCH 56993 WORKSHOP: VARIABLE TOPIC 1-3 Credit Hours**

(Repeatable for credit) (Cross-listed with ARCH 46993) Field experience.

**Prerequisite:** Graduate standing.

**Schedule Type:** Workshop

**Contact Hours:** 1-3 other

**Grade Mode:** Satisfactory/Unsatisfactory

**ARCH 56995 SPECIAL TOPICS IN ARCHITECTURE 1-3 Credit Hours**

(Repeatable for credit) (Cross-listed with ARCH 46995) Special topics in architecture.

**Prerequisite:** Special approval and Graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 1-3 lecture

**Grade Mode:** Standard Letter-IP



**ARCH 60101 GRADUATE DESIGN STUDIO I 3-6 Credit Hours**

Architectural studies related to buildings. Emphasis on spatial, aesthetic, environmental and functional factors in design.

**Prerequisite:** Graduate standing.

**Schedule Type:** Studio

**Contact Hours:** 3-6 other

**Grade Mode:** Standard Letter

**ARCH 60102 GRADUATE DESIGN STUDIO II 3-6 Credit Hours**

Independent design project, completed under the direction of an individual adviser selected from the graduate faculty.

**Prerequisite:** ARCH 60101 and 60301 and Graduate standing.

**Corequisite:** ARCH 60922.

**Schedule Type:** Studio

**Contact Hours:** 3-6 other

**Grade Mode:** Standard Letter

**ARCH 60103 GRADUATE DESIGN STUDIO III 6-9 Credit Hours**

Capstone-studio (or "Master Project") aimed at further investigating building design issues both at a greater depth of complexity and by focusing on particular design aspects or areas of concentration.

**Prerequisite:** ARCH 60102 and 60150 and 60922 and Graduate standing.

**Schedule Type:** Studio

**Contact Hours:** 6-9 other

**Grade Mode:** Standard Letter-IP

**ARCH 60111 GRADUATE DESIGN FOUNDATIONS STUDIO 3-6 Credit Hours**

Graduate-level introduction to the organizational principles and tools designers use to interpret and shape the build environment.

**Prerequisite:** Graduate Standing.

**Schedule Type:** Studio

**Contact Hours:** 3-6 other

**Grade Mode:** Standard Letter

**ARCH 60112 GRADUATE DESIGN ARCHITECTURE STUDIO 3-6 Credit Hours**

The introduction of a building design process that emphasizes the integration of program requirements with specific form typologies using architectural elements as the primary components to design shape, space, and form.

**Prerequisite:** Graduate Standing.

**Schedule Type:** Studio

**Contact Hours:** 3-6 other

**Grade Mode:** Standard Letter

**ARCH 60113 GRADUATE DESIGN CONTEXT STUDIO 3-6 Credit Hours**

Studio investigation that includes consideration of program, site, context, materiality, and tectonics. Specific emphasis on understanding the influences of site, context, and urban design; including the role of social and cultural influences on the built environment.

**Prerequisite:** Graduate standing.

**Schedule Type:** Studio

**Contact Hours:** 3-6 other

**Grade Mode:** Standard Letter

**ARCH 60114 GRADUATE DESIGN SYSTEMS STUDIO 3-6 Credit Hours**

Studio investigation of comprehensive design concerns including the integration of building systems and implementation of sustainable strategies.

**Prerequisite:** Graduate standing.

**Schedule Type:** Studio

**Contact Hours:** 3-6 other

**Grade Mode:** Standard Letter

**ARCH 60150 PROJECT PROGRAMMING 2-3 Credit Hours**

Study and discussion of the notion of program in architecture and the principles of project programming. Case study analysis and preparation of a comprehensive program for an architectural project.

**Prerequisite:** Graduate standing; ARCH 60101 and 60301.

**Schedule Type:** Lecture

**Contact Hours:** 2-3 lecture

**Grade Mode:** Standard Letter

**ARCH 60211 GRADUATE GLOBAL HISTORY OF ARCHITECTURE I 3 Credit Hours**

Global history of architecture from Neolithic times through the 16th Century.

**Prerequisite:** Graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**ARCH 60212 GRADUATE GLOBAL HISTORY OF ARCHITECTURE II 3 Credit Hours**

Global history of architecture from the 17th century to the early 21st century.

**Prerequisite:** ARCH 60211 and Graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**ARCH 60301 THEORIES OF ARCHITECTURE 1-3 Credit Hours**

(Repeatable for a maximum of 3 credit hours) In-depth analysis and discussion of contemporary architectural theories. Critical evaluation of major authors and architectural projects.

**Prerequisite:** Graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 1-3 lecture

**Grade Mode:** Standard Letter

**ARCH 60601 TOOLS OF REPRESENTATION 3 Credit Hours**

Tools of representation: Introduction to the software used in the digital environment for modeling and representing architectural schemes.

Course will cover: Software interface, x,y,z coordinates and navigation, Nurbs modeling, and Mesh Modeling. The course will enable students to three-dimensionally design and represent massing studies, building details, and the development of architectural elements and site context.

**Prerequisite:** Graduate standing.

**Schedule Type:** Combined Lecture and Lab

**Contact Hours:** 3 other

**Grade Mode:** Standard Letter

**ARCH 60602 TOOLS OF FABRICATION 3 Credit Hours**

Tools of fabrication: The course covers advanced three-dimensional modeling tools and the different methods for outputting digital models into the physical environment. The course covers 3d printing, laser cutting, cnc milling, and vacuum forming.

**Prerequisite:** Graduate standing.

**Schedule Type:** Combined Lecture and Lab

**Contact Hours:** 3 other

**Grade Mode:** Standard Letter

**ARCH 60603 TOOLS OF SIMULATION 3 Credit Hours**

Tools of Simulation: The course covers two-dimensional and three-dimensional simulation platforms and the theory behind the tools to generate and simulate architectural ideas and environments. Animation techniques and robotic integration will operate as the bridge between the digital and the physical environment.

**Prerequisite:** Graduate standing.

**Schedule Type:** Combined Lecture and Lab

**Contact Hours:** 3 other

**Grade Mode:** Standard Letter

**ARCH 60604 TOOLS OF CODING 3 Credit Hours**

Tools of coding: The course covers visual parametric software and coding languages to generate and develop architectural ideas. The course integrates the tools and theory of coding and parametric software and their evolution in the architecture field.

**Prerequisite:** Graduate standing.

**Schedule Type:** Combined Lecture and Lab

**Contact Hours:** 3 other

**Grade Mode:** Standard Letter

**ARCH 60922 METHODS OF INQUIRY IN ARCHITECTURAL STUDIES 2 Credit Hours**

(Cross-listed with AED 60922 and LARC 60922) Provides a comprehensive coverage of architectural inquiry techniques including qualitative and quantitative research methods and critical thinking skills to help students better conduct and understand research.

**Prerequisite:** ARCH 60101 and 60301 and Graduate standing and special approval.

**Schedule Type:** Lecture

**Contact Hours:** 2 lecture

**Grade Mode:** Standard Letter

**ARCH 65001 PROFESSIONAL PRACTICE: REAL ESTATE AND DEVELOPMENT 2-4 Credit Hours**

Introduction to the economic, social, ethical and legal impact on/ of development projects in both the public and the private sectors. Computer applications and case-studies analysis are required.

**Prerequisite:** Graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 2-4 lecture

**Grade Mode:** Standard Letter

**ARCH 65002 PROFESSIONAL PRACTICE: CONTRACT AND PLANNING LAW 2 Credit Hours**

The course surveys laws relating to the practice of architecture and to dispute resolution with emphasis on contract laws contrasted with laws of negligence and the standard of care in the profession. The planning law component surveys land use control mechanisms as seen through zoning, variances and practical applications.

**Prerequisite:** Architecture (ARCH) major and Graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 2 lecture

**Grade Mode:** Standard Letter

**ARCH 65003 PROFESSIONAL PRACTICE: LEADERSHIP, ETHICS AND OFFICE MANAGEMENT 2-3 Credit Hours**

Course discusses issues of professional leadership and examines architectural office structures. Management approaches, professional registration and practice, use of consulting engineers and financial management of an office in the context of the profession as business.

**Prerequisite:** ARCH 65002 and Architecture (ARCH) major and Graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 2-3 lecture

**Grade Mode:** Standard Letter

**ARCH 66199 THESIS I 2-6 Credit Hours**

Thesis students must register for a total of 6 hours.

**Prerequisite:** Graduate standing.

**Schedule Type:** Masters Thesis

**Contact Hours:** 2-6 other

**Grade Mode:** Satisfactory/Unsatisfactory-IP

**ARCH 66299 THESIS II 2 Credit Hours**

(Repeatable for credit) Following completion of 6 credit hours of Thesis I all graduate students must continuously register for Thesis II for all subsequent academic terms (including summer) until all degree requirements are met. Graduate standing.

**Prerequisite:** 6 credit hours of ARCH 66199.

**Schedule Type:** Masters Thesis

**Contact Hours:** 2 other

**Grade Mode:** Satisfactory/Unsatisfactory-IP

**ARCH 66892 PRACTICUM 1-3 Credit Hours**

(Repeatable for credit) Variable topic practicum.

**Prerequisite:** Permission.

**Schedule Type:** Practicum or Internship

**Contact Hours:** 1-3 other

**Grade Mode:** Standard Letter

**ARCH 66991 SEMINAR: VARIABLE TOPIC 1-4 Credit Hours**

(Repeatable for credit) Seminar on a variable topic.

**Prerequisite:** Graduate standing.

**Schedule Type:** Seminar

**Contact Hours:** 1-4 other

**Grade Mode:** Standard Letter

**ARCH 66992 FIELD STUDY 1-3 Credit Hours**

(Repeatable for credit) Field study in architecture.

**Prerequisite:** Graduate standing.

**Schedule Type:** Field Experience

**Contact Hours:** 1-3 other

**Grade Mode:** Standard Letter-IP

**ARCH 66993 WORKSHOP: VARIABLE TOPIC 1-3 Credit Hours**

(Repeatable for credit) Variable topic workshop.

**Prerequisite:** Graduate standing.

**Schedule Type:** Workshop

**Contact Hours:** 1-3 other

**Grade Mode:** Satisfactory/Unsatisfactory

**ARCH 66995 SPECIAL TOPICS IN ARCHITECTURE 1-4 Credit Hours**

(Repeatable for credit) Special topics in architecture.

**Prerequisite:** Graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 1-4 lecture

**Grade Mode:** Standard Letter

**ARCH 66996 INDIVIDUAL INVESTIGATION 1-3 Credit Hours**

(Repeatable for credit) Individual investigation in architecture.

**Prerequisite:** Graduate standing.

**Schedule Type:** Individual Investigation

**Contact Hours:** 1-3 other

**Grade Mode:** Standard Letter-IP

**ARCH 66998 RESEARCH 2-6 Credit Hours**

(Repeatable for credit) Research in architecture.

**Prerequisite:** Graduate standing.

**Schedule Type:** Research

**Contact Hours:** 2-6 other

**Grade Mode:** Standard Letter

**ARCH 67510 SUSTAINABLE BUILDING CONSTRUCTION I 3 Credit Hours**

First course of a two-course sequence. Provides an in-depth survey of design, pre- and post-construction activities pertinent to Green Building and Sustainable Design of the Built environment. Reviews fundamental concepts and principles of sustainable building design and construction with special emphasis on construction site issues. Provides a comprehensive review of impact of site on construction and building design on the site and its resources. Focus is on understanding the role building design and construction play on resources efficiency and minimizing the impact of construction activities on the environment.

**Prerequisite:** TECH 57000 and Graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**ARCH 67511 SUSTAINABLE BUILDING CONSTRUCTION II 3 Credit Hours**

Second course of a two-course sequence. Provides an in-depth survey of design, pre- and post-construction activities pertinent to Green Building and Sustainable Design of the Built environment. Reviews fundamental concepts and principles of sustainable building design and construction with special emphasis on building systems. Provides a comprehensive review of impact of building component, materials, and systems on design and construction of High-performance buildings. Focus is on understanding the role building design and construction play on resources efficiency and minimizing the impact of construction activities on the environment.

**Prerequisite:** ARCH 67510 and Graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter