

Graduate Architecture Courses

Foundation Studios

Path C (3-yr. M.Arch) Studios - year 1:

61111 **Architectural Design I – 6 credits (Fall)**

Part one of a required two-semester studio sequence introducing all 3-year M.Arch students to the grammar, syntax, and composition of classical architecture and the latter's relationship to tectonics, expression, and urbanism.

61121 **Architectural Design II – 6 credits (Spring)**

Part two of a required two-semester studio sequence introducing all 3-year M.Arch students to the grammar, syntax, and composition of classical architecture and the latter's relationship to tectonics, expression, and urbanism.

Path A (2-yr. M.ADU) & Path B (2-yr. M.Arch) Studio – year 1:

71111 **Elements and Principles of Classical Architecture – 6 credits (Fall)**

A required first design studio for all M.ADU and 2-year M.Arch students, introducing them to the grammar, syntax, and composition of classical architecture and the latter's relationship to tectonics, expression, and urbanism.

Path C (3-yr. M.Arch) Studio - year 2:

71131 **Architectural Design III – 6 credits (Fall)**

Integrative Design Studio: design of a simple program building in detail, allowing students to demonstrate their ability to integrate structural and environmental technologies into their building design.

Concentration / Common Studios:

71141 **Classical Architecture I – 6 credits (Spring)**

Part one of a two-studio sequence for students concentrating in classical architecture, in projects that explore in detail selected elements and aspects of classical architecture.

74142 **Urban Design I – 6 credits (Spring)**

Part one of a two-studio sequence for students concentrating in urban design, in projects that focus in detail upon the formal elements of traditional European urbanism; in Rome.

81151 **Urban Design II – 6 credits (Fall)**

Part two of a two-studio sequence for students concentrating in urban design, entailing an on-site real-world charrette to create a neighborhood or town plan and the graphic documents and legal mechanisms needed to implement it.

84152 **Classical Architecture II – 6 credits (Fall)**

Part two of a two-studio sequence for students concentrating in classical architecture; in Rome.

81161 **Terminal Design Project – 6 credits (Spring)**

Independently selected final design project for all Graduate Architecture students, focusing upon a project of the student's choice. All M.Arch. students must do a design for a building; M.ADU students have the option of doing a building design, urban design, or some combination thereof.

Required Path C Ancillary Courses [* indicates courses taken with undergraduates]

60211* Architectural History I – 3 credits (Fall)

A survey of architectural history from the Egyptian, Greek, and Roman civilizations to Europe during the Romanesque and Gothic periods. Each period is studied in relation to physical determinants, such as climate, materials, technology, and geography, and historical determinants such as economics, religion, politics, society, and culture.

60221* Architectural History II – 3 credits (Spring)

This course continues the history survey, beginning with Renaissance and Baroque Europe, continuing to the 18th and 19th centuries in Europe and the United States, to the world-wide impact of the Modern Movement and late 20th century reactions to it.

60411* Building Technology I / Masonry and Timber – 3 credits (Fall)

Qualitative and quantitative principles of traditional building assembly and detailing in masonry and timber.

60421* Building Technology II / Concrete, Steel and Glass – 3 credits (Spring)

Qualitative and quantitative principles of modern building assembly and detailing in concrete, steel and glass.

60431* Environmental Systems I / Acoustics and Illumination – 3 credits (Fall)

Principles of acoustics, illumination, electrical and signal systems, with emphasis on architectural applications.

60511 Structures I / Introduction to Structures – 3 credits (Fall)

Basic principles of building structures with a focus on statics. General topics include structural stability, dynamics and lateral loads, structure types, and materials. Computational subjects involve vectors and forces, torque, shear, bending moments, spanning conditions, beams, columns, funicular structures, arches, and domes.

60521* Structures II / Concrete – 3 credits (Spring) [ARCH 60511 prerequisite]

The study of concrete structures. Studies include beams, columns, frames, shear walls and connections. Subjects include reinforcement, material properties, seismic design, foundations, and building codes.

61011 Introduction to Architectural Representation – 0 credit [Summer before Year-1]

Instruction in the techniques of traditional architectural drawing and presentation. Required of all incoming graduate students.

61021 Introduction to CAD – 3 credits (Spring)

Instruction in analysis and representation of architectural form through the medium of the computer, including drafting and three-dimensional modeling.

70211 History of Rome – 3 credits (Fall)

A history of Rome from its origins through the Republic and Empire, its ongoing character as the spiritual and administrative center of European Christendom, and its role as the capital of modern Italy, with special attention to the relationship between its political and religious history and its formal order.

70311 Urban Elements and Principles – 3 credits (Fall)

A required theory course for all graduate students entailing a broad survey, both typological and historical, of the physical characteristics of traditional western cities and their development; with special emphasis upon urban form as a cooperative human artifact embodying particular cultural values and ideals.

70441* Environmental Systems II – 3 credits (Fall)

Basic concepts of heating, ventilation, air conditioning, energy conservation, fire suppression, plumbing and vertical transportation, with a focus on integration of these systems in building design.

70531* Structures III / Wood and Steel – 3 credits (Fall) [ARCH 60511 prerequisite]

The study of wood and steel structures. Studies include beams, columns, frames and connections. Additional topics address vertical loading, bracing, moment resistive structures and wind forces.

73321 Architectural Treatises – 3 credits (Spring)

Consideration of the theoretical and practical background of traditional architecture through a careful reading both of primary theoretical sources (including Vitruvius, Alberti, Serlio, Palladio, Vignola, Claude Perrault, and others) as well as influential pattern books; and the pertinence of both to contemporary architectural discourse and practice.

74322 Italian Urbanism – 6 credits (Spring / Rome)

A six-credit drawing and theory course centered upon outdoor, on-site analyses and documentation of both prototypical and exceptional urban conditions in Rome and elsewhere in Italy. Analytical work to be documented by a combination of measured drawings, sketchbook, watercolor and photographic records of sites visited in Rome and on multiple field trips.

80711* Professional Practice – 3 credits (Spring)

Lectures and assignments covering professional services, marketing, economics of practice, programming, design drawing development, contracts and project management.

83311 After Urbanism – 3 credits (Spring)

A consideration of the possibilities for traditional urbanism within the context of contemporary culture; specifically, the ways in which contemporary culture frustrates traditional urban ambitions, and the extent to which it may be possible for traditional urbanism to both critique and transform contemporary culture.

84312 Italian Classicism – 6 credits (Fall / Rome)

A six-credit drawing and theory course centered upon outdoor, on-site analyses and documentation of both typical and canonical buildings and details in Rome and elsewhere in Italy. Analytical work to be documented by a combination of measured drawings, sketchbook, watercolor and photographic records of buildings visited in Rome and on multiple field trips.

Recommended Elective Courses:

74211 **Urban History of Rome – 3 credits (Spring / Rome)**

This course will introduce graduate urban design students to the historical, cultural, political, economic, and religious factors that contributed to the growth and development of Rome. Emphasis will be placed on the evolving institutions of ancient Rome, the power of the ruling families in medieval Rome, the patronage of the Papacy and papal families in Renaissance and Baroque Rome, and the growth of the modern city, especially as these relate to the urban formal order of Rome.

84211 **Architectural History of Rome – 3 credits (Rome / Fall)**

This course will introduce graduate classical architecture students to the historical, cultural, political, economic, and religious factors that contributed to the growth and development of the architecture of Rome. Emphasis will be placed on the evolving institutions of ancient Rome, the power of the ruling families in medieval Rome, the patronage of the Papacy and papal families in Renaissance and Baroque Rome, and the growth of the modern city.

TBD **Open Electives / Theory Electives – 3 credits (multiple courses, TBD)**