Two-Year Post-Professional Degree (Path A)

# MASTERS OF ARCHITECTURAL DESIGN & URBANISM (MADU) With a Concentration in Classical Architecture

#### **SUMMER SESSION**

|       | ARCH 61011     | Introduction to Architectural Representation            | 0      |
|-------|----------------|---|--------|
|       |                | TOTAL CREDITS:  | 0      |
| FALL  | (First Term)   |   |        |
|       | ARCH 71111     | Elements & Principles of Classical Architecture (Studio | ) 6    |
|       | ARCH 70211     | History of Rome   | 3      |
|       | ARCH 70311     | Urban Elements & Principles                             | 3<br>3 |
|       |                | TOTAL CREDITS:  | 12     |
| SPRIN | NG (Second Ter | m)  |        |
|       | ARCH 71141     | Classical Architecture I (Studio)                       | 6      |
|       | ARCH 73321     | Architectural Treatises                                 | 3      |
|       |                | Optional Elective Course                                | 3      |
|       |                | TOTAL CREDITS:  | 9-12   |
| FALL  | (Third Term)   | ROME  |        |
|       | ARCH 84152     | Classical Architecture II (Studio)                      | 6      |
|       | ARCH 84211     | Architectural History of Rome                           | 3      |
|       | ARCH 84312     | Italian Classicism                                      | 3      |
|       |                | TOTAL CREDITS:  | 12     |
| SPRIN | NG (Fourth Ter | m)  |        |
|       | ARCH 81161     | Terminal Design Project (Studio)                        | 6      |
|       |                | Optional Elective Course                                | 3      |
|       |                | Optional Elective Course                                | 3      |
|       |                | TOTAL CREDITS.  | 6-12   |

**TOTAL DEGREE CREDITS REQUIRED: 39 minimum-48 maximum** 

Two-Year Post-Professional Degree (Path A)

# MASTERS OF ARCHITECTURAL DESIGN & URBANISM (MADU) With a Concentration in Urban Design

#### **SUMMER SESSION**

|       | ARCH 61011    | <u> </u>   | 0            |
|-------|---------------|--|--------------|
|       |               | TOTAL CREDITS:   | 0            |
| FALL  | (First Term)  |  |              |
|       | ARCH 71111    | Elements & Principles of Classical Architecture (Studio) | 6            |
|       | ARCH 70211    | History of Rome  | 3            |
|       | ARCH 70311    | Urban Elements & Principles                              | 3            |
|       |               | TOTAL CREDITS:   | 12           |
| SPRIN | G (Second Ter | m)ROME   |              |
|       | ARCH 74142    | Urban Design I (Studio)                                  | 6            |
|       | ARCH 74211    | Urban History of Rome                                    |              |
|       | ARCH 74322    | Italian Urbanism   | 3<br>3<br>12 |
|       |               | TOTAL CREDITS:   | 12           |
| FALL  | (Third Term)  |  |              |
|       | ARCH 81151    | Urban Design II (Studio)                                 | 6            |
|       |               | Optional Elective Course                                 | 3            |
|       |               | (ARCH 83321 A Survey of Form-Based Codes)                |              |
|       |               | Optional Elective Course                                 | 3            |
|       |               | TOTAL CREDITS:   | 6-12         |
| SPRIN | G (Fourth Ter | m)   |              |
|       | ARCH 81161    | Terminal Design Project (Studio)                         | 6            |
|       | ARCH 83311    | After Urbanism   | 3            |
|       |               | Optional Elective Course                                 | 3            |
|       |               | TOTAL CREDITS:   | 9-12         |

**TOTAL DEGREE CREDITS REQUIRED: 39 minimum-48 maximum** 

Two-Year Professional Degree (Path B)

### MASTERS OF ARCHITECTURE (M.ARCH)

### With a Concentration in Classical Architecture

| SUMMER SE | SSION |
|-----------|-------|
|-----------|-------|

|       | ARCH 61011     | Introduction to Architectural Representation            | 0                 |
|-------|----------------|---|-------------------|
|       |                | TOTAL CREDITS:  | 0                 |
| FALL  | (First Term)   |   |                   |
|       | ARCH 71111     | Elements & Principles of Classical Architecture (Studio | 0) 6              |
|       | ARCH 70211     | History of Rome   | 3                 |
|       | ARCH 70311     | Urban Elements & Principles                             | 3                 |
|       |                | Required Course (Determined on an Individual Basis)     | 3<br>3<br>3<br>15 |
|       |                | TOTAL CREDITS:  | 15                |
| SPRIN | NG (Second Ter | m)  |                   |
|       | ARCH 71141     | Classical Architecture I (Studio)                       | 6                 |
|       | ARCH 73321     | Architectural Treatises                                 | 3                 |
|       |                | Required Course (Determined on an Individual Basis)     | 3<br>3<br>3       |
|       |                | Elective Course   |                   |
|       |                | TOTAL CREDITS:  | 15                |
| FALL  | (Third Term)   | -ROME   |                   |
|       | ARCH 84152     | Classical Architecture II (Studio)                      | 6                 |
|       | ARCH 84211     | Architectural History of Rome                           | 3<br>3            |
|       | ARCH 84312     | Italian Classicism                                      |                   |
|       |                | TOTAL CREDITS:  | 12                |
| SPRIN | NG (Fourth Ter | m)  |                   |
|       | ARCH 81161     | Terminal Design Project (Studio)                        | 6                 |
|       | ARCH 80711     | Professional Practice                                   | 3                 |
|       |                | Required Course (Determined on an Individual Basis)     | 3                 |
|       |                | Optional Elective Course                                | 3                 |
|       |                | TOTAL CREDITS:  | 12-15             |

**TOTAL DEGREE CREDITS REQUIRED: 54 minimum-57 maximum** 

Two-Year Professional Degree (Path B)

## MASTERS OF ARCHITECTURE (M.ARCH)

## With a Concentration in Urban Design

| SUN | ΛN | <b>JER</b> | SESSION |  |
|-----|----|------------|---------|--|
|     |    |            |         |  |

|       | ARCH 61011     | Introduction to Architectural Representation TOTAL CREDITS: | <u>0</u>          |
|-------|----------------|---|-------------------|
| FALL  | (First Term)   |   |                   |
|       | ARCH 71111     | Elements & Principles of Classical Architecture (Studio     | o) 6              |
|       | ARCH 70211     | History of Rome   | 3                 |
|       | ARCH 70311     | Urban Elements & Principles                                 | 3                 |
|       |                | Required Course (Determined on an Individual Basis)         | 3<br>3<br>3<br>15 |
|       |                | TOTAL CREDITS:  | 15                |
| SPRIN | NG (Second Ter | m)ROME  |                   |
|       | ARCH 74142     | Urban Design I (Studio)                                     | 6                 |
|       | ARCH 74211     | Urban History of Rome                                       | 3                 |
|       | ARCH 74322     | Italian Urbanism  | 3<br>3            |
|       |                | TOTAL CREDITS:  | 12                |
| FALL  | (Third Term)   |   |                   |
|       | ARCH 81151     | Urban Design II (Studio)                                    | 6                 |
|       |                | Required Course (Determined on an Individual Basis)         | 3                 |
|       |                | Elective Course   | 3                 |
|       |                | (ARCH 83321 A Survey of Form-Based Codes)                   |                   |
|       |                | Optional Elective Course                                    | 3                 |
|       |                | TOTAL CREDITS:  | 12-15             |
| SPRIN | NG (Fourth Ter | m)  |                   |
|       | ARCH 81161     | Terminal Design Project (Studio)                            | 6                 |
|       | ARCH 80711     | Professional Practice                                       |                   |
|       | ARCH 83311     | After Urbanism  | 3                 |
|       |                | Required Course (Determined on an Individual Basis)         | 3                 |
|       |                | TOTAL CREDITS.  | 15                |

**TOTAL DEGREE CREDITS REQUIRED: 54 minimum-57 maximum** 

Three-Year Professional Degree (Path C)

### MASTERS OF ARCHITECTURE (M.ARCH)

### **Foundational Semesters (Both Concentrations)**

#### **SUMMER SESSION**

| AR        | CH 61011   | Introduction to Architectural Representation | 0           |
|-----------|------------|--|-------------|
|           |            | TOTAL CREDITS:                               | 0           |
| FALL (Fir | st Term)   |  |             |
| AR        | CH 61111   | Architectural Design I (Studio)              | 6           |
| AR        | CH 60211   | Architectural History I                      | 3           |
| AR        | CH 60411   | Building Technology I                        | 3           |
| AR        | CH 60431   | Environmental Systems I                      | 3<br>3<br>3 |
| AR        | CH 60511   | Structures I                                 | 3           |
|           |            | TOTAL CREDITS:                               | 18          |
| SPRING (S | Second Ter | rm)  |             |
| AR        | CH 61121   | Architectural Design II (Studio)             | 6           |
| AR        | CH 60221   | Architectural History II                     | 3           |
| AR        | CH 60421   | Building Technology II                       | 3<br>3<br>3 |
| AR        | CH 60521   | Structures II                                | 3           |
| AR        | CH 61021   | Introduction to CAD                          | 3           |
|           |            | TOTAL CREDITS:                               | 18          |
| FALL (Thi | ird Term)  |  |             |
| AR        | CH 71131   | Architectural Design III (Studio)            | 6           |
| AR        | CH 70211   | History of Rome                              | 3           |
| AR        | CH 70311   | Urban Elements & Principles                  | 3<br>3<br>3 |
| AR        | CH 70441   | Environmental Systems II                     | 3           |
| AR        | CH 70531   | Structures III                               | 3           |
|           |            | TOTAL CREDITS:                               | 18          |

**FOUNDATIONAL CREDITS REQUIRED: 54 total** 

TOTAL DEGREE CREDITS REQUIRED: 90 minimum-96 maximum

Three-Year Professional Degree (Path C)

### MASTERS OF ARCHITECTURE (M.ARCH)

#### With a Concentration in Classical Architecture

### **SPRING (Fourth Term)**

| ARCH 71141          | Classical Architecture I (Studio)  | 6     |
|---------------------|------------------------------------|-------|
| ARCH 73321          | Architectural Treatises            | 3     |
|                     | Elective Course                    | 3     |
|                     | Optional Elective Course           | 3     |
|                     | TOTAL CREDITS:                     | 12-15 |
| FALL (Fifth Term)I  | ROME                               |       |
| ARCH 84152          | Classical Architecture II (Studio) | 6     |
| ARCH 84211          | Architectural History of Rome      | 3     |
| ARCH 84312          | Italian Classicism                 | 3     |
|                     | TOTAL CREDITS:                     | 12    |
| SPRING (Sixth Term) |                                    |       |
| ARCH 81161          | Terminal Design Project (Studio)   | 6     |
| ARCH 80711          | Professional Practice              | 3     |
|                     | Elective Course                    | 3     |
|                     | Optional Elective Course           | 3     |
|                     | TOTAL CREDITS:                     | 12-15 |

CREDITS REQUIRED IN CONCENTRATION & TERMINAL DESIGN SEMESTERS: 36 minimum-42 maximum

TOTAL DEGREE CREDITS REQUIRED: 90 minimum-96 maximum

Three-Year Professional Degree (Path C)

## MASTERS OF ARCHITECTURE (M.ARCH)

### With a Concentration in Urban Design

#### **SPRING (Fourth Term)--ROME**

| ARCH 74142          | Urban Design I (Studio)                   | 6     |
|---------------------|---|-------|
| ARCH 74211          | Urban History of Rome                     | 3     |
| ARCH 74322          | Italian Urbanism                          | 3     |
|                     | TOTAL CREDITS:                            | 12    |
| FALL (Fifth Term)   |   |       |
| ARCH 81151          | Urban Design II (Studio)                  | 6     |
|                     | Elective Course                           | 3     |
|                     | (ARCH 83321 A Survey of Form-Based Codes) |       |
|                     | Elective Course                           | 3     |
|                     | Optional Elective Course                  | 3     |
|                     | TOTAL CREDITS:                            | 12-15 |
| SPRING (Sixth Term) |   |       |
| ARCH 81161          | Terminal Design Project (Studio)          | 6     |
| ARCH 80711          | Professional Practice                     | 3     |
| ARCH 83311          | After Urbanism                            | 3     |
|                     | Optional Elective Course                  | 3     |
|                     | TOTAL CREDITS:                            | 12-15 |

CREDITS REQUIRED IN CONCENTRATION & TERMINAL DESIGN SEMESTERS: 36 minimum-42 maximum

TOTAL DEGREE CREDITS REQUIRED: 90 minimum-96 maximum

Four-Year Dual Degree (Path D)

### MASTERS OF ARCHITECTURE (M.ARCH)

# & MASTERS OF ARCHITECTURAL DESIGN & URBANISM (MADU) Foundational Semesters

#### **SUMMER SESSION**

| ARCH 61011         | Introduction to Architectural Representation | 0           |
|--------------------|--|-------------|
|                    | TOTAL CREDITS:                               | 0           |
| FALL (First Term)  |  |             |
| ARCH 61111         | Architectural Design I (Studio)              | 6           |
| ARCH 60211         | Architectural History I                      |             |
| ARCH 60411         | Building Technology I                        | 3           |
| ARCH 60431         | Environmental Systems I                      | 3           |
| ARCH 60511         | Structures I                                 | 3<br>3<br>3 |
|                    | TOTAL CREDITS:                               | 18          |
| SPRING (Second Ter | m)   |             |
| ARCH 61121         | Architectural Design II (Studio)             | 6           |
| ARCH 60221         | Architectural History II                     | 3           |
| ARCH 60421         | Building Technology II                       | 3<br>3<br>3 |
| ARCH 60521         | Structures II                                | 3           |
| ARCH 61021         | Introduction to CAD                          | 3           |
|                    | TOTAL CREDITS:                               | 18          |
| FALL (Third Term)  |  |             |
| ARCH 71131         | Architectural Design III (Studio)            | 6           |
| ARCH 70211         | History of Rome                              |             |
| ARCH 70311         | Urban Elements & Principles                  | 3<br>3<br>3 |
| ARCH 70441         | Environmental Systems II                     |             |
| ARCH 70531         | Structures III                               | 3           |
|                    | TOTAL CREDITS:                               | 18          |

**FOUNDATIONAL CREDITS REQUIRED: 54 total** 

**TOTAL DEGREE CREDITS REQUIRED: 114 minimum-117 maximum** 

Four-Year Dual Degree (Path D)

## MASTERS OF ARCHITECTURE (M.ARCH)

### & MASTERS OF ARCHITECTURAL DESIGN & URBANISM (MADU) Beginning with Three-Year Program & Concentration in Classical Architecture

### **SPRING (Fourth Term)**

| ARCH 71141          | Classical Architecture I (Studio)     |                 | 6      |
|---------------------|---------------------------------------|-----------------|--------|
| ARCH 73321          | Architectural Treatises               |                 | 3      |
|                     | Elective Course                       |                 |        |
|                     | Optional Elective Course              |                 | 3      |
|                     | -                                     | TOTAL CREDITS:  | 12-15  |
| FALL (Fifth Term)R  | OME                                   |                 |        |
| ARCH 84152          | Classical Architecture II (Studio)    | )               | 6      |
| ARCH 84211          | Architectural History of Rome         |                 | 3      |
| ARCH 84312          | Italian Classicism                    |                 | 3      |
|                     | '                                     | TOTAL CREDITS:  | 12     |
| SPRING (Sixth Term) | ROME                                  |                 |        |
| ARCH 74142          | Urban Design I (Studio)               |                 | 6      |
| ARCH 74211          | Urban History of Rome                 |                 | 3      |
| ARCH 74322          | Italian Urbanism                      |                 | 3      |
|                     | ,                                     | TOTAL CREDITS:  | 12     |
| FALL (Seventh Term) |                                       |                 |        |
| ARCH 81151          | Urban Design II (Studio)              |                 | 6      |
|                     | Elective Course                       |                 | 3      |
|                     | (ARCH 83321 A Survey of Fo            | rm-Based Codes) |        |
|                     | Elective Course                       |                 | 3      |
|                     | •                                     | TOTAL CREDITS:  | 12     |
| SPRING (Eighth Term | n)                                    |                 |        |
| ARCH 81161          | Terminal Design Project (Studio       | )               | 6      |
| ARCH 80711          | Professional Practice                 |                 | 3      |
| ARCH 83311          | After Urbanism                        |                 | 3<br>3 |
|                     | · · · · · · · · · · · · · · · · · · · | TOTAL CREDITS:  | 12     |

CREDITS REQUIRED IN CONCENTRATION

& TERMINAL DESIGN SEMESTERS: 60 minimum-63 maximum

TOTAL DEGREE CREDITS REQUIRED: 114 minimum-117 maximum

## Two-Year Degree

## MASTERS OF SCIENCE IN HISTORIC PRESERVATION (MSHP)

| SUMIN   | TER SESSION    |  |    |
|---------|----------------|--|----|
|         | ARCH 61011     | Introduction to Architectural Representation             | 0  |
|         | <u> </u>       | TOTAL CREDITS:   | 0  |
| FALI    | (First Term)   |  |    |
| FALL    | (First Term)   |  |    |
|         | ARCH 71111     | Elements & Principles of Classical Architecture (Studio) | 6  |
|         | ARCH 70311     | Urban Elements & Principles                              | 3  |
|         | ARCH 71411     | Research & Documentation of Historic Buildings           | 3  |
|         | ARCH 73231     | History & Theory of Preservation                         | 3  |
|         |                | TOTAL CREDITS:   | 15 |
| SPRIN   | NG (Second Ter | m)   |    |
| S1 1111 | (80001141 101  | <del></del> )  |    |
|         | ARCH 71321     | Urban Conservation Studio                                | 6  |
|         | ARCH 73411     | History of American Architecture 1630-1915               | 3  |
|         | ARCH 73421     | Historic Preservation & Construction                     | 3  |
|         |                | Elective Course  | 3  |
|         |                | TOTAL CREDITS:   | 15 |
| SUMN    | MER SESSION    |  |    |
|         | ARCH 75999     | Professional Internship & Field Work                     |    |
|         | intell (3)))   | in Historic Preservation                                 | 1  |
|         | _              | TOTAL CREDITS:   | 1  |
|         |                |  |    |
| FALL    | (Third Term)   | ROME   |    |
|         | ARCH 84331     | Historic Preservation Studio                             | 6  |
|         | ARCH 84411     | Research & Documentation of Historic Sites               | 3  |
|         | ARCH 84421     | International Conservation Laboratory                    | 3  |
|         | -              | TOTAL CREDITS:   | 12 |
| CDDIN   | IC (Fourth Tow | m)   |    |
| SPKIN   | NG (Fourth Ter | III <i>)</i>   |    |
|         | ARCH 81341     | Terminal Design Project in Historic Preservation         | 6  |
|         | ARCH 80411     | Preservation Practice                                    | 3  |
|         |                | Elective Course  | 3  |
|         |                | TOTAL CREDITS:   | 12 |

#### UNIVERSITY OF NOTRE DAME SCHOOL OF ARCHITECTURE

## REQUIRED COURSE DESCRIPTIONS FOR GRADUATE DEGREES IN ARCHITECTURE & HISTORIC PRESERVATION

#### **ARCH 60211: Architectural History I**

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.

#### **ARCH 60221: Architectural History II**

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 20<sup>th</sup> century reactions to it.

### ARCH 60411: Building Technology I--Masonry and Timber

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

#### ARCH 60421: Building Technology II--Concrete, Steel and Glass

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

#### ARCH 60431: Environmental Systems I--Acoustics and Illumination

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

#### **ARCH 60511: Structures I--Introduction to Structures**

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.

#### **ARCH 60521: Structures II--Concrete**

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.

#### **ARCH 61011: Introduction to Architectural Representation**

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

### **ARCH 61021: Introduction to CAD**

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

#### ARCH 61111: Architectural Design I

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.

#### **ARCH 61121: Architectural Design II**

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.

#### **ARCH 70211: History of Rome**

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.

#### **ARCH 70311: Urban Elements and Principles**

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.

#### **ARCH 70441: Environmental Systems II**

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.

#### ARCH 70531: Structures III--Wood and Steel

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.

#### **ARCH 71111: Elements and Principles of Classical Architecture**

A required first design studio for all graduate historic preservation students, engaged in tandem with professional and post-professional degree architecture graduate students, introducing all to the grammar, syntax, and composition of classical architecture and the latter's relationship to tectonics, expression, and urbanism.

#### ARCH 71131: Architectural Design III

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.

#### **ARCH 71141: Classical Architecture I**

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.

#### **ARCH 71321: Urban Conservation Studio**

An introductory urban design studio with a conservation emphasis. The focus will be on traditional urban neighborhoods and their preservation in terms of physical fabric as well as with respect to social, economic, political, and cultural issues. The close interaction between architecture, urbanism, and historic preservation will be explored through student design proposals.

#### **ARCH 71411: Research and Documentation of Historical Buildings**

Research and Documentation of Historic Buildings will develop the student's skills and knowledge to accurately research and develop a comprehensive history of a site using academic and professional standards and practices. The course takes students through the history of research and documentation practices, best current practices and look at developing new technology. The terminal project will have students develop a historic structures report for an existing historic building.

#### **ARCH 73231: History and Theory of Preservation**

This class will introduce students to the history, theory, and practice of architectural historic preservation in Europe and the United States, beginning with the origins of the movement in the late eighteenth century, classical theoretical statements of the nineteenth, and its application by means of legislation and regulation worldwide in the twentieth.

#### **ARCH 73321: Architectural Treatises**

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.

#### ARCH 73411: History of American Architecture 1630-1915

This course is seminar on the history of architecture in the United States from the colonial period in the 1600s until World War I. The purpose of this course is to introduce some of the formative ideas, major monuments, and characteristic experiences of different building cultures in the United States and to investigate various problems of interpretation raised by the material under review. Architecture will be defined in the broadest possible terms to include vernacular as well as high architecture examples of buildings, distinctive urban configurations, and landscape design. Architectural History will be defined as the record of the rich diversity of human experiences evident in the different ways Americans have shaped the built environment to pursue social, civil, and religious ends. By the end of the semester, students should have an understanding of the cultural and historical factors that shaped American architecture from 1630 to 1915 and should have the ability to identify and distinguish between the different styles and periods of architecture from this period. They should have the research skills to prepare scholarly and theoretical papers and essays on the subject, and they will have experience with in-class presentations on topics related to their research.

#### ARCH 73421: Historic Preservation and Construction

This course explores the knowledge that leads to successful preservation of historic construction. The study of materials, methods and resources available to architects from antiquity, through the early twentieth century is requisite for all rational choices made for preservation structures today. The course will prepare students to analyze, modify, and certify historic buildings for modern use. Demonstrations of production or fabrication methods for stone, brick, mortar, paints and wood framing and trim will give first-hand knowledge to preservation specialists. Acceptable practices for structural rehabilitation will be discussed and evaluated. Students completing this course will have the basis for understanding the process used to build historic structures and the means to preserve them.

#### ARCH 74142: Urban Design I

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.

#### **ARCH 74211: Urban History of 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.

#### ARCH 74322: Italian Urbanism

A three-credit course centered upon 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 field and studio drawings, watercolors, and sketchbook records of sites visited in Rome and on multiple field trips.

#### ARCH 75999: Fieldwork or Internship in Historic Preservation

During the course of the students' work, they will gain first-hand experience and continue their practical training as they directly apply the technical knowledge and skills which have been developed through studio projects and other coursework in a professional setting to preservation activities in the field or in the office.

#### **ARCH 80411: Preservation Practice**

The course examines of the practice of historic preservation, whether within an architectural firm or other professional setting. The course will cover contemporary policies in the field, activities of organizations and public agencies, project management, and tax incentive/grant programs. Through a series of case studies, students learn the practical, legal, and ethical aspects of professional practice related to historic preservation.

#### **ARCH 80711: Professional Practice**

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

#### ARCH 81151: Urban Design II

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.

#### **ARCH 81161: Terminal Design Project**

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.

### **ARCH 81341: Terminal Design Project for Historic Preservation**

Independently selected final design project focusing upon a topic of the student's choice. MSHP students have the option of doing a building design, urban design, conservation plan, or some combination thereof.

#### **ARCH 83311: After Urbanism**

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.

#### **ARCH 84152: Classical Architecture II**

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

#### **ARCH 84211: Architectural History of Rome**

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.

#### ARCH 84312: Italian Classicism

A three-credit course centered upon on-site analyses and documentation of classical buildings and details in Rome and elsewhere in Italy. Analytical work to be documented by a combination of field and studio drawings, watercolors, and sketchbook records of buildings visited in Rome and on multiple field trips.

#### **ARCH 84331: Historic Preservation Studio**

Based on the studios and courses in the preceding semesters, the studio in Rome introduces the student to the international context of conserving buildings, urban districts, and landscapes, whether highly formalized monumental works or examples of vernacular building cultures. The European approach to conservation will be highlighted.

#### ARCH 84411: Research and Documentation of Historic Sites

This course introduces students to advanced techniques for documenting and analyzing historic sites, including both manual and advanced digital technologies. Drawing on the resources of the Digital Heritage Architectural Research and Materials Analysis Laboratory (DHARMA), students will participate in actual documentation projects at important sites in Rome and elsewhere.

#### **ARCH 84421: International Conservation Laboratory**

This seminar class will provide "hands-on" opportunities to meet practitioners in the field and observe advanced techniques for physical analysis and conservation of historic art and architectural materials. The class will include guest lectures and demonstrations by international experts based in Rome and elsewhere.