

# The School of Architecture

## The School of Architecture

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## The Program of Studies

The Notre Dame School of Architecture welcomes all students who meet the entrance requirements and are willing to engage the professional and intellectual premises of the graduate program's emphases in traditional architecture and urbanism. The intellectual foundation of the graduate curriculum is the University of Notre Dame's world-view, which supports the Architecture School's commitment to learning the crafts and critically examining and extending the discourses of classical architecture, vernacular building and traditional European and American urbanism. The curriculum fosters design that is classical in spirit and form, gives physical expression to and supports good human communities, is environmentally sustainable, is based on and extends the best traditions of architecture and urbanism, and challenges and responds to the exigencies of contemporary practice.

The School of Architecture currently offers three paths of graduate study that each lead to one of two graduate degrees:

- Path A, a four-semester course of study leading to the master of architectural design and urbanism (M.ADU) post-professional degree;
- Path B, a four-semester course of study leading to a two-year master of architecture (M.Arch) N.A.A.B.-accredited professional degree; and
- Path C, a six-semester course of study leading to a three-year master of architecture (M.Arch) N.A.A.B.-accredited professional degree.

The studio course sequence of the final three semesters of each path "track" with one another, i.e., Path A, B and C students take studios with each other in their final three semesters. Each path requires the student to do an independent terminal design project in his or her final semester, and to select a concentration in either classical architecture or urban design in the two semesters prior. All students spend one of those two concentration semesters in Rome, depending upon which concentration they select.

Students choosing to concentrate in classical architecture spend extensive time in both South Bend and Rome on studio projects and ancillary course work that develop their knowledge of and ability to participate in the 2,500-year old tradition of western classical architecture descending from Greece and Rome.

Students choosing to concentrate in urban design likewise spend time in South Bend and Rome — and travel extensively to other towns and cities as well — learning in their design studios the formal principles of good urban design, and being introduced to the political, legal and cultural frameworks of contemporary traditional urban design through studio-based community design workshops.

An independent semester-long terminal design project is required of all students in their final semester. This project provides an opportunity for students to design in a variety of scales and contexts of their own choosing, in which contemporary architectural issues are explored in projects that require the student to synthesize their academic experience. M.Arch student projects may include an urban design component, but must include the in-depth design of a building.

### Path A: The Master of Architectural Design and Urbanism (M.ADU) Post-professional Degree

The two-year master of architectural design and urbanism post-professional degree is intended for students who already hold an accredited professional degree and are seeking to further develop their design skills and critical thinking in the disciplines of classical architecture and traditional urban design. The studio course work consists of a foundational first semester spent in South Bend introducing students to classical architectural design, urban principles and history, and the history of Rome; followed by two semesters of studio work (one in Rome) in the student's selected concentration, followed by an

independent terminal design project in the student's fourth semester. Forty-five (45) credit hours are required for graduation, and M.ADU students are limited to 12 credit hours per semester. M.ADU students also serve as teaching assistants in undergraduate courses during their three semesters in South Bend, for which they receive a stipend.

Although Path A leads to a post-professional degree, and although Notre Dame encourages and accepts applications from foreign students with professional degrees in their home country, foreign applicants should note that the master of architectural design and urbanism (M.ADU) degree does not permit persons lacking an N.A.A.B.-accredited degree to sit for the Architectural Registration Examination (A.R.E.) in the United States.

### Paths B and C: The Master of Architecture (M.Arch) Professional Degree

The National Architectural Accrediting Board (N.A.A.B.) requires all schools offering professional degree programs in architecture to publish the following statement:

In the United States, most state registration boards require a degree from an accredited professional degree program as a prerequisite for licensure. The National Architectural Accrediting Board (N.A.A.B.), which is the sole agency authorized to accredit US professional degree programs in architecture, recognizes three types of degrees: the bachelor of architecture, the masters of architecture and the doctor of architecture. A program may be granted a six-year, three-year, or two-year term of accreditation, depending on its degree of conformance with established educational standards.

Masters degree programs may consist of a pre-professional undergraduate degree and a professional graduate degree, which, when earned sequentially, comprise an accredited professional education. However, the pre-professional degree is not, by itself, recognized as an accredited degree.

### Path B: Two-year M.Arch

Notre Dame's two-year master of architecture degree is intended for students entering the University of Notre Dame with a four-year pre-professional degree

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in architecture who are seeking a professional graduate degree that focuses upon classical architecture and traditional urbanism. Studio course work is identical to that of the two-year Path A M.ADU program, with a foundational first semester spent in South Bend, followed by two semesters of studio work (one in Rome) in the student's selected concentration, followed by a terminal design project in the student's fourth semester. Required studio and seminar courses are supplemented by other courses needed to meet the N.A.A.B.'s substantive curricular requirements for accredited professional architecture degree programs, which will vary from student to student depending upon their undergraduate architectural education. A minimum of 57 credit hours is required for graduation, and the normal course load for Path B / two-year M.Arch students is 15 credit hours per semester.

**Path C: Three-year M.Arch**

The three-year master of architecture professional degree is intended for students entering the University of Notre Dame with a four-year undergraduate degree in a field other than architecture. An intensive three-semester sequence of studio, history, theory and technology courses prepare students for the final three semester concentration / terminal design project sequence described above. Ninety-six (96) credit hours are required for graduation, including a normal load of 18 credit hours each of the first three semesters.

**Degree Requirements**

As described above, degree requirements include various studio and theory courses in Paths A, B and C; as well as various ancillary history and technology courses for Paths B and C. Minimum credit hour requirements for Paths A, B and C are indicated below, as well as the anticipated time to complete them:

Path A: M.ADU  
45 credit hours (48 max); two years

Path B: M.Arch  
57 credit hours; two years

Path C: M.Arch  
96 credit hours; three years

**Application**

All applications to the Notre Dame graduate programs in architecture must be done on line. In addition to the Notre Dame Graduate School's requirements for application, the following documents are also to be submitted:

- Letters of Recommendation: for those applicants with practice experience in architecture, a minimum of one letter of recommendation from a registered practicing architect is required in addition to the references required by the Graduate School.

- Portfolio: all applicants must submit a portfolio of their work from academic experience, from independent projects, and/or from practice. The portfolio size should be a maximum 11 x 14 inches and should include only reproductions, not originals. Candidates submitting portfolios in excess of 11 x 14 inches will not be considered.

A visit to the campus and a personal interview are encouraged. The School of Architecture's graduate studies committee conducts interviews.

Completed applications and all admission requirements except the portfolio should be directed to the Office of Graduate Admissions, and are due on February 1<sup>st</sup> for admission in the fall of that same year. Portfolios only (with self-addressed return package and sufficient return postage, if return of portfolio is desired) should be directed to:

Graduate Studies Committee  
School of Architecture, 110 Bond Hall  
University of Notre Dame  
Notre Dame, IN 46556-5652

**Financial Support**

Candidates in the M.ADU program receive financial support in the form of full tuition scholarships and teaching stipends from the Bond-Montedonico Fellowship program, the Joseph Z. Burgee and Joseph Z. Burgee Jr. Fellowship program, the James A. Nolen Jr. Fellowship, and the Joseph M. and Virginia L. Corasaniti Architecture Fellowship. Teaching or research requirements for M.ADU students receiving stipends comprise a minimum of three out of four semesters, and average 15 hours per week during the academic semester. M.Arch students are eligible for financial aid in the form of partial tuition scholarships, loans, and work study. Path C students are not permitted to have work study jobs during their first year of study.

**Course Descriptions**

Each course listing includes:

- Course number
- Title
- (Credits per semester—lecture hours per week—laboratory or tutorial hours per week)
- Course description

**Required Courses**

60211. Architectural History I / Pre-Renaissance (3-3-0)

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 / Post Renaissance (3-3-0)

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 (3-3-0)

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

60421. Building Technology II / Concrete, Steel and Glass (3-3-0)

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

60431. Environmental Systems I / Acoustics and Illumination (3-3-0)

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

60511. Structures I / Introduction to Structures (3-3-0)

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 (3-3-0)

Prerequisite: ARCH 60511. 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.

61021. Introduction to CAD (3-0-4)

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

61111. Architectural Design I (6-0-12)

Part one of a required two-semester studio sequence introducing all three-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 (6-0-12)

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

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70211. History of Rome  
(3-3-0)

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  
(3-3-0)

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  
(3-3-0)

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  
(3-3-0)

Prerequisite: ARCH 60511. 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.

71111. Elements and Principles of Classical Architecture  
(6-0-8)

A required first design studio for all M.ADU and two-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.

71141. Classical Architecture I  
(6-0-12-)

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.

73321. Architectural Treatises  
(3-3-0)

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.

74142. Urban Design I  
(6-0-12) – Rome

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; with a visiting critic, in Rome.

74322. Italian Urbanism  
(6-3-6) – 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  
(3-3-0)

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

81151. Urban Design II  
(6-0-12)

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.

81161. Terminal Design Project  
(6-0-12)

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.

83311. After Urbanism: Modernity and the Neo-Traditional City  
(3-3-0)

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.

84152. Classical Architecture II  
(6-0-12) – Rome

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

84312. Italian Classicism  
(6-3-6) – 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.

**Faculty**

Robert L. Amico, *Professor*. B.Arch., Univ. of Illinois, 1961; M.Arch., Harvard Univ., 1965. (1978)

Philip Bess, *Director of Graduate Studies and Professor*. B.A. Whittier College, 1973; M.T.S. Harvard Divinity School, 1976; M.Arch., Univ. of Virginia, 1981 (2004)

Imdat As, *Assistant Professor*. B.Arch., Middle East Technical Univ., 2000; M.S., Massachusetts Institute of Technology, 2002; Dr. of Design, Harvard Univ., 2005. (2005)

Steve Bass, *Visiting Assistant Professor*. B.Arch., Pratt Institute, 1970; M.A., Royal College of Art, 1991. (2006)

Robert Brandt, *Professional Specialist*. B.S., Univ. of Southern Indiana, 1986; M.F.A., Indiana State Univ., 1989. (1992)

Rev. Richard S. Bullene, C.S.C., *Assistant Dean and Associate Professional Specialist*. B.S., Univ. of Notre Dame, 1976; M.S., Univ. of Pennsylvania, 1992; Ph.D., *ibid.*, 1994. (1993)

Norman A. Crowe, *Professor*. B.Arch., Univ. of Oregon, 1964; M.Arch., Cornell Univ., 1970. (1974)

Alan DeFrees, *Associate Professional Specialist*. B.S., Univ. of Notre Dame, 1974. (1996)

Dennis P. Doordan, *Chair, Professor of Architecture and concurrent Professor of Art, Art History, and Design*. B.A., Stanford Univ., 1973; M.A., Columbia Univ., 1976; M.Phil., *ibid.*, 1978; Ph.D., *ibid.*, 1983. (1990)

Richard Economakis, *Associate Professor*. B.Arch., Cornell Univ., 1983; M.A., *ibid.*, 1996. (1996)

Jed Eide, *Adjunct Assistant Professor*. B.Arch., Univ. of Notre Dame 1977; M.Arch, Univ. of Illinois, 1982; M.B.A., Univ. of Illinois, 1982. (2006)

Sallie A. Hood, *Associate Professor*. B.A., Carleton College 1966; M.Arch, Univ. of Illinois at Chicago, 1979. (2001)

Francis Huderwitz, *Adjunct Assistant Professor*. B.Arch, Univ. of Notre Dame, 1980; M.B.A., Monmouth Univ. 1985; M.Arch, Univ. of Notre Dame, 1992. (1998)

Edward Keegan, *Adjunct Professor*. B.S. in Architecture, Univ. of Virginia, 1983. (2006)

Diana Lefever Creech, *Adjunct Assistant Professor*. A.S., Purdue Univ., 1981; B.S., Purdue Univ., 1983; B.Arch, Univ. of Notre Dame, 1997. (2006)

Thomas Lowing, *Adjunct Professor*. B.S. in Architecture, 1979 and M.Arch, Univ. of Michigan, 1981. (1998)

Michael N. Lykoudis, *Dean and Professor*. B.Arch., Cornell Univ., 1979; M.Arch., Univ. of Illinois, 1983. (1991)

David Mayernik, *Visiting Assistant Professor*. B.Arch, Univ. of Notre Dame, 1983.

Ettore Maria Mazzola, *Visiting Assistant Professor*. Dipl. di Laurea, Univ. degli Studi, La Sapienza, Roma, 1992. (2001)

Richard Piccolo, *Visiting Assistant Professor*. MID, Pratt Institute, 1966; MFA, Brooklyn College, 1968. (1984)

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William Ponko, *Adjunct Associate Professor*. B.Arch., Univ. of Notre Dame, 1971. (2006)

Ronald J. Sakal, *Professional Specialist*. B.A., Univ. of Illinois, 1971; B.Arch., Univ. of Illinois at Chicago, 1975. (2003)

Steven W. Semes, *Associate Professor*. B.S., Univ. of Virginia, 1975; M. Arch., Columbia Univ., 1980. (2005)

Thomas Gordon Smith, *Professor*. B.A., Univ. of California, Berkeley, 1970; M.Arch., *ibid.*, 1975. (1989)

John Stamper, *Associate Dean and Associate Professor*. B.S., Univ. of Illinois, 1973; M.A., *ibid.*, 1975; M.A., Williams College, 1977; Ph.D., Northwestern Univ., 1985. (1984)

Duncan G. Stroik, *Associate Professor*. B.S.Arch., Univ. of Virginia, 1984; M.Arch., Yale Univ., 1987. (1990)

Krupali Uplekar, *Assistant Professor*. B.Arch., L.S. Raheja School of Architecture India, 2001; M.Arch., Hochschule Anhalt, Germany, 2003. (2005)

Carroll William Westfall, *the Frank Montana Professor*. B.A., Univ. of California, Berkeley, 1961; M.A., Univ. of Manchester, England, 1963; Ph.D., Columbia Univ., 1967. (1998)

Samir Younés, *Director of the Rome Studies Center and Associate Professor*. B.Arch., Univ. of Texas, 1981; M.Arch., *ibid.*, 1984. (1991)