School of Architecture
School of Architecture

Chair: Carroll William Westfall
Frank Montana Chair in Architecture: Carroll William Westfall
Professors: Robert L. Amico; Norman A. Crowe; Thomas Gordon Smith
Associate Professors: Dennis P. Doordan; Michael N. Lykoudis (on leave); Paloma Pajares; John W. Stamper; Duncan G. Stroik; Samir Younes
Assistant Professors: Vincente Rosado; Richard Economakis; Barbara Kenda (on leave 2001-02); Dino Marcanconio
Visiting Assistant Professors: Michael Djordjevitch; Frank Huderwitz; Ettore Mazzola; Richard Piccolo; David Sassano
Adjunct Instructor: Giovanna Sandusky
Professional Specialist: Robert J. Brandt; Rev. R.S. Bullene, C.S.C.; Al DeFrees

Program of Studies. The study of architecture has a long and distinguished history at the University of Notre Dame. Courses in architecture were taught at the University as early as 1869, and the School of Architecture has offered formal instruction since 1898. The school offers a five-year program leading to the degree of bachelor of architecture. The program is accredited by the National Architectural Accrediting Board, and the curriculum conforms to NAAB requirements for the professional degree in architecture.

Since the early 1990s, the school’s curriculum has been based on education in traditional and classical architecture and urbanism. Instruction teaches the skills, cultivates the talents, and imparts the knowledge necessary to produce buildings that use nature’s materials responsibly and contribute to a just and charitable society. The school believes this is best done by learning how recurring problems in designing and constructing buildings and fitting them into existing urban and rural settings have been addressed in the past and adapting those lessons to the ever-changing circumstances of the modern world.

The goals of the curriculum include developing competence in the design of individual buildings, understanding the relationship between individual buildings and their physical and cultural contexts, and recognizing the ethical dimensions of the professional practice of architecture. Architects play a primary role in shaping the built environment and have a professional responsibility to do so in a manner that contributes to the civil life of society. Their work must also help to renew and sustain the integrity of the natural world and promote social welfare.

While the primary objective of the curriculum is professional education, students have opportunities to explore fields such as business, engineering, environmental sciences, and the liberal arts through electives during fourth and fifth years of study.

Most states require that an individual intending to become an architect hold an accredited degree in architecture. There are two types of degrees that are accredited by the NAAB: (1) the bachelor of architecture, which requires a minimum of five years of study, and (2) the master of architecture, which requires a minimum of three years of study following an unrelated bachelor’s degree or two years following a related preprofessional bachelor’s degree. These professional degrees are structured to educate those who aspire to registration/licensure as architects.

In addition to the first professional degree of bachelor of architecture, the school offers a first professional degree program at the master’s level. The degree program is for graduate students whose undergraduate degree involved a four-year study in architecture. The school also offers a post-professional master’s degree in either classical building design or urban design for the student who already holds a first professional degree in architecture at either the bachelor’s or master’s level.

A concentration in furniture design is also an option within the first professional degree program. Required courses for the concentration are ARCH 481, Beginning Furniture; ARCH 482, Advanced Furniture Design; ARCH 583, Special Studies in Furniture Design; ARCH 584, Special Studies in Furniture Design 2; and either AMST 258, The Arts in America or AMST 484, Material Culture in America. (Either of the last two courses will satisfy a portion of the University history requirement.)

Both the undergraduate and graduate programs at Notre Dame take advantage of the school’s proximity to Chicago. In addition, all third-year students spend the academic year in the school’s Rome Studies Center in Italy. All graduate students spend a spring semester there. Some limited scholarship aid is available for the additional expenses incurred in Rome.

The initial phase of undergraduate architectural study is devoted to acquiring basic design and technical skills and developing an understanding of architectural concepts by learning canonical forms of classical architecture and manipulating them in design problems. The sophomore year begins with paradigmatic projects and ends by solving complex and challenging building programs. The sophomore foundation is reinforced in the third year, which is spent in Rome. There, 2,500 years of building tradition provides the context for contemporary design problems. Fourth-year students return to Notre Dame, where they are reintroduced to the American context. At this stage, students are encouraged to synthesize their interpretations of the historical legacy in the context of American urban centers and small cities. The undergraduate program culminates with a thesis design project completed in the fifth year of study. In addition to studio instruction, students complete coursework in structural, mechanical, and environmental systems and architectural history. History and theory courses in the School of Architecture include a two-semester survey of the history of architecture from the earliest times to the present and specialized upper-level coursework in selected topics involving the history and theory of architecture.

The student is in contact with the practicing professional through collaboration between the School of Architecture and the Northern Indiana Chapter of the American Institute of Architects. The School of Architecture has an active student chapter of the American Institute of Architects.

Facilities. The School of Architecture is located in the newly renovated and expanded Bond Hall of Architecture. This building, the former University library, was thoroughly rebuilt from 1995 through 1996. The 60,000-square-foot building contains classrooms, an auditorium, library, computer lab and studios that are both functional and designed in accord with the historical limestone structure. The Rome Studies Center is in the heart of Rome’s historic center.

First Year
First-year students intending to major in architecture take the following courses:

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<thead>
<tr>
<th>Course</th>
<th>First Semester Credits</th>
<th>Second Semester Credits</th>
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<tbody>
<tr>
<td>Composition/University Seminar</td>
<td>3</td>
<td>3</td>
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<td>MATH 105 and 110</td>
<td>3</td>
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<td>PHYS 115 and 116 or PHYS 115 and Science Elective</td>
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<tr>
<td>History or Social Science</td>
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<td>ARCH 132G: Graphics II</td>
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<td>3</td>
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<td>ARCH 143G: Graphics I</td>
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<td>ARCH 144: Architectural Writings</td>
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<td>Physical Education</td>
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<td>15</td>
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The courses listed below indicate the normal sequence for sophomore, junior, senior and fifth years majoring in architecture.

Sophomore Year
First Semester
ARCH 241: Environmental Studies 3
ARCH 243: Design I 6
ARCH 245: Building Technology I 3
ARCH 247: Architectural History I 3
ROIT 105: Beginning Italian I 3
ARCHITECTURE COURSE DESCRIPTIONS

The following course descriptions give the number and title of each course. Lecture hours per week and laboratory and/or tutorial hours per week and credits each semester are in parentheses.

132G. Graphics II: Drafting
(3-0-3) Pajares
Instruction and practice in the skills necessary to draw and think like an architect. The course emphasizes mechanical drawing with exercises that include descriptive geometry, perspective, and other means of representing three-dimensional architectural problems with two-dimensional techniques, including those using computers. The course is open to all students. Studio format. Required for those intending to enter the architecture program. Spring.

143G. Graphics I: Drawing
(3-2-3) Bullene
Instruction and practice in drawing as a means of exploring and communicating formal and theoretical concepts. Aspects of freehand drawing in pencil, charcoal, and watercolor are taught with subjects from buildings, nature, and the human figure. The course is open to all students. Studio format. Strongly recommended for those entering the architecture program. Fall.

144. Analysis of Architectural Writing
(3-2-4) Bullene
This course examines concepts of architecture within writings about architecture. It explores universal issues of function, strength, and beauty, along with the interactions between theory and practice and the tensions between tradition and innovation. The coursework consists of analytical drawings, design exercises, and exams. It is open to all students. Required for those intending to enter the architecture program. Fall.

241. Environmental Studies
(3-0-3) Crowe
This course investigates the relationship between the built environment and the natural environment. Lectures, readings and exercises explore the ethical and professional responsibilities of the architect relative to ongoing environmental issues of the architecture program. Spring.

243. Design I
(0-12-6) Economakis
This studio and lecture course introduces students to design beginning with the classical elements of architecture. It proceeds to the design of components of buildings. Fall.

244. Design II
(0-12-6) Economakis, Marcantonio
Principles of planning, design and construction are developed in urban contexts and in complex building programs. The concentration on classical paradigms as a basis for architecture and urban design is continued. Spring.

245. Building Technology I
(2-3) Staff, Sassano
Exploration and application of qualitative principles and theory of building construction to the design process. Fall.

246. Building Technology II
(3-0-3) Amico
Prerequisite: ARCH 245. Qualitative and quantitative principles of building assembly and detailing in masonry, timber, concrete and steel. Spring.

247. Architectural History I
(3-0-3) Stamper
Global architecture from the prehistoric through Gothic periods is studied in relation to physical determinants, such as climate, materials, technology and geography. Historical determinants such as economics, religion, politics, society and culture are also considered. Fall.

248. Architectural History II
(3-0-3) Westfall
Same approach as ARCH 247. Coverage begins with the 15th century and extends to the present.

256. Principles of Structural Engineering
(3-0-3) DeFrees
Prerequisite: MATH 106. Principles of statics, force and moment equilibrium, area properties, stress and strain, beam and column analysis. Spring.

343. Design III (Rome)
(0-12-6) Deupi, Djordjevitch, Mazzola
Architectural design relating to the urban environment of Rome. Fall.

344. Design IV (Rome)
(0-12-6) Deupi, Djordjevitch, Mazzola
Architectural and urban design relating to the regional implications of the context of Rome and environs. Spring.

391. Architectural Theory I (Rome)
(2-2-3) Djordjevitch
The purpose of this class is to examine and debate essential constituents of architectural theory in urbanism, architectural composition, aesthetic theory, tectonics, and construction. Various treatises will form the required readings, and the ideas contained therein are debated on-site within the Italian context.

392. Architectural Theory II (Rome)
(2-2-3) Djordjevitch
The purpose of this class is to examine and debate essential constituents of architectural theory in urbanism, architectural composition, aesthetic theory, tectonics, and construction. Various treatises will form the required readings, and the ideas contained therein are debated on-site within the Italian context.
393. Roman Urbanism and Architecture I
(Rome)
(V-V-3) Mazzola
The purpose of this class is to examine the essential elements of Roman urbanism, architectural composition, and tectonic considerations over time, through extensive analysis and direct on-site experience.

394. Roman Urbanism and Architecture II
(Rome)
(V-V-3) Mazzola
The purpose of this class is to examine the essential elements of Roman urbanism, architectural composition, and tectonic considerations over time, through extensive analysis and direct on-site experience.

3956. Graphics III: Freehand Drawing
(0-6-3) Piccolo, Deupi
Freehand graphic communication with pencil, pen and charcoal, drawing exteriors and interiors of architecture. Consideration of light, shade and form. Fall.

3966. Graphics IV: Watercolor
(0-6-3) Piccolo, Deupi
Freehand graphic communication with watercolor, painting still lifes and exteriors and interiors of architecture. Fall.

443. Design V
(0-12-6) Marcantonio, Pajares, Amico, Stroik
Study of building types related to towns and cities. Spring.

444. Design VI
(0-12-6) Pajares, Amico, Crowe, Staff
Study of building types related to large urban centers. Spring.

(3-0-3) Marcantonio, Hudewitz
Study of basic skills necessary for the analysis and representation of architectural form through the medium of the computer. Students will study drafting as well as three-dimensional modeling. Spring.

446. Structural Design
(3-0-3) DeFrees
Prerequisite: ARCH 256.
The application of the principles of mechanics to the stress and deformation analysis and design of reinforced concrete structural elements and framing systems. Fall.

481. Beginning Furniture
(0-6-3) Brandt
Students gain an understanding of scale, proportion and construction of furniture. Lectures and demonstrations expose students to the history of furniture, properties of wood and the use of woodworking equipment. Fall.

482. Advanced Furniture
(0-6-3) Brandt
Prerequisite: ARCH 481.
Students construct furniture of original design. They learn to understand furniture’s relationship to architectural context. Spring.

483. Introduction to Carving Classical Elements
(0-3-3) Brandt
In this introductory course, students are instructed in the fundamental uses of carving tools and the physical properties of wood. The emphasis of the course is on the design and shaping of classical architectural ornamentation.

484. Intermediate Carving Classical Elements
(0-3-3) Brandt
Students continue the exploration of design by sculpting classical architectural ornament. Relying on tradition as a paradigm, students are required to design and create original objects that relate to their personal direction in architectural studies.

501. Architecture Theory I
(3-0-3) Westfall
This course reviews, through lectures, discussions, analysis of signed texts, and the writing of research papers, the intersection of the religious, civil, architectural and urban characteristics of the built world within the Western tradition. Fall.

502. Architecture Theory II
(3-0-3) Deupi
This seminar explores the philosophical, historical and literary background of traditional architecture by probing within the curious domain of architectural theory through a careful reading of primary sources in their original languages and in translation, of Vitruvius, Abbot Suger, Alberti, Serlio, Palladio, Vignola, Claude Perrault, etc. Fall.

503. Architectural Theory III
(3-0-3) Economakis
A survey of contemporary traditional architecture and urbanism, including works by Raymond Erith, Hasan Farhy, Pierre Barbé, Demetri Porphyrios, Leon Krier, and Demetri Porphyrios, and concluding with the most recent events, buildings, and urban developments. Emphasis will be given to works that exemplify the urban, constructional, and formal principles of contemporary traditional architecture.

541. Environmental Systems
(3-0-3) DeFrees
Study of the basic concepts that lead to the design of the mechanical, acoustical, and illumination services for the control of the architectural environment. Spring.

542. Design VII
(0-12-6) Smith, Stamper, Staff
Integrates the students’ previous study of building design and construction in Thematic Studios. Fall.

544. Design VIII Thesis
(0-12-6) Smith, Stamper, Stroik, Bullene
Required of all students in architecture. Students devote the semester to the preparation and presentation of an independent architectural project. Spring.

546. Professional Practice
(3-0-3) Stroik
Lecture and assignments covering professional services, marketing, economics of practice, programming, design drawing development, contracts and project management. Spring.

547. History/Design: Forms, Values and Technology
(3-0-3) Doordan
This course will provide a historical perspective on the development of industrial, product and graphic design in the 19th and 20th centuries.

553. Applied Structural Systems
(3-0-3) DeFrees
Application of structural systems in relation to architectural concepts meeting economic and building-code requirements. Spring.

558. Teaching Concepts/Principles of Structural Engineering
(ARCH 256)
(3-0-3) DeFrees
Teaching assistants aid professor in grading examinations, assigning homework and preparing lectures. Spring.

559. Teaching Concepts/Structural Design
(ARCH 446)
(3-0-3) DeFrees
Teaching assistants aid professor in grading examinations, assigning homework and preparing lectures. Fall.

560. Teaching Concepts/
Applied Structural Systems
(ARCH 563)
(3-0-3) DeFrees
Teaching assistants aid professor in grading examinations, assigning homework and preparing lectures. Spring.

561. Teaching Concepts/Drawing
(ARCH 143G)
(2-2-3) Bullene
Assist professor in critiquing student work. The assistant may be requested to deliver a presentation on a relevant topic. Fall.

562. Teaching Concepts/Reading
Architectural Writings (ARCH 144)
(1-4-3) Bullene
Teaching assistants aid in studio and provide guidance in drawing. Spring.

563. Teaching Concepts/Building Technology I
(ARCH 245)
(2-2-3) Staff
Teaching assistants guide second-year students taking ARCH 245 in developing technical solutions to architectural studies. They assist in evaluation of submitted work and prepare and deliver short presentations on current building techniques. Fall.
SCHOOL OF ARCHITECTURE

564. Teaching Concepts/Building Technology II (ARCH 246) 
(3-0-3) Amico 
Teaching assistants guide second-year students taking ARCH 246 in developing technical solutions to architectural studies. They assist in evaluation of submitted work and prepare and deliver short presentations on current building techniques. Spring.

565. Teaching Concepts/History of Architecture I (ARCH 247) 
(3-0-3) Stamper 
Teaching assistants aid professor in grading examinations and preparing lectures. Fall.

566. Teaching Concepts/History of Architecture II (ARCH 248) 
(3-0-3) Westfall 
Teaching assistants aid professor in grading examinations and preparing lectures. Spring.

568. Teaching Concepts/Graphics II: Drafting (ARCH 132G) 
(2-2-3) Pajares 
Students in ARCH 568 serve as teaching assistants in the course ARCH 132, Introduction to Computers for Architects. Students enrolled in 568 work with students in the computer cluster, assisting on specific assignments and advising on the use of the computer with respect to software programs. Students in 568 assist as well in the evaluation of assignments and examinations in ARCH 132. Spring.

581. Grecian Architecture and Furniture I (3-0-3) Smith 
Students explore Notre Dame’s holdings of British and American architectural books that introduced “Grecian” architecture to the English-speaking world.

582. Competitions and Independent Studio (V-V-V) Staff 
Students have the option of selecting either a national or international design competition or a design project of special interest to them. Spring.

583. Special Studies in Furniture Design I 
(0-6-3) Brandt 
Prerequisite: ARCH 482. 
Students pursue specific interests in design and construction of furniture. Fall.

584. Special Studies in Furniture Design II 
(0-6-3) Brandt 
Prerequisite: ARCH 583. 
Continuation of architecture 583. Spring.

585. Advanced Studies in Computers 
(0-6-3) DeFrees 
In ARCH 585, students pursue specific interests in computer applications to architecture. Spring.

586. Grecian Architecture and Furniture II 
(0-6-3) Smith 
The development of Greek-inspired architecture in the United States between 1820 and 1860. Influences from abroad are compared to the distinct American cast of the movement. The related movement in furniture and interior decoration is also studied.

595. Frank Lloyd Wright Seminar 
(3-0-3) Doordan 
This seminar examines critical perspectives on the life, work, and influence of Frank Lloyd Wright. “Critical perspectives” means that we should try to be conscious not only of the subject under examination (Wright) but also of our method of studying this subject (formal analysis, social history, biography, etc.) and the implications of selecting one approach or methodology over another.

596. Architecture of the 20th Century 
(3-0-3) Doordan 
A survey of the many facets developed by 20th-century architects.

598. Directed Studies 
(V-V-V) Staff 
Directed studies in special projects in architecture. Focus on specific topics and their relationship and effect on the design of buildings and the physical environment. Offered to fourth- or fifth-year undergraduates. Individual or group study under the direction of the staff in an undergraduate subject not currently covered by a University course.

Student Awards and Prizes

The American Institute of Architects Award. An annual award made by the School of Architecture on behalf of the American Institute of Architects to the senior who has the highest average for the complete course in architecture. This medal is given by the American Institute of Architects to each of the members of the Association of Collegiate Schools of Architecture.

The Amico Architecture Scholarship. Established in 1997-98 by Bob Amico, design studio partner and chairman of the School of Architecture from 1978 to 1989, to be awarded annually to a fifth-year student to assist in the support of the student’s study of architecture in the professional degree program.

The Noel Blank Design Award. Founded by Leon W. Blank in memory of his brother. This award in architecture is designated for excellence in fifth-year thesis design.

Chairman’s Award in Design for Excellence in Architecture. Overall excellence in fifth-year thesis.

James E. Childs and Associates, Inc. Scholarship. To provide tuition assistance for racial minority student(s) in the School of Architecture.

The Brian J. Cramlish Memorial Scholarship Award. Awarded to a fourth- or fifth-year student in the School of Architecture.

The Andrew F. Kervick Award. Founded by Prof. Francis W. Kervick, former head of the Department of Architecture of the University, in memory of his father. Awarded to the student of the school whose work in the entire course of freehand drawing is of the highest merit.

Ferguson Shamamian and Rattner Architects Undergraduate Prize. Awarded to a fifth-year student in the Bachelor of Architecture Program for overall excellence in classical design exhibited throughout the course of study.

The Nellie Wynn Kervick Award. Founded by Prof. Francis W. Kervick, former head of the Department of Architecture of the University, in memory of his mother. Awarded to the third-year student in the Bachelor of Architecture whose work for the first three years in courses of architecture has been of the highest merit.

Frank Montana Rome Scholarships. These awards are made for educational purposes in connection with the Notre Dame Rome Studies Program.

The Gertrude S. Sollitt Prize for Architectural Structure. Founded in 1931 by the Ralph Sollitt and Sons Construction Company of Chicago and South Bend and awarded to the student who submits the best work as a solution to a special problem in structure assigned in the scholastic year.
Ralph Thomas Sollitt Award. Founded in 1931 by Ralph Sollitt and Sons Construction Company of Chicago and South Bend and awarded to the student in the School of Architecture who submits the best design as a solution to the thesis architecture problem in the fall semester.

The David M. Schwarz/Architectural Services Internship and Traveling Fellowship Award. This internship and travel award is open to fourth-year architecture students at Notre Dame for the summer between the fourth and fifth year. The award involves two months of a paid internship in the offices of Architectural Services in Washington, D.C., followed by one month of travel involving independent research and study. Selection is based upon scholarship and design ability, plus a written statement describing in detail how the candidate intends to use the travel stipend funds.

Ray Stuermer Memorial Award for Excellence in Design. Awarded in memory of Professor Stuermer on the basis of design work through the fourth year for overall improvement and design excellence.

Alice Wesoloski Scholarship. For her decades of service to the School of Architecture, an award was established at the close of the school’s centennial celebration on behalf of Alice Wesoloski. The award is presented to a student of particular ability and need.

Pella Prize. Awarded by the Pella Window Co. for the best design in a studio devoted to production building.

St. Joseph Award in Furniture Design. Awarded to the furniture design student best resolving issues of concept, design, and craftsmanship.

Student Organizations

AIAS, Student Chapter of the American Institute of Architects. Students begin to engage in the professional activities of the national AIAS by attending meetings and conventions and structuring activities within the School of Architecture. The AIAS sponsors educational, professional and social events in the school.

Tau Sigma Delta. In 1961 the Sigma Chapter of Tau Sigma Delta, the national architectural honor society, was established at Notre Dame. The constitution of Tau Sigma Delta stresses as its sole function the encouragement of high scholastic standing. Election to membership is limited to the top 20 percent of the students in the School of Architecture who have completed 60 percent of their requirements for the professional degree.

Advisory Council

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Montecito, California

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Managua, Nicaragua

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