

School of Architecture

Michael N. Lykoudis Associate Dean:

John Stamper Assistant Dean:

Rev. R.S. Bullene, C.S.C.

Professors:

Robert L. Amico; Norman A. Crowe; Dennis P. Doordan; Michael N. Lykoudis; Thomas Gordon Smith; Carroll William Westfall Associate Professors:

Richard Economakis; Paloma Pajares; John W. Stamper; Duncan G. Stroik; Samir Younés Assistant Professors:

Victor Deupi; Barbara Kenda; Dino Marcantonio

Visiting Assistant Professors:

Frank Huderwitz; Ettore Mazzola; Richard Piccolo; David Sassano; Thomas Lowing Professional Specialist:

> Robert J. Brandt; Rev. R.S. Bullene, C.S.C.; Al DeFrees; Giovanna Lenzi-Sandusky

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.

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 represent innovation within long-standing traditions, use nature's materials responsibly, and contribute to building livable communities. 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. They also have required electives in theology and philosophy.

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 (NAAB), which is the sole agency authorized to accredit U.S. professional degree programs in architecture, recognizes three types of degrees: the bachelor of architecture, the master's 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 preprofessional 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.

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 major 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. They are also challenged by projects that require them to engage architectural problems outside their normal Western focus. The undergraduate program culminates with a thesis design project completed in the fifth year of study. In 2000, the school opened the South Bend Downtown Design

Center, which it operates in collaboration with the Downtown Partnership. This center provides fourth- and fifth-year students with opportunities to do community planning projects and architectural design exercises in conjunction with local architects, planning officials, and community groups. In addition to studio instruction, students complete course work in structural, mechanical, and environmental systems and architectural history. History and theory courses in the School of Architecture include a twosemester survey of the history of architecture from the earliest times to the present and specialized upper-level course work in selected topics involving the history and theory of architecture.

Students are in contact with practicing professionals through collaboration between the School of Architecture and the South Bend Downtown Design Center, as well as 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 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.

Richard H. Driehaus Prize In Classical

Architecture. Richard H. Driehaus, the founder and chairman of Driehaus Capital Management in Chicago, initiated the Richard H. Driehaus Prize in Classical Architecture to honor a major contributor in the field of traditional and classical architecture or historic preservation. He established the prize through the University of Notre Dame's School of Architecture because of its reputation as a national leader in incorporating the ideals of traditional and classical architecture into the task of modern urban development.

First Year

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

	First Semester	Second Semester
Course	Credits	Credits
Composition/		
University Seminar	3	3
MATH 105 and 110	3	3
PHYS 115 and 116		
or PHYS 115		
and Science Elective	3	3
History		
or Social Science	3	_
ARCH 132G: Graphics II		3
ARCH 143G: Graphics I	3	_
ARCH 144: Architectural		
Writings	_	4
Physical Education	_	_
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The courses listed below indicate the normal sequence for sophomore, junior, senior, and fifth years majoring in architecture.

Sophomore rear	
First Semester	
ARCH 243: Design I	6
ARCH 245: Building Technology I	3
ARCH 247: Architectural History I	3
ROIT 105: Beginning Italian I	3
Theology or Philosophy	3
	18
Second Semester	
ARCH 244: Design II	6
ARCH 248: Architectural History II	3
ARCH 256: Structural Mechanics	
for Architects	3
ROIT 106: Beginning Italian II	3
Theology or Philosophy	3
	18
Junior Year (Rome Studies Program)	
First Semester	
ARCH 343: Design III	6
ARCH 391: Architectural History III	3
ARCH 393: Roman Urbanism	_
and Architecture I	3
ARCH 395G : Graphics III:	2
Freehand Drawing	3
	15
Second Semester	
ARCH 344: Design IV	6
ARCH 392: Architectural History IV	3
ARCH 394: Roman Urbanism	
and Architecture II	3
ARCH 396G: Graphics IV: Watercolor	3
	15
Senior Year	
First Semester	
ARCH 441: Environmental Studies	3
ARCH 443: Design V	6
ARCH 445: Graphics V: Computers	3
ARCH 446: Structural Design for Architects	3
Theology or Philosophy	3
	18
Second Semester	1
ARCH 444: Design VI	6
ARCH 448: Building Technology II	3
ARCH 553: Structural Systems	3
Elective	3
Theology or Philosophy	3
Social Science or History	3



Fifth Year First Semester ARCH 543: Design VII 6 ARCH 541: Environmental Systems 3 Elective 3 Elective 3 15 Second Semester ARCH 544: Design VIII (Thesis) 6 ARCH 546: Professional Practice 3 Elective 3 Elective 3

Total for five years: 163 semester hours.

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

18

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

15

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 course work consists of analytical drawings, design exercises, and exams. It is open to all students. Required for those intending to enter the architecture program. Spring.

243. Design I

(0-12-6) Economakis, Lykoudis

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, Lykoudis

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

(2-2-3) Sassano

Exploration and application of qualitative principles and theory of building construction to the design process. Fall.

247. Architectural History I

(3-0-3) Stamper

This course provides a survey of architectural history from the Egyptian, Greek, and Roman civilizations to Europe during the Romanesque and Gothic periods. Also included are Islamic, pre-Columbian, and Far Eastern building traditions. 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. Fall.

248. Architectural History II

(3-0-3) Doordan

This course continues the history survey, beginning with Renaissance and Baroque Europe and continuing to the 18th and 19th centuries in Europe and the United States. It extends to the Modern Movement as it effected countries as far-reaching as Japan and Australia.

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 columanalysis. Spring.

343. Design III (Rome)

(0-12-6) Staff

Architectural design relating to the urban environment of Rome. Fall.

344. Design IV (Rome)

(0-12-6) Staff

Architectural and urban design relating to the regional implications of the context of Rome and environs. Spring,

391. Architectural History III (Rome)

(2-2-3) Staff

Structured field study and lecture presentations analyzing buildings and urban complexes in Italy from the Renaissance to the present.

392. Architectural Theory IV (Rome)

(2-2-3) Staff

Continuation of ARCH 391.

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.

395G. Graphics III: Freehand Drawing

(0-6-3) Piccolo, Staff

Freehand graphic communication with pencil, pen and charcoal, drawing exteriors and interiors of architecture. Consideration of light, shade, and form. Fall.

396G. Graphics IV: Watercolor

(0-6-3) Piccolo, Staff

Freehand graphic communication with watercolor, painting still lifes and exteriors and interiors of architecture. Spring.

423E. Greek Architecture

SEE ARHI 423E.

(3-0-3) Rhodes

In this course the development of Greek monumental architecture, and the major problems that define it, will be traced from the eighth to the second centuries B.C., from the late Geometric through the Archaic, Classical, and Hellenistic periods. Among themes to be treated are the relationship between landscape and religious architecture, the humanization of temple divinities, the architectural expression of religious tradition and even specific history, architectural procession and hieratic direction, emblem and narration in architectural sculpture, symbolism and allusion through architectural order, religious revival and archaism, and the breaking of architectural and religious canon.

441. 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. Topics include a survey of the effects of the built environment on natural systems, a survey of evolving environmental studies, and design issues with the focus on in-site planning, landscape design, and passive energy measures for architecture. Fall.

443. Design V

(0-12-6) Crowe, Bullene, Kenda, Stamper Design V involves the design of buildings within urban settings, with a special emphasis on building types in relation to cultural, ethnic, and civic priorities.

444. Design VI

(0-12-6) Staff

Design VI presents students with the opportunity to select one among a number of studio options. Specific focus of studios varies from year to year and is designed to address needs and specific to each fourth-year class.

445. Graphics V: Computers

(3-0-3) Marcantonio, Huderwitz

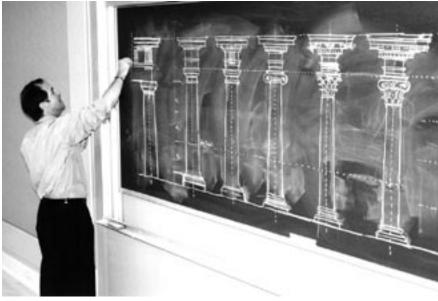
Study of basic skills necessary for the analysis and representation of architectural form through the medium of the computer. Students will study drafting as well as three-dimensional modeling.

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.



Richard Economakis, School of Architecture professor

448. Building Technology II

(3-0-3) Staff

Prerequisite: ARCH 245.

Qualitative and quantitative principles of building assembly and detailing in masonry, timber, concrete, and steel. Spring.

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,

501. Architecture Theory I

(3-0-3) Stamper

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 Fathy, Pierre Barbe, Demetri Pikionis, 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.

543. Design VII

(0-12-6) Stroik, Amico, Bess, Smith, Pajares Integrates the students' previous study of building design and construction in Thematic Studios. Fall.

544. Design VIII Thesis

(0-12-6) Smith, Stroik, Amico, Deupi 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) Sassano

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.

552. Analysis and Design of Architectural Ornament (ARCH 552)

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.

560. Teaching Concepts/Applied Structural Systems

(ARCH 553)

(3-0-3) Lowing

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) Sassano

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.

564. Teaching Concepts/Building Technology II (ARCH 448)

(3-0-3) Staff

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)

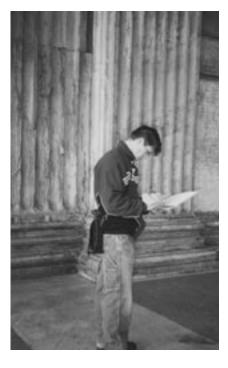
(3-0-3) Stamper

Teaching assistants aid professor in grading examinations and preparing lectures. Fall.

566. Teaching Concepts/History of Architecture II (ARCH 248)

(3-0-3) Doordan

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.

570. Teaching Concepts/Graphics V

(3-0-3) Marcantonio, Huderwitz

Teaching assistants provide instructional support to students in the computer cluster during class and help with grading.

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) Amico

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.

591. Renaissance Architecture, Art, and Science (3-0-3) Kenda

This course examines the relation between architecture, art, and science. The seminar investigates the integration of various artistic and scientific fields such as geometry, music, medicine, optics, mathematics, astronomy, and philosophy within the architecture of the 15th, 16th, and 17th century. The focus of these interdisciplinary inquiries revolves around the technological inventions of Renaissance architecture.

593. Issues in Sacred Architecture

(3-0-3) Stroik

An upper-level seminar exploring themes related to issues in sacred architecture. The course is open to architecture students and students in other disciplines.

596. Architecture of the Twentieth 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 member schools of the Association of Collegiate Schools of Architecture.

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.

Dean's Award in Design for Excellence in Architecture. Overall excellence in fifth-year thesis.

Chelminiak Architecture Award. Awarded to a graduating student who displays excellence in thesis design.

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

Computer Award. Awarded to the student who displays excellence in digital imagery.

The Brian J. Crumlish 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 and Shamamian 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 School 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

Advisory Council

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New Haven, Connecticut

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