

# ARCHITECTURE

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## THE SCHOOL OF ARCHITECTURE

### **DEAN AND WILLIAM WARD**

#### **WATKIN PROFESSOR**

Sarah Whiting

#### **PROFESSORS**

William T. Cannady

Carlos Jimenez

Albert H. Pope

Gordon G. Wittenberg Jr.

#### **HARRY K. AND ALBERT K.**

#### **SMITH PROFESSORS**

John Casbarian

Lars Lerup

#### **WORTHAM PROFESSOR**

Albert Pope

Gus Sessions

#### **ASSOCIATE PROFESSORS**

Farès el-Dahdah

Dawn Finley

Christopher Hight

Spencer W. Parsons

Ron Witte

#### **ASSISTANT PROFESSOR**

Neyran Turan

#### **SENIOR LECTURERS**

Alan Fleishacker

James Furr

#### **LECTURERS**

Tom Lord

Frank S. White

#### **PROFESSORS IN PRACTICE**

Nonya S. Grenader

Douglas E. Oliver

Danny M. Samuels

Mark Wamble

#### **LECTURER**

Stephen Fox

### **DEGREES OFFERED: BA, BARCH, MARCH, MARCH IN URBAN DESIGN, DARCH**

The principal goal of the School of Architecture is to contribute to a more humane environment. The school focuses on teaching and research, the development of a broad liberal education for undergraduates in the allied sciences and arts of architecture, and professional graduate and postgraduate education in architecture and urban design. Intimate student–faculty interaction, academic freedom, and unrestricted institutional cooperation within and outside the university are distinctive qualities of the architecture degree programs at Rice.

*“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, which is the sole agency authorized to accredit U.S. professional degree programs in architecture, recognizes two types of degree: the Bachelor of Architecture and the Master 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.*

*Master’s degree programs may consist of a preprofessional undergraduate degree and a professional degree, which, when earned sequentially, comprise an accredited professional education. However, the professional degree is not, by itself, recognized as an accredited degree.”—National Architectural Accrediting Board*

The undergraduate programs maintain a balance between academic studies and professional practice. Lectures and other public programs, visiting faculty, scholarly presentations, and the Preceptorship Program, which provides a

one-year internship in outstanding architectural offices throughout the United States, Europe, and Japan, all complement the school's core of distinguished teachers and practitioners.

The graduate programs have three areas of emphasis: architectural design, with particular attention paid to history, theory, and practice; urban design, where the concern is the emerging form of the American city; and research in computer visualization, which uses the resources of the state-of-the-art Rice Advanced Visualization Lab.

## DEGREE REQUIREMENTS FOR BA IN ARCHITECTURE OR ARCHITECTURAL STUDIES

For general university requirements, see Graduation Requirements (Undergraduate Students section, pages 2–5). The conditions specified here for each major also satisfy the university distribution requirements.

**BA in Architecture**—The curriculum for architecture majors is divided into a foundation sequence taken in the freshman and sophomore years and a preprofessional sequence taken in the junior and senior years. The foundation sequence consists of four semesters of design studios and other related courses in architecture. The first-semester studio develops basic design skills through directed explorations and problem-solving exercises in form, texture, color, material, and structures. In the subsequent three studios, through a carefully sequenced series of exercises, students are introduced to a broad range of architectural design issues, processes, and methods. Students are required to take four courses in the history and theory of art and architecture during the freshman and sophomore years in addition to two semesters of architectural technology. They also must complete university distribution requirements. It is recommended that students take an introductory drawing course during their first two years of study to develop visual skills.

Students who satisfactorily complete the foundation sequence may, upon approval of their major, enter the junior and senior year preprofessional sequence. The fall studios for the third and fourth years are organized around the workshop model and emphasize urban design issues, digital media applications, and comprehensive building design. The spring studios are vertically integrated, allowing students to select offerings emphasizing specialized design topics such as technology, landscape design, historical precedent, sustainable design, and project delivery systems. During the third and fourth years, students are required to take two additional technology courses and to fulfill all remaining school or university distribution requirements. Students wishing to pursue the professional degree in architecture may apply for admission to the Bachelor of Architecture (BArch) degree program during the second semester of the fourth year.

**BA in Architectural Studies**—As an alternative to the preprofessional degree sequence, and open only to students who have been admitted as architecture majors and have completed the two-year foundation program, the Architectural Studies curriculum is an option. The first four semesters of the curriculum are identical to the foundation sequence of the architecture major except for the omission of one technology course. Subsequent requirements are the completion of an additional studio and four elective courses in architecture. The program provides basic preparation for later professional study while allowing other academic interests to be pursued at greater depth.

## TYPICAL CURRICULUM FOR BA IN ARCHITECTURE

### **1st Semester**

ARCH 101 *Principles of Architecture I*  
 HART 101 *Introduction to History of Art*  
 PHYS 101 *Mechanics (with lab)*  
 LPAP 101 *Lifetime Physical Activities*  
 Approved architecture-restricted distribution course in humanities

### **2nd Semester**

ARCH 102 *Principles of Architecture I*  
 ARCH 132 *Freshman Seminar*  
 HART 102 *Introduction to History of Art*  
 LPAP 102 *Lifetime Physical Activities*  
 MATH 101 *Single Variable Calculus*  
 Approved architecture-restricted distribution course in humanities

### **3rd Semester**

ARCH 201 *Principles of Architecture II*  
 ARCH 207 *Introduction to the Design of Structures*  
 ARCH 345 *Architecture and the City I*  
 Studio Art Elective\*  
 Elective\*

### **4th Semester**

ARCH 202 *Principles of Architecture II*  
 ARCH 309 *Design of Structures*  
 ARCH 346 *Architecture and the City II*  
 Approved architecture-restricted distribution course in social sciences  
 Elective\*

### **5th Semester**

ARCH 301 *Principles of Architecture III*  
 ARCH 316 *Design of Structures III*  
 Architectural Theory Elective  
 Elective\*  
 Elective\*

### **6th Semester**

ARCH 302 *Principles of Architecture III*  
 ARCH 315 *Structures, Practice, and Environments*  
 Elective\*  
 Elective\*  
 Elective\*

### **7th Semester**

ARCH 401 *Principles of Architecture IV*  
 Elective\*  
 Elective\*  
 Elective\*

### **8th Semester**

ARCH 402 *Principles of Architecture IV*  
 Elective\*  
 Elective\*  
 Elective\*

\*All courses must be selected to satisfy both architecture major requirements and university distribution requirements.

## DEGREE REQUIREMENTS FOR A BACHELOR OF ARCHITECTURE (BARCH)

The Bachelor of Architecture program is open only to students who have completed the undergraduate preprofessional architecture program at Rice. Upon admission, students are assigned a preceptorship, which takes place immediately after receipt of the Bachelor of Arts in Architecture degree. The preceptorship program balances academic learning with professional experience. Qualified students who have been admitted to the BArch degree program are assigned to work for a year in the United States or abroad with leading architectural offices designated by the school as preceptors. The BArch degree requires the successful completion of the BA in architecture, completion of the two-semester preceptorship, and completion of two graduate studios and five approved lecture or seminar courses. Students may apply to Rice School of Architecture Paris to complete one semester in Paris.

**PRECEPTORS****Allied Works**

Portland

**Cambridge Seven Associates**

Cambridge

**Gensler**

Houston, San Francisco

**Michael Graves Architects**

Princeton

**Kohn Pedersen Fox, Architects**

London

**Lake/Flato Architects**

San Antonio

**Machado-Silvetti Associates**

Boston

**Richard Meier and Partners**

Los Angeles

**Mitchell Giurgola**

New York

**NBBJ**

Seattle

**Office dA, Inc**

Boston

**Ong & Ong Architects**

Singapore

**Pei, Cobb, Freed & Partners**

New York

**Pelli Clarke Pelli**

New Haven

**Renzo Piano Building Workshop**

Genoa, Paris

**Rogers Marvel Architecture**

New York

**SOM**

San Francisco

**Venturi Scott-Brown & Associates**

Philadelphia

**Weiss/Manfredi Architects**

New York

**Zimmer Gunsul & Frasca**

Los Angeles, Portland

**Michael van Valkenburgh****Associates**

Brooklyn

**MASTER OF ARCHITECTURE**

The Master of Architecture (MArch) program prepares graduates for a full range of professional activities in the field of architecture. It is offered to individuals who possess a bachelor's degree. Students follow a course of study in all four areas of the curriculum: design; history, theory, and criticism; structures, practice, and environments; and computing, logic, and representation. These areas of study are sustained by groups of courses from which students may choose offerings according to the requirements of their particular program. Strong emphasis is given to developing design skills, logic, and imagination through an intensive series of design studio courses. Students also are required to prepare an independent thesis before graduating. A potential exists for dual degrees.

The Master of Architecture program is accredited by the National Architectural Accrediting Board. It leads to the degree of Master of Architecture, which qualifies graduates to take the state professional licensing examination after completing the required internship in an architectural office.

**Programs of Study**—Three program options are available at the Master of Architecture level. Options 1, 2, and 3 differ according to the bachelor's degree received before entering the graduate program.

**OPTION 1**

**Seven-Semester Program**—Option 1 is offered to individuals who hold a four-year undergraduate degree with a major in a field other than architecture. Preference for admission is given to those who have completed a balanced education in the arts, sciences, and humanities. A minimum of two semesters of

college-level courses in the history of art and/or architecture are recommended, as is a minimum of one semester of college-level courses in mathematics or physics. Previous preparation in the visual arts also is desirable, as are courses in philosophy, literature, and economics.

To graduate, students must complete a four-semester core curriculum (76 credit hours), which is followed by a three-semester advanced curriculum (57 credit hours). Course work in both core and advanced curricula consists of seven studios (including thesis) and 20 distribution courses (133 credit hours).

### **Core Curriculum**

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1st Semester

ARCH 501 *Core Design Studio I*

ARCH 507 *Introduction to Design of Structures*

Distribution Elective (*Computing, Logic, and Representation*)

ARCH 645 *Architecture and the City*

#### **2nd Semester**

ARCH 502 *Core Design Studio II*

ARCH 509 *Design of Structures II*

ARCH 532 *Introduction to Digital Visualization and Communication*

ARCH 646 *Architecture and the City*

3rd Semester

ARCH 503 *Core Design Studio III*

ARCH 516 *Environmental Control Systems*

ARCH 683 *20th-Century History of Ideas in Architecture*

Distribution Elective (*Computing, Logic, and Representation*)

#### **4th Semester**

ARCH 504 *Architectural Problems*

ARCH 623 *Professionalism and Management in Architecture*

Distribution Elective (*History, Theory, and Criticism*)

Distribution Elective (*Structures, Practice, and Environments*)

### **Advanced Curriculum**

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#### **5th Semester**

ARCH 601 *Architectural Problems*

Distribution Elective (*History, Theory, and Criticism*)

Distribution Elective (*Computing, Logic, and Representation*)

Elective

#### **6th Semester**

ARCH 602 *Architectural Problems*

ARCH 702 *PreThesis Preparation*

Distribution Elective (*Structures, Practice, and Environments: Sustainability*)

Elective

#### **7th Semester**

ARCH 703 *Thesis Studio or Architectural Problems and Elective*

Elective

Elective

## **OPTION 2**

**Five-Semester Program**—Option 2 is offered to individuals who hold a four-year undergraduate degree with a major in architecture. Preference for admission is given to those who have successfully completed between four and six semesters of undergraduate design studio as well as undergraduate courses that are analogous to those given in the first year of Option 1. A minimum of two semesters of college-level courses in the history of art and/or architecture are recommended; as is a minimum of one semester of college-level courses in mathematics and physics.

Students in this program enter into the second year of the core curriculum (two semesters, 38 credit hours), followed by the advanced curriculum (three semesters, 57 credit hours). Course work in both core and advanced curricula consists of five studios (including thesis) and 14 distribution courses (95 credit hours).

**1st Semester**ARCH 503 *Core Design Studio III*ARCH 516 *Environmental Control Systems*ARCH 683 *20th-Century History of Ideas in Architecture*Dist. Elective (*Computing, Logic, and Representation*)**2nd Semester**ARCH 504 *Architectural Problems*ARCH 623 *Professionalism and Management in Architecture*Distribution Elective (*History, Theory, and Criticism*)Distribution Elective (*Structures, Practice, and Environments*)**Advanced Curriculum**

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**3rd Semester**ARCH 601 *Architectural Problems*Distribution Elective (*History, Theory, and Criticism*)Distribution Elective (*Computing, Logic, and Representation*)

Elective

**4th Semester**ARCH 602 *Architectural Problems* orARCH 702 *Prethesis Preparation*Distribution Elective (*Structures, Practice, and Environments*): *Sustainability*

Elective

**5th Semester**ARCH 703 *Design Thesis Studio* or  
*Architectural Problems* and *Elective*

Elective

Elective

**OPTION 3**

**Three-Semester Program**—Option 3 is offered to individuals who hold a professional degree in architecture (BArch) or its equivalent from a foreign university. Preference for admission is given to those who have significant practical experience in architecture and who have demonstrated high achievement in design.

To graduate, students must complete a three-semester advanced curriculum of elective courses. Course work consists of three studios (including thesis) and eight distribution courses (57 credit hours).

**1st Semester**ARCH 601 *Architectural Problems*Distribution Elective (*History, Theory, and Criticism*)Distribution Elective (*Computing, Logic, and Representation*)

Elective

Distribution Elective (*Structures, Practice, and Environments*)

Elective

**3rd Semester**ARCH 601 *Architectural Problems*

Elective

Elective

**2nd Semester**ARCH 602 *Architectural Problems*ARCH 702 *Prethesis Preparation*

**Thesis Requirement**—MArch Option 1 and Option 2 candidates are required to develop a thesis in partial fulfillment of graduate degree requirements. Students are asked to demonstrate their ability to independently undertake research and analysis and develop a hypothesis and a thorough demonstration of the thesis. This must take the form of either a research thesis (written thesis) or a thesis with a design demonstration (design thesis). Both thesis formats must address architectural consequences that may be derived from within or outside conventional boundaries of the architectural discipline.

Thesis preparation begins in the next-to-last semester with a three-hour independent study course leading to the submission of a thesis proposal and the selection of a thesis director plus two faculty members as readers. While the thesis is independent work carried out by the student under the direction of a chosen advisor, it is organized as a studio in the fall term of the academic year. The thesis studio provides a support setting for both formal and informal review processes throughout the thesis semester. In early January, thesis projects are reviewed by a panel of guest critics and publicly presented in the Farish Gallery.

### **RSA PARIS**

MArch (Option 1, Option 2, and Option 3) students may apply to RSAP for completion of one semester in Paris: Option 1 students may do so after the fourth semester, Option 2 after their second semester.

### **MASTER OF ARCHITECTURE IN URBAN DESIGN**

The Master of Architecture in Urban Design (MAUD) program prepares graduates for a full range of professional activities in the field of urban design. It is offered to individuals who already hold a professional degree qualifying them for registration as architects or landscape architects. The MAUD program makes extensive use of Houston as a setting for case studies and design problems. During the first year, strong emphasis is given to developing design skills, logic, and imagination through an intensive series of urban design studio courses. Three additional courses in urban history, planning, and design are required each semester. Students also are required to prepare an independent thesis during their third semester.

### **DOCTOR OF ARCHITECTURE**

Admission to the Doctor of Architecture program requires either a bachelor's or master's degree in architecture and a detailed statement of research concerns and anticipated array of investigation. A student entering with a master's degree normally takes three semesters of course work before the qualifying examination. A student with a bachelor's degree normally requires two to five semesters of course work before the qualifying examination. Preparation for doctoral candidacy may include a foreign language or computer skills. Specific course requirements are established individually when a student is admitted to the program.

After successful completion of all required course work, students may apply to take the qualifying examination after submitting a prospectus outlining their research programs for the doctoral dissertation. The dissertation must represent an original contribution to knowledge in the field of architecture. Completion and successful defense of the dissertation will take a minimum of one year. University requirements for thesis (dissertation) preparation and defense must be carefully followed. The time limit for successful defense of the dissertation is established by university policy. Students should not expect to complete the Doctor of Architecture program in less than four years of full-time study.

**See ARCH in the Courses of Instruction section.**