Architecture

The School of Architecture

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Lars Lerup

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Gordon G. Wittenberg, Jr.

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Fares el-Dahdah
Carlos Jimenez
Keith Krumwiede

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Alan Fleishacker
James Furr
Tom Lord
Mark Oberholzer
David Todd
Wendy Todd
Frank S. White

Adjunct Lecturer
Stephen Fox

Visiting Critics
Natalye Appel
Nonya Grenader
Doug Oliver

Visiting Professor
Danny M. Samuels

Degrees Offered: B.A., B.Arch., M.Arch., M.Arch. in Urban Design, D.Arch.

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.

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 U.S., 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 that uses the resources of the state-of-the-art Rice Advanced Visualization Lab.
Degree Requirements for B.A. in Architecture or Architectural Studies

For general university requirements, see Graduation Requirements (pages 17–19). The conditions specified here for each major also satisfy the university distribution requirements.

B.A. 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 4 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 3 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 4 courses in the history and theory of art and architecture during the freshman and sophomore years in addition to 2 semesters of architectural technology. They must also complete university distribution requirements. It is recommended that students take an introductory drawing course during their first 2 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 complex building/computer applications and urban design issues, respectively. The spring studios are vertically integrated, allowing students to select offerings emphasizing specialized design topics such as technology, landscape, historical precedent, and urban design. During the third and fourth years, students are required to take 2 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 (B.Arch.) degree program during the second semester of the fourth year.

B.A. in Architectural Studies. Students who have been admitted as architecture majors and who have successfully completed the 2-year foundation program may choose the architectural studies curriculum. The first 4 semesters of the curriculum are identical to the foundation sequence of the architecture major except for the omission of 1 technology course. Subsequent requirements are the completion of 1 additional studio and 4 elective courses in architecture. The program provides basic preparation for later professional study while allowing students to pursue other academic interests in depth.

Bachelor of Architecture (B.Arch.) Program. The Bachelor of Architecture program is only open 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 B.Arch. 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 B.Arch. degree requires the successful completion of the B.A. in architecture, completion of the 2-semester preceptorship, and completion of 2 graduate studios and 5 approved lecture or seminar courses.
Typical Curriculum for B.A. in Architecture

1st Semester
ARCH 101 Principles of Architecture I
HART 205 Introduction to History of Art
PHYS 101 Mechanics (with lab)
HUMA 101 Introduction to Humanities
HPER 101 Basic Instruction in Physical Activity

2nd Semester
ARCH 102 Principles of Architecture I
ARCH 132 Freshman Seminar
HART 206 Introduction to History of Art
MATH 101 Single Variable Calculus
HUMA 102 Introduction to Humanities
HPER 102 Basic Instruction in Physical Activity

3rd Semester
ARCH 201 Principles of Architecture II
ARCH 207 Introduction to the Design of Structures
HART 345 Renaissance and Baroque Architecture in Italy
Studio Art Elective*
Elective*

4th Semester
ARCH 202 Principles of Architecture II
ARCH 214 Design of Structures II
ARCH 346 19th- and 20th-Century Architectural History
Approved restricted distribution course in social science elective*

5th Semester
ARCH 301 Principles of Architecture III
ARCH 315 Design of Structures III
Architectural Theory Elective
Elective*

6th Semester
ARCH 302 Selected Architectural Problems I
ARCH 316 Building Climatology
Elective*
Elective*
Elective*

7th Semester
ARCH 401 Principles of Architecture IV
Elective*
Elective*
Elective*

8th Semester
ARCH 402 Selected Architectural Problems II
Elective*
Elective*
Elective*

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

Backen Arrigoni & Ross, Inc.
San Francisco

Cambridge Seven Associates
Cambridge

Studio Citterio/Dwan
Milan

Genzler & Associates
London, Los Angeles, New York, San Francisco

Michael Graves Architects and Industrial Design
Princeton

Kohn Pedersen Fox, Architects
London, New York

Lake/Flato Architects
San Antonio

Machado–Silvetti Associates
Cambridge

Mitchell Giurgola
New York

NBBJ
Seattle

Pei, Cobb, Freed & Partners
New York

Cesar Pelli & Associates
New Haven

Renzo Piano Building Workshop
Genoa, Paris

Robert A. M. Stern Architects
New York

Venturi Scott–Brown & Associates
Philadelphia

Zimmer Gunsul & Frasca
Los Angeles

Master of Architecture

The Master of Architecture (M.Arch.) 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 are also 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 (NAAB). 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

There are 3 program options at the Master of Architecture level. Options 1, 2, and 3 differ according to the bachelor’s degree received prior to 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 2 semesters of college-level courses in the history of art and/or architecture are recommended; so is a minimum of 1 semester of college-level courses in mathematics and physics. Previous preparation in the visual arts is also desirable and so are courses in philosophy, literature, and economics.

In order to graduate, students must complete a 4-semester core curriculum (76 credit hours), which is followed by a 3-semester advanced curriculum (57 credit hours). Course work in both core and advanced curricula consists of 7 studios (including thesis) and 20 distribution courses (133 credit hours).

<table>
<thead>
<tr>
<th>Core Curriculum</th>
<th>Advanced Curriculum</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1st Semester</strong></td>
<td><strong>5th Semester</strong></td>
</tr>
<tr>
<td>ARCH 501 Core Design Studio I</td>
<td>ARCH 601 Architectural Problems</td>
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<tr>
<td>ARCH 507 Introduction to Design of Structures II</td>
<td>Dist. Elective (Hist., Theory, and Crit.)</td>
</tr>
<tr>
<td>ARCH 633 Introduction to Computer Applications in Architecture</td>
<td>Dist. Elective (Comp., Log., and Repr.)</td>
</tr>
<tr>
<td>ARCH 685 Architecture and Society</td>
<td>Elective</td>
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<tr>
<td><strong>2nd Semester</strong></td>
<td><strong>6th Semester</strong></td>
</tr>
<tr>
<td>ARCH 502 Core Design Studio II</td>
<td>ARCH 602 Architectural Problems</td>
</tr>
<tr>
<td>ARCH 514 Design of Structures II</td>
<td>ARCH 701 Pre-Thesis Preparation</td>
</tr>
<tr>
<td>ARCH 636 Computer Aided Design in Architecture</td>
<td>Dist. Elective (Struct., Pract., and Env.)</td>
</tr>
<tr>
<td>ARCH 686 Architecture and Society II</td>
<td>Elective</td>
</tr>
<tr>
<td><strong>3rd Semester</strong></td>
<td><strong>7th Semester</strong></td>
</tr>
<tr>
<td>ARCH 503 Core Design Studio III</td>
<td>ARCH 703 Thesis Studio</td>
</tr>
<tr>
<td>ARCH 515 Design of Structures III</td>
<td>Elective</td>
</tr>
<tr>
<td>ARCH 683 20th-Cent. History of Ideas in Architecture</td>
<td>Elective</td>
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<tr>
<td>Dist. Elective (Comp., Log., and Repr.)</td>
<td>Dist. Elective (Hist., Theory, and Crit.)</td>
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<tr>
<td><strong>4th Semester</strong></td>
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<tr>
<td>ARCH 504 Core Design Studio IV</td>
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<tr>
<td>ARCH 516 Building Climatology</td>
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<tr>
<td>ARCH 623 Professionalism and Manag. in Architecture</td>
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<tr>
<td>Dist. Elective (Hist., Theory, and Crit.)</td>
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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 4 and 6 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 2 semesters of college-level courses in the history of art and/or architecture are recommended; so is a minimum of 1 semester of college-level courses in mathematics and physics.

Students in this program enter into the second year of the core curriculum (2 semesters, 38 credit hours), which is followed by the advanced curriculum (3 semesters, 57 credit hours). Course work in both core and advanced curricula consists of 5 studios (including thesis) and 14 distribution courses (96 credit hours).

### Core Curriculum

#### 1st Semester
- ARCH 503 Core Design Studio III
- ARCH 515 Design of Structures III
- ARCH 683 20th-Century History of Ideas in Architecture
- Dist. Elective (Comp., Log., and Repr.)

#### 2nd Semester
- ARCH 504 Core Design Studio IV
- ARCH 516 Building Climatology
- ARCH 623 Professionalism and Manag. in Architecture
- Dist. Elective (Hist., Theory, and Crit.)

### Advanced Curriculum

#### 3rd Semester
- ARCH 601 Architectural Problems
- Dist. Elective (Hist., Theory, and Crit.)
- Dist. Elective (Comp., Log., and Repr.)

#### 4th Semester
- ARCH 602 Architectural Problems
- ARCH 701 Pre-Thesis Preparation
- Dist. Elective (Struct., Pract., and Env.)

#### 5th Semester
- ARCH 703 Thesis Studio
- Elective
- Elective

Option 3: Three-Semester Program

Option 3 is offered to individuals who hold a professional degree in architecture (B.Arch.), 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.

In order to graduate, students must complete a 3-semester advanced curriculum of elective courses. Course work consists of 3 studios (including thesis) and 8 distribution courses (57 credit hours).

### 1st Semester
- ARCH 601 Architectural Problems
- Dist. Elective (Hist., Theory, and Crit.)
- Dist. Elective (Comp., Log., and Repr.)
- Elective

### 2nd Semester
- ARCH 602 Architectural Problems
- ARCH 701 Pre-Thesis Preparation
- Dist. Elective (Struct., Pract., and Env.)
- Elective

### 3rd Semester
- ARCH 703 Thesis Studio
- Elective
- Elective
**Thesis Requirement**

All M.Arch. 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 as well as 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 penultimate semester with a 3-hour independent study course leading to the submission of a thesis proposal and the selection of a thesis director plus 2 faculty members as readers. While the thesis is independent work carried out by the student under the direction of a chosen adviser, 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.

**Master of Architecture in Urban Design**

The Master of Architecture in Urban Design 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 are also required to prepare an independent thesis during their third semester.

**Doctor of Architecture**

Admission to the Doctor of Architecture program requires either a bachelor or master’s degree in architecture. A student entering with a master’s degree normally takes 3 semesters of course work before the qualifying examination. A student with a bachelor’s degree normally requires 2 and 5 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.

See ARCH (pages 250–258) in the Courses of Instruction section.