Architecture

The School of Architecture

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Keith Krumwiede
Nana Last

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Alan Fleishacker
James Furr
Nonya Grenader
Tom Lord
Mark Oberholzer
Frank S. White

Adjunct Lecturer
Stephen Fox

Visiting Critics
David Guthrie
Doug Oliver
William Williams

Visiting Professor
Danny M. Samuels
Mark Wamble

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 18–20). 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 four semesters of design studios and other related courses in architecture. The first-year 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 two semesters of architectural technology. They must also 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 years preprofessional sequence. The junior and senior 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 two-year foundation program may choose the architectural studies curriculum. The first four 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 two-semester preceptorship, and completion of 2 graduate studios and 5 approved lecture or seminar courses.

Typical Curriculum for B.A. in Architecture

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<thead>
<tr>
<th>First Semester</th>
<th>Fifth Semester</th>
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<tbody>
<tr>
<td>ARCH 101 Principles of Architecture I</td>
<td>ARCH 301 Principles of Architecture III</td>
</tr>
<tr>
<td>HART 101 Introduction to History of Art</td>
<td>ARCH 315 Design of Structures III</td>
</tr>
<tr>
<td>PHYS 101 Mechanics (with lab)</td>
<td>Architectural Theory Elective</td>
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<tr>
<td>LPAP 101 Lifetime Physical Activities</td>
<td>Elective*</td>
</tr>
<tr>
<td>Approved architecture restricted distribution course in humanities</td>
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<table>
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<tr>
<th>Second Semester</th>
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<tbody>
<tr>
<td>ARCH 102 Principles of Architecture I</td>
<td></td>
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<tr>
<td>ARCH 132 Freshman Seminar</td>
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</tr>
<tr>
<td>HART 102 Introduction to History of Art</td>
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<tr>
<td>LPAP 102 Lifetime Physical Activities</td>
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<tr>
<td>MATH 101 Single Variable Calculus</td>
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<tr>
<td>Approved architecture restricted distribution course in humanities</td>
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<tr>
<th>Third Semester</th>
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<tbody>
<tr>
<td>ARCH 201 Principles of Architecture II</td>
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<tr>
<td>ARCH 207 Introduction to the Design of Structures</td>
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<tr>
<td>ARCH 345 Renaissance and Baroque Architecture in Italy</td>
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<tr>
<td>Studio Art Elective*</td>
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<tr>
<td>Elective*</td>
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<tr>
<th>Fourth Semester</th>
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<tr>
<td>ARCH 202 Principles of Architecture II</td>
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<tr>
<td>ARCH 214 Design of Structures II</td>
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<tr>
<td>ARCH 346 Architecture and the City II</td>
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<tr>
<td>Approved architecture restricted distribution course in social sciences</td>
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<tr>
<td>Elective*</td>
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*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
Gensler & Associates
London, Los Angeles, New York, San Francisco
Michael Graves Architects and Industrial Design
Princeton
HTA Architects
London
Kohn Pedersen Fox, Architects
London, New York
Machado–Silvetti Associates
Cambridge
Mitchell Giurgola
New York
NBBJ
Seattle
Ong & Ong Architects
Singapore
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
Weiss/Manfredi Architects
New York
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 three 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 two semesters of college-level courses in the history of art and/or architecture are recommended; so is a minimum of one 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 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 7 studios (including thesis) and 20 distribution courses (133 credit hours).

Core Curriculum

First Semester
ARCH 501 Core Design Studio I
ARCH 507 Introduction to Design of Structures II
ARCH 633 Introduction to Computer Applications in Architecture
ARCH 685 Architecture and Society I

Second Semester
ARCH 502 Core Design Studio II
ARCH 514 Design of Structures III
ARCH 636 Computer Aided Design in Architecture
ARCH 686 Architecture and Society II

Third Semester
ARCH 503 Core Design Studio III
ARCH 515 Design of Structures IV
ARCH 683 20th-Century History of Ideas in Architecture

Fourth Semester
ARCH 504 Architectural Problems
ARCH 516 Building Climatology
ARCH 623 Professionalism and Manag. in Architecture

Advanced Curriculum

Fifth Semester
ARCH 601 Architectural Problems
ARCH 602 Architectural Problems
ARCH 602 Pre-Thesis Preparation

Sixth Semester
ARCH 602 Architectural Problems
ARCH 602 Pre-Thesis Preparation

Seventh Semester
ARCH 703 Thesis Studio or equivalent
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; so 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 5 studios (including thesis) and 14 distribution courses (95 credit hours).

Core Curriculum
First 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.)
Dist. Elective (Hist., Theory, and Crit.)

Second Semester
ARCH 504 Architectural Problems
ARCH 516 Building Climatology
ARCH 623 Professionalism and Manag. in Architecture
Dist. Elective (Hist., Theory, and Crit.)

Third Semester
ARCH 601 Architectural Problems
Dist. Elective (Hist., Theory, and Crit.)
Dist. Elective (Comp., Log., and Repr.)

Advanced Curriculum
First Semester
ARCH 701 Thesis Studio*
Elective

Second Semester
ARCH 702 Pre-Thesis Preparation
Dist. Elective (Struct., Pract., and Env.)

Third 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 three-semesters advanced curriculum of elective courses. Course work consists of 3 studios (including thesis) and 8 distribution courses (57 credit hours).

First Semester
ARCH 601 Architectural Problems
Dist. Elective (Hist., Theory, and Crit.)
Dist. Elective (Comp., Log., and Repr.)
Elective

Second Semester
ARCH 602 Architectural Problems
Dist. Elective (Hist., Theory, and Crit.)

Third Semester
ARCH 703 Thesis Studio*
Elective
Elective

* or an approved alternative

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 two 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 (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 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’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 doctoral program in less than four years of full-time study.

See ARCH in the Courses of Instruction section.