School of Architecture

Roy F. Knight, Dean
William J. Lauer, Associate Dean

The School of Architecture offers a program of professional studies which prepares its graduates for the practice of architecture. While emphasizing knowledge and skills required by architects in guiding the processes of building, the school is especially concerned that its students learn that kind of good judgment which particularly distinguishes the architect from all other professionals who serve the building industry. Therefore, the student is regularly called upon to pay attention to cultural, philosophical and ethical issues that appropriately concern the architect in performance of the art of building. The student is also required to discover and understand the principles by which our physical universe appears to operate in order to know the science of building as fully as possible. It is important for the student to learn the characteristics of the natural environment while learning the physical behavior of materials in structures. Furthermore, the program of the school is concerned with preparing the student to be adaptable to change. An understanding of society is important as we see it developing in sometimes surprising ways. This places special demands upon the architect. Consequently the program of the School emphasizes the process of learning with the intent of enabling its graduates to adapt to the changing circumstances of our world. How to learn about architecture is as important a matter for the student as learning itself.

Facilities
In the spring of 1981, a new building housing the School of Architecture and shared by the Art Department was completed. The Art and Architecture Building contains all the primary activities of the school. Expressly designed for the school in an open architectural competition, the building has received widespread recognition and has become one of the models sought out by other schools. The building was designed by the Knoxville architectural firm of McCarty, Bullock, Holsaple, Inc. It contains as its major feature a large interior mall or street. Opening off this large gathering space, which serves as a campus focal point, are amply designed classrooms, a reference library which contains extensive slide collections and other reference materials, computer rooms, faculty offices, lecture rooms, administrative offices, an elaborate darkroom, workshop, and a gallery in which architecture as well as art exhibits are mounted.

The principal library holdings of the school are located in the James D. Hoskins Library, with additional volumes in the Undergraduate Library. A reading and reference room is maintained in the Art and Architecture Building.

Financial Assistance for Students
A number of $500 sponsorships are made available each year by architectural firms, manufacturers of building materials, and other construction related industries. These grants are used to cover tuition, books and equipment. Scholarships are also available through the national headquarters of the American Institute of Architects. Honor students in all the upper four years are eligible for this aid, but it is primarily awarded to student's of third- and fourth-year standing.

Lecture Program
Throughout the academic year, the school organizes an extensive series of special lectures by experts in architecture and related subjects. Students are expected to attend regularly and benefit from this opportunity to hear the leading people of the field. The lectures are open to the University community and the public as well.

Included in the series is the ROBERT B. CHURCH MEMORIAL LECTURESHIP. Named for the school's second dean, it has become widely respected in the field as an honor to be appointed to this lectureship. The most prominent architects from around the world are brought to the school with income from the endowment.

Other important lectures are sponsored by the General Shale Corporation and the architectural branch of the Tennessee Valley Authority. Annually in the spring quarter a special program called TAAST is arranged. Within a period of one week the entire school participates in special lectures, seminars, exhibits, and informal gatherings. Featured are discussions by a series of visiting experts. TAAST is a student organized event.

Publications
Students in the school each year publish The University of Tennessee Journal of Architecture. Continuing several years of excellent publications covering work of the school and current thinking in the field, this journal has become a widely recognized part of the school's participation in the profession.

Foreign Studies Program
Each year the school offers at least two opportunities for foreign study to its students. In cooperation with the Danish International Student Committee a program is regularly offered in Copenhagen taught by outstanding Danish architects and educators. Exchange programs are established with Royal Melbourne Institute of Architecture, Melbourne, Australia and Chongqing Institute of Architecture and Engineering, Chongqing, Sichuan Province, China.

Within the school faculty, a person is assigned responsibility to lead a program in Europe each year at varied locations. These are designed to include visits to prominent new architectural sites and major historic locations.

Studies abroad, which are arranged to include a full quarter's credit for advanced students, include design, history, and theory of architecture.

Memphis and Knoxville Community Design Centers
Each year, throughout the year, advanced students may work at these locations of
Third-Year Prerequisites

Students are required to have all first-and second-year courses satisfactorily completed before entering the third-year design courses, Architecture 3001-02-03. Students progress and design work in second year will be reviewed by a committee of the faculty determining their readiness for advancement to third year. Students who register for a third-year design course holding first- or second-year deficiencies may be required to drop the course at any point during the quarter.

Progression to 4000-level Courses

Architecture students must have attained third-year standing in the school before being admitted to any 4000-level course, with the exception of Architecture 4000 Service Practicum.

Minor

An undergraduate minor in architecture is offered in order to enable students in other colleges to pursue studies in architecture which are relevant to their major areas of concentration. The minor will consist of not less than 18 hours. Persons interested must obtain the consent of the School of Architecture Academic Standards Committee and Dean of the School of Architecture, who will approve specific programs of study proposed by students.

Course Load

The average course load in any quarter is 16 credit hours. The minimum which may be taken by full-time students is 12 hours; the maximum which may be taken without approval of the dean is 19 hours.

Satisfactory/No Credit Courses

These courses, if successfully completed, will count as hours for graduation, although neither S nor NC grades will be calculated in the student's grade point average. The following regulations apply: (1) S/NC courses may not count for required courses or architecture electives; (2) a student who desires to take a course S/NC should indicate this intention at the start of registration. A change from S/NC grading to regular grading or from regular grading to S/NC will not be permitted beyond the add deadline for each quarter. Exception: students who register for a course S/NC in a restricted area will be required to change to regular grading when the error is discovered.

Program Description

The curriculum for the Bachelor of Architecture Degree includes a combination of required and elective courses which offer the student both a solid professional program of study and a sound general education. While the majority of the courses are designated as required, students may use the available architecture electives to expand their knowledge in areas of special interest. Academic non-architecture electives allow students to broaden their education in areas of general interest: the humanities, natural sciences, social sciences or arts. All electives are to be taken only with the approval of the student's advisor.

Curricula for Architecture

All students studying for a Bachelor of Architecture degree will include the following requirements in their course of study. Students are not allowed to enroll simultaneously in two design courses. For any additional specialized requirements, the student should refer to the Student Handbook of the School of Architecture and the student's advisor.

SERVICE PRACTICUM REQUIREMENT

A three-month, non-credit internship in an architect's office is required. Upon petition, work in an engineer's, or contractor's office or related work may be approved by the school. This work must be evidenced by a letter from the employer indicating type and quality of student's work and time of employment prior to the fifth year. (See course description for Architecture 4000.)

Foreign students may need to obtain Immigration and Naturalization Service Employment Authorization before service practicum begins. To obtain authorization, foreign students should take their I-94 form to the Office of International Student Affairs not more than 60 days nor less than 30 days before the anticipated starting dates. Beginning service practicum employment without INS authorization constitutes unauthorized employment and may jeopardize foreign student's continued stay in the United States.
### Bachelor of Architecture as a Second Degree

A curriculum leading to a Bachelor of Architecture degree is available to students who already hold a bachelor's degree or an advanced degree in a related field.

This program begins with intensive initial studies in architecture and is possible to complete within three years. A minimum of 9 quarters residency is required. The degree is the first professional degree recognized for purposes of eventual qualification for the license to practice architecture. Applicants must provide a transcript of previous academic work and must have attained at least a 2.5 overall grade point average. Appropriate goals and abilities must be shown by the applicant as well.

#### SECOND DEGREE PROGRAM MINIMUM REQUIREMENTS

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<tr>
<th>Hours</th>
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<tr>
<td>First Year</td>
<td>Architecture 1190, 1290, 1390</td>
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<td>Second Year</td>
<td>Architecture 1191, 1291, 1391</td>
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<td>Architecture 2207, 2307, 3107</td>
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<td>Architecture 2114, 2124, 2314</td>
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#### Approved Electives List

Approved Electives: First & Second Year Students English 2560-70, 2640-50; Philosophy 1710, 2510; History 3740; Classics 3340; Foreign Language; Architecture 2560.

Approved Electives: Fourth & Fifth Year Students 3000-4000 level courses in the following areas: Humanities, Social Sciences, Natural Sciences, U.S. Studies, Foreign Studies.

#### Faculty

**Professors:**

**Associate Professors:**
- M. D. Herz, B. Arch. Columbia; S. A. Kinzy, M. Arch. Illinois; W. E. Martella, B. Arch. California
- (Berkeley); M. Moffett, Ph.D. M.I.T.; V. Naranico, B. Arch. Belgrade; J. S. Rabun, M. Arch. Texas; M. A. Robinson, M. Arch. Pennsylvania.

**Assistant Professors:**

1100 Introduction to Architecture (3) Examination of scope and definition of architecture. Imaginative, intel- lectual, and professional background. The field in relation to contemporary society, the building industry, and allied design professions. Architectural design as a creative process; orientation to courses and pro- grams of the school.

1101 Design Drawing (3) Principles of design through graphic presentation of field observations. Techni- ques of freehand sketching and abstract graphic communication applied to local examples of build- ings and sites. Exercises related to discussions in 1100. Training introduced which relates develop- ment of creative drawing skill and the student's imaginative capabilities.


1200 Architectural Graphics (4) Descriptive geome- try and constructed architectural drawings: plane, section, elevation, isometric, axonometric, and perspective. Conventional architectural drawing symbols. Empha- sis on basic graphic design; introduction to graphic presentation of field observations. Prereq: 1100 and 1101. W.

1290 Second Degree Program: Basic Architecture II (6) Principles of site development and basic approach- es to planning and design of buildings in relation to function and context. Prereq: 1190 and 1191; coreq: 1291.


2100 Fundamentals of Site Design (4) Projects involving site orientation, climate, energy conservation, access, parking, drainage, and zoning. Prereq: 1300 and 1301; coreq: 2101.

2101 Design in the Environment (3) Introduction to design issues in the natural environment and in urban contexts. Review of exemplary approaches in current practice. Prereq: 1300 and 1301; coreq: 2100. F.

2114 Computer Applications in Architecture (4) Demo- stration of computer use in architecture, including exercises in programming. F.

2200 Elements of Architecture (4) Design of small buildings with special consideration for site, internal circulation patterns, space allocation, and physical order: Presentation sketches, constructed drawings, and sketch models. Prereq: 2100 and 2101; coreq: 2200. W.

2201 Building Use (2) Introduction to techniques of building programming. Space allocation and bal- ance. Inter-relationship of spaces in terms of use. Examination of user requirements. Typical approaches to entrance, access, and public use. Coreq: 2100. Zoning. Diagrammatic presentations and sketches from field observations. Prereq: 2100 and 2101; coreq: 2200. S.

2207 Architectural History I (3) Development of archi- tecture from antiquity through the Byzantine period, with consideration for cultural conditions and form of settlements. E.


2301 Models of Building Form (2) Exemplary buildings illustrating imaginative manipulation of form in response to spatial and structural requirements. Prereq: 2200 and 2201; coreq: 2300. S.

2307 Architectural History II (3) Development of west- ern architecture from the medieval period through the Baroque. Prereq: 2207. E.


3107 Architectural History III (2) Study of the modern movement from its roots in Romanticism, Neo-Class- icism, and the Industrial Revolution through the work of modern masters, with applications to current design issues. Prereq: 2307.

3114 Structures in Wood and Steel (4) Introduction to analysis and design of simple steel and wood struc- tures based upon specific loading requirements. Use of construction and building code tables - selection of structural members. F.

3116 Environmental Control (4) Human physiological
response to heat, light, and sound in buildings. Study of climatological factors which affect buildings; introduction to heating, ventilating, and air conditioning.

**3200 Architectural Design II: Concepts (6)** Building concepts, forms and design development. Emphasis on design presentation and design of buildings of moderate complexity. Preliminary study, material choice, energy considerations, and environmental factors. Solution to issues of site and context. Complete sketches, drawings, and models at site and building scales required. Prereq: 3100. W.

**3214 Structures in Masonry and Concrete (4)** Introduction to design and analysis of simple reinforced concrete and masonry structures based upon specific loading conditions. Use of construction and building codes, handbooks, and design tables. Prereq: 3114. W.

**3216 Mechanical Systems in Architecture (4)** Continuation of the study of heating, ventilating, and air conditioning systems, including both passive and active solar energy systems. Plumbing and fire protection systems. Prereq: 3116. W.

**3217 Materials and Processes of Construction (4)** Architectural materials and their use in building construction. W.

**3300 Architectural Design III: Details (6)** Design concepts developed in detail, with consideration of aesthetic and functional requirements. Design problems will be placed upon the role of environmental factors in human development, learning, adaptation, stress and satisfaction. Emphasis on aesthetic and functional functions. Students will learn to design details. Students will explore the design of environments for children and environmental supports for various types of physical and mental conditions for people of all ages. Prereq: Consent of instructor.

**3940 Development and Design (6)** Design considerations of feasibility studies, economics, finance, marketing, environmental impact, and social considerations in development of real property. Prereq: 3116. S.

**3945 Design Service in Communities (6)** Studies conducted under direction of architect or expert in allied profession, in service to public service organizations and government, and public groups. Off-campus locations. Prereq: 3116. S.

**3950 Working Drawings (6)** Preparation of detailed working drawings, specifications, and other documents for typical architectural projects.

**4100 Advanced Architectural Design I (6)** Large-scale buildings. Program, form, and structure are studied in the context of project. Staff problem which resolves complex use and context requirements. Prereq: 3300. F.

**4101 Community Form (3)** Patterns of community development. Study of selected historical and contemporary examples. Examination of basic urban design issues and exemplary design approaches through lectures, readings, essays, and sketch studies. F.


**4200 Advanced Architectural Design II (6)** Design at community scale, emphasizing attention to patterns of community design in response to use requirements and the physical environment. Consideration of design of community open space, pedestrian use, access and circulation, spatial form and character, studied through diagrams, sketches, drawings, and models. Course study may be housed in off-campus locations. Prereq: 4100 and 4101. W.

**4213 Professional Practice I (3)** Principles and methods of economics and management for architectural offices; project production, cost analysis, budgeting, office and construction management. F, W, S.

**4300 Advanced Architectural Design III (8)** Study of case projects in larger community settings, with attention to site character, building designs, and site relationships in a given pattern of comprehensive development. Course sections may be housed in off-campus locations. Prereq: 4200. S.

**4313 Professional Practice II (3)** Legal responsibilities of architect and allied professions. Business contracts, administration, codes and zoning regulations, liability, and insurance. Prereq: 4213. F, W, S.

**4400 Design Studies (8)** Individual design projects under faculty direction. Prereq: 3116. S.

**4410 Foreign Studies (6)** Architectural design projects employing electronic data processing. Prereq: 3116. S.

**4415 Urban Design (6)** Appropriate community form and urban design frameworks responding to specific community conditions and aspirations. Off-campus locations.

**4600 Comprehensive Architectural Design Project (6)** Development of design for complex buildings with attention to clarity of form, spatial and structural concepts, and technical requirements and design of details. Full complement of visual and written presentations which support students' arguments for design concept and its development. Required review by faculty representing all areas of the architectural program. Prereq: 4501 and satisfactory review by faculty. Consent of instructor. Prereq: 4501. W.


**4801 American Architecture I (3)** Development of American architecture from arrival of immigrants in 1607 until 1860. W.

**4802 American Architecture II (3)** Stylistic periods from the Gothic Revival through the twentieth century. S.

**4803 Oriental Architecture (3)** The eastward expansion of the Fertile Crescent to the Indus Valley. Hindu, Buddhist, and Mughal architecture in India. Architecture in China and Japan from the earliest beginnings. A.

**4804 The International Style (3)** Architecture of the International Style 1922-1932 with antecedents and influences. A.

**4805 Indigenous Architecture (3)** Study of world-wide "anonymous" architecture reliant upon climatic conditions, availability of materials, and economic level of people. Examples from prehistoric structures through twentieth century vernacular. A.

**4806 History of Architectural Technology (3)** Building materials and construction techniques from antiquity to the present. A.

**4807 Tennessee Architecture (3)** History of settlement patterns and building in Tennessee. F.

**4808 History of the City (2)** Examination of historical change in urban form and design. Survey, Case Studies.

**4809 Literature of Architecture (3)** Survey of architectural writing. Relationship between literature and design.

**4810 Aesthetics in Architecture (3)** Philosophies of art underlying the practice of architecture. F, W, S.

**4811 Special Topics in History, Theory and Criticism (1-4)** Special topics in history-related subjects. May be repeated. Maximum credit 6 hours.

**4812 East European Architecture (3)** Twentieth century architecture in Russia, Czechoslovakia, Poland, Hungary, East Germany, Rumania, Bulgaria, Yugoslavia, S.

**4813 Medieval Architecture (3)** History of architecture from the decline of Rome to the beginning of the Renaissance. A.

**4814 Forms of Utopia (3)** Ideas and architectural expressions of Utopian movements.

**4815 Criticism Seminar (3)** Theory, function, and techniques of architectural criticism. S.

**4816 Architects in Social Criticism (3)** Writings which illustrate technological, political, and anthropological assumptions of some nineteenth and twentieth century architects.

**4817 Architecture since 1945 (3)** Recent architectural developments and views of the future. F.

**4820 Special Topics in Architecture (1-4)** Individual projects under faculty direction. Credit adjusted to project complexity and level of effort. May be repeated. Maximum credit 6 hours. E.

**4821 Design Methods (3)** Application of general systems theory to design methods for architectural design.
4825 Current Issues in Architecture (3) A review of emerging approaches to design, their underlying principles and background in recent practice. E.

4830 Introduction to Preservation (3) History and theory of architectural preservation and restoration. F.

4831 Preservation Technology (3) Techniques of preservation: dating, methods of analysis, history of materials and technology used in old buildings. W.

4832 Descriptive Analysis of Historic Buildings (3) Identification and analysis of characteristic elements of buildings from various architectural periods, with emphasis on American architecture. Survey techniques. S.

4833 Preservation Law (3) Legal aspects of contemporary preservation activity.

4840 Project Management (3) Principles, methods, and application of project management to the total building process. Project manager function, responsibilities, and activities investigated through case studies, job history reviews, and project simulation.

4841 Construction Management (3) Principles, methods, and application of construction management to the total building process. Construction manager function, responsibilities, and activities investigated through case studies, job history reviews, and project simulation.

4842 Marketing Architectural Services (3) Marketing of architectural practice by study of cases, theories, public relations procedures, and understanding sales of architectural services, both basic and comprehensive. F.

4843 Contract Documents (3) Analysis and theory of contract documents by application of production techniques and procedures.

4844 Advanced Contracts (3) Study of contractual problems relating to architect, owner, contractor, and subcontractor.

4845 Codes and Zoning (3) Theory, review, and research of city, county, state, region, and national codes and zoning. History and development of fire safety and building codes; history and development of zoning emphasizing architect's responsibility as related to specific project application.

4846 Cost Analysis (3) Methods and theories of estimating project cost and building cost with reference to present techniques. Research in new techniques of cost analysis.

4847 Specifications (3) Theory, analysis, and methods of specifications. Emphasis placed on development and research of specifications.

4849 Supervision (3) Theories, methods, and site study of job inspection during construction phase and construction administration.

4850 Elementary Structural Matrix Methods (4) Introduction to the generalized matrix methods of analysis of structures. Review of matrix algebra and vectors; development of member stiffness and flexibility matrices; assembly of structure stiffness and flexibility matrices. Prereq: Consent of instructor. (Same as Civil Engineering 4850 and Engineering Science and Mechanics 4850.) SU.


4852 Fire Protection in Structures (3) Characteristics of fires in buildings. Fire codes, building evacuation, sprinklers and other fire protection systems, emergency power and lighting, and fire resistant materials and construction.

4853-64-65 Advanced Mechanical and Electrical Systems (5, 3, 3) In-depth analysis and innovative concepts in design of heating, ventilating, air conditioning, lighting and electrical distribution systems in buildings. Prereq: 3316. 4863-F; 4864-W; 4865-S.

4857 Architectural Photography (3) Photography as a design, research, and presentation medium. Emphasis on architectural photography using black and white media. F. W. S.

4870 Advanced Architectural Photography (3) Application of special photographic techniques with emphasis on color printing and processing. Prereq: Consent of instructor. F. W. S.

4871 Advanced Architectural Photography (3) Specialized and sophisticated techniques of architectural presentation. Rendered perspectives and color.

4872 Advanced Architectural Graphics (3) Specialized and sophisticated techniques of architectural presentation. Special emphasis on artistic and conceptual aspects of graphic solutions. Prereq: Consent of instructor. F. W. S.

4881-82 Advanced Structural Design I, II (4, 4) Advanced structural analysis and design of building structures. Structural and constructional aspects of building, including structures in steel, concrete, masonry, and timber to satisfy loading and building code requirements. Prereq: 3214 or equivalent.

4883-84 Advanced Architectural Structures I, II (3, 3) Philosophy of structural design in relation to materials and form. Advanced mathematical and experimental analysis of structures, including use of computer programs. Prereq: 4891 or equivalent.

4887 Structural Design for Protection Against Extreme Hazards (3) Probability, risk, human values, insurance. Survey of possible hazards: floods, fire, hurricanes and tornadoes, earthquakes, nuclear effects, internal and external explosions. Building code and engineered design of steel, masonry and wood structures to resist extreme effects. Protective construction for human needs. Fire protection engineering, fire phenomena, life safety analysis, high-rise building fires.


4891 Computer-aided Design (3) Survey of computer applications in architecture, with special emphasis on structural calculations. Prereq: 2114. S.

4892 Architectural Computer Graphics (3) Survey of architectural applications of computer graphics; program planning and implementation. Prereq: 2114. W.


4894 Advanced Design of Concrete Buildings (3) Precast and on-site concrete construction and maintenance, foundations, floor and wall systems, Domes and shell roofs. Prereq: 4891 or equivalent.

4900 Aspects of Urban Environment (4) Interdisciplinary course in urban problems. Prereq: Consent of one of the instructors. (Same as Urban Studies 4900).

4901 Proxemics (4) Seminar for graduate students and upper-division students. Introduction to proxemic research. Definition of proxemic variables. Proxemic notation exercises. Analysis of etic data and the identification of emic categories. Observer bias and methods and bias reduction. Members of seminar required to design, conduct, and present original proxemic research. Prereq: 2114 or consent of instructor.

4950 Environment as Code (4) For graduate students. Advanced lecture course of theoretical issues involved in considering environment as a medium of human communication. Codes and nature of coding behavior in animals and man. Relationships between coding behavior and the organization of the nervous system. Coding and social behavior. Communication process as a generic model of man-environmental relations. Hierarchical aspects of environmental communications. Prereq: 2114 or consent of instructor.