REQUIREMENTS FOR THE BACHELOR OF ARCHITECTURE

COLLEGE OF ARCHITECTURE
THE UNIVERSITY OF OKLAHOMA

For Students Entering the Oklahoma State System for Higher Education: **Summer 2002 through Spring 2003**

Credit Hours and Grade Averages Required

Total Credit Hours	**160**
Minimum Upper-Division Hours Required	**48**
Minimum OU Retention GPA	**2.50**
Minimum Combined Retention GPA	**2.50**
Minimum GPA on all Required Coursework	**2.50**

Architecture-
Five-Year Program
0202A
Bachelor of
Architecture

Year	FIRST SEMESTER	Hours	SECOND SEMESTER	Hours
FIRST YEAR	**ENGL 1113**, Principles of English Composition (Core I)	3	**ENGL 1213**, Principles of English Composition (Core I)	3
	PHYS 1114, Physics for Non-Science Majors (Core II)	4	**P SC 1113**, American Federal Government (Core III)	3
	EN D 1011, Introduction to the Built Environment	1	**ARCH 1012**, Computers in Architecture	2
	EN D 1511, Studies in Visual Acuity	1	**EN D 1133**, Graphics I	3
	HIST 1483 or 1493, U.S. History (Core IV)	3	**EN D 1524**, Design 1	4
	GENERAL EDUCATION ELECTIVE	3		
	TOTAL CREDIT HOURS	**15**	**TOTAL CREDIT HOURS**	**15**
SECOND YEAR	**MATH 1823**, Calculus & Analytic Geometry I (Core I)	3	**ARCH 2544**, Architectural Design/Human Factors	4
	ARCH 3313, Mechanics for Architects I	3	**ARCH 3223**, Environmental Systems in Architecture	3
	EN D 2212, Nature and Use of Materials	2	**ARCH 3323**, Mechanics for Architects II	3
	EN D 2413, History of the Built Environment I (Core IV)	3	**EN D 2013**, Human Aspects of Design	3
	EN D 2143, Graphics 2	3	**EN D 2423**, History of the Built Environment II	3
	EN D 2534, Design 2	4		
	TOTAL CREDIT HOURS	**18**	**TOTAL CREDIT HOURS**	**16**
THIRD YEAR	**ARCH 3152**, Architectural Theory/Design Process	2	**ARCH 3162**, Architectural Programming	2
	ARCH 3565, Architectural Design/Environmental Factors	5	**ARCH 3232**, Architectural Materials	2
	ARCH 4333, Architectural Structures I	3	**ARCH 3555**, Architectural Design/Technological Factors	5
	UNDERSTANDING ARTISTIC FORMS—Advised Elective (Core IV)	3	**ARCH 4343**, Architectural Structures II	3
	NON-WESTERN CULTURE—Advised Elective (Core IV)	3	NATURAL SCIENCE, with lab —(Core II) chosen from approved Gen. Ed. list	4
	TOTAL CREDIT HOURS	**16**	**TOTAL CREDIT HOURS**	**16**
FOURTH YEAR	**ARCH 4243**, Environmental Control for Buildings I	3	**ARCH 4033**, Project Documents	3
	ARCH 4443, History of the American Built Environment	3	**ARCH 4253**, Environmental Control for Buildings II	3
	ARCH 4575, Arch. Design/Building System Integration (Capstone)	5	**ARCH 4585**, Architectural Design/Special Topics	5
	SOCIAL SCIENCE—Advised Elective (Core III)	3	PROFESSIONAL ELECTIVE	3
	ECOLOGY ELECTIVE—(chosen from suggested list)	3		
	TOTAL CREDIT HOURS	**17**	**TOTAL CREDIT HOURS**	**14**
Admission to 5th year requires a minimum OU retention GPA and combined retention GPA of 2.50				
FIFTH YEAR	**ARCH 5043**, Project Management	3	**ARCH 5052**, Professional Practice	2
	ARCH 5595, Arch. Design/Urban Design (Capstone)	5	**ARCH 5453**, History of Modern Architecture	3
	PROFESSIONAL ELECTIVE	3	**ARCH 5505**, Arch. Design/Comprehensive Project (Capstone)	5
	PROFESSIONAL ELECTIVE	3	PROFESSIONAL ELECTIVE	3
	GENERAL EDUCATION ELECTIVE	3	GENERAL EDUCATION ELECTIVE—upper-division	3
	TOTAL CREDIT HOURS	**17**	**TOTAL CREDIT HOURS**	**16**

University-Wide General Education Requirements (minimum 40 hours)

Courses designated as Core I, II, III or IV are part of the General Education curriculum. Students must complete a minimum of 40 hours of General Education courses, chosen from the approved list, including at least one upper-division Gen. Ed. course outside of the student's major. Courses graded S/U or P/NP will not apply.

Core I	**Symbolic and Oral Communication (9–19 hours, 3–5 courses)** •English Composition–6 hours, 2 courses •Mathematics–3 hours, 1 course •Foreign Language–0–10 hours, 2 courses in the same language, (which can be met by successfully completing two years of the same foreign language in high school) •Other (courses such as communication, logic or public speaking)
Core II	**Natural Science (7 hours, 2 courses)** •Courses must be taken from different disciplines in the biological and/or physical sciences; one of which must include a laboratory.
Core III	**Social Science (6 hours, 2 courses)** •One course must be P SC 1113, "American Federal Government"
Core IV	**Humanities (12 hours, 4 courses)** •Understanding Artistic Forms–3 hours, 1 course •Western Civilization and Culture–6 hours, 2 courses, including HIST 1483 or HIST 1493 •Non-Western Cultures–3 hours, 1 course

Senior Capstone Experience (15 hours, 3 courses - *as required by the College of Architecture*)

COURSES IN ARCHITECTURE (ARCH)

1012 Computers in Architecture. An introduction to the application of computers to many facets of architecture and related design disciplines, with emphasis on programming and computer graphics. **Laboratory** (F, Sp)

2544 Architectural Design/Human Factors (Crosslisted with Interior Design 2544). Prerequisite: EN D 2533. Study of human needs and activities as design determinants; lectures and individual projects. Emphasis on the design implications of spatial relationships, scale and function. Additional emphasis on the relationship between architecture and interior design. **Laboratory** (Sp, Su)

3152 Architectural Theory/Design Process. Prerequisite: 2544 and program admission. Introduction to architectural theory and the design process: brief survey of architectural theory with emphasis on philosophical, ideological and aesthetic concepts as influences on contemporary theory and practice. Exploration of decision making for design as a creative and problem-solving process. (F)

3162 Architectural Programming. Prerequisite: 3152, 3555. Study of the elements of architectural programming; information gathering, analysis and concept development leading to architectural problem definition. The relationship between programming and the design process is emphasized. (F, Sp)

3223 Environmental Systems in Architecture. Prerequisite: Physics 1114 or 2514. Introduction to environmental control, vertical transportation, water supply, waste water drainage, lighting, and electrical power systems for buildings. (F, Sp)

3232 Architectural Materials. Prerequisite: EN D 2212 and program admission. The relationship between the technology of building materials and architectural design. The effect of material form, strength, durability and workability on structure, connections, surfaces and edges. (Sp)

3313 Mechanics for Architects I. Prerequisite: Mathematics 1812, Physics 1114 or 2514. Principles of architectural structures in tension and compression; resultants and equilibrium force systems; section properties; stress and strain; tension and compression members; trusses and pin connections. (F, Sp, Su)

3323 Mechanics for Architects II. Prerequisite: 3313, and Mathematics 1743 or 1823. Principles of architectural structures in bending; shear and moment diagrams; bending members; columns and walls; selection of simple members in wood and steel. (F, Sp, Su)

3555 Architectural Design/Technological Factors. Prerequisite: 2544 and program admission. Study of construction materials and technology as design determinants; lectures and individual projects. Emphasis on the design implications of building technology. **Laboratory** (F)

3565 Architectural Design/Environmental Factors. Prerequisite: 3555. Study of forces within the natural and built environment as design determinants; lectures and individual projects. Emphasis on the design implications of environmental forces and the built environment. **Laboratory** (Sp, Su)

3734 Interior Design III (Crosslisted with Interior Design 3734). Prerequisite: 3223, Interior Design 3724 or permission. Focuses on conceptual design, lighting design, and regulatory constraints in commercial interiors. Studio/lecture presentation of design principles in lighting, acoustics and space planning. Emphasis on contract interiors where lighting is of major importance. **Laboratory** (Sp)

G4033 Project Documents (Crosslisted with Landscape Architecture 4033). Prerequisite: 4575 or permission or CNS 4923. An introduction to the building construction industry and architectural project manual with emphasis on owner/contractor relations. (Sp)

4243 Environmental Control for Buildings I. Prerequisite: 3223 and program admission. Introduction to psychrometrics, heat transmission in building materials, building heat losses and cooling loads and passive solar heating. Survey of air conditioning systems, design of systems for control of the thermal environment in buildings and influences of fenestration, shading and orientation. (F)

4253 Environmental Control for Buildings II. Prerequisite: 3223 and program admission. Relationship of lighting quality to human performance; principles of illumination and electrical power distribution systems; electrical code requirements and automatic control; introduction to piping design, alarm systems, lift controls, architectural acoustics and noise control. (Sp)

4333 Architectural Structures I. Prerequisite: 3323 and program admission. Structural design of simple building frameworks; loads; simple structural systems for gravity, lateral, and seismic loads in steel, wood, and masonry; connections; structural detailing. (F, Sp, Su)

4343 Architectural Structures II. Prerequisite: 3323 and program admission. Structural design of continuous building frameworks; loads; concrete structural systems; foundations; connections; structural detailing. (F, Su)

4443 History of the American Built Environment. Prerequisite: EN D 2413 and 2423 or permission. Survey of the American built environment from initial settlement and subsequent European colonization through the middle of the twentieth century. The integral nature of the built environment, the unique characteristics of the American frontier, and the heterogeneous nature of the American culture will be emphasized. Buildings, urban patterns and ideas will be studied, supported by examples ranging from the recognized standards to the commonplace. (F)

4575 Architectural Design/Building Systems Integration. Prerequisite: 3223, 3232, 3565, 4333 or 4343. Integration of structures, environmental systems, construction materials and architectural detailing. Emphasis on the use of production and presentation drawings to communicate technical information. **Laboratory** (F, Su)

4585 Architectural Design/Special Topics. Prerequisite: 4575. Studio-based investigation of special topics in architecture or field study in a placement approved by the instructor. (Sp)

G5043 Project Management. Prerequisite: 4033 or permission. Continuation of 4033. Management of the various phases within a project sequence: schematic design, design development, construction documents, bid/negotiation, construction administration. Emphasis on owner/architect relationships. (F)

G5052 Professional Practice (Crosslisted with Landscape Architecture 5052). Prerequisite: 5043 or permission of instructor. Survey of career options, internship, registration, firm organization, office management, professional conduct and ethics within the practice of architecture. (F, Sp)

G5505 Architectural Design/Comprehensive Project. Prerequisite: 4243, 4253, 4333, 4343, 5595. Major individual design Project. Emphasis on comprehensive, integrated design solution to the human, environmental and technological concerns encountered in a complex architectural problem. **Laboratory** (Sp)

G5595 Architectural Design/Urban Design. Prerequisite: 4585, 4243 or 4253, 4333 or 4343. Studio-based investigation of interbuilding relationships; team and individual projects. Emphasis on the relationship of architecture to urban design, landscape architecture and regional/city planning. **Laboratory**

COURSES IN ENVIRONMENTAL DESIGN (EN D)

1011 Introduction to the Built Environment. Introduction of the issues and factors that define quality in the built environment, including a discussion of current trends; a brief survey of the various design disciplines and the professional responsibilities of each. (F)

1133 Graphics I. Prerequisite: 1011, 1511; corequisite: 1524. Introduction to visual communications for the design professions, including technical drawing, empirical perspective, freehand drawing, and an introduction to computer graphics. (Sp, Su)

1511 Studies in Visual Acuity. Corequisite for majors: 1011. An introduction to formal design principles applied to the built environment: architecture, interiors, and landscapes. Attention is given to definitions with emphasis on illustrations to explore a range of applications across cultures, time, and disciplines. Stressed is the use of principles, concepts and techniques to create and communicate relationships among function, technology and context. (F)

1524 Design I. Prerequisite: 1011 and 1511; corequisite: 1133. An introduction to the basic principles and fundamental concepts for the design professions, with emphasis on color theory and application, materials and proportioning systems. (F, Sp)

2013 Human Aspects of Design. An introduction to cultural, social and behavioral factors and their implications for the planning and design of the built environment. (Sp)

2143 Graphics II. Prerequisite: 1133, 1524; corequisite: 2534. Theory and methods of measured perspective and shade and shadow. Continued work in computer graphics, and an introduction to presentation techniques. (F)

2212 Nature and Use of Materials. An introduction to basic building materials: their history, sources, manufacture, properties, products and systems. (F)

2413 History of the Built Environment I. A survey of the built environment from the first human presence through the Middle Ages, stressing the integral nature of the built environment and the cultural milieu. Buildings, urban patterns and ideas will be emphasized. Examples will range from recognized standards to the commonplace. (F, Sp)

2423 History of the Built Environment II. Prerequisite: 2413. A continuation of 2413 from the Middle Ages through the early twentieth century. (F, Sp)

2534 Design II. Prerequisite: 1133, 1524; corequisite: 2143. Emphasis on issues of form and space, natural light, climate, and site. An introduction to issues of building design, focusing on landscape, interiors and the building. (F)