

ARCHITECTURAL ENGINEERING: MECHANICAL, ELECTRICAL AND PLUMBING, BEN

Requirements for Students Matriculating in or before Academic Year 2019-2020. Learn more about University Academic Regulation 3.1 (<http://catalog.okstate.edu/university-academic-regulations/#matriculation>).

Minimum Overall Grade Point Average: 2.00

Total Hours: 157

Code	Title	Hours
General Education Requirements		
All General Education coursework requirements are satisfied upon completion of this degree plan		
<i>English Composition</i>		
See Academic Regulation 3.5 (http://catalog.okstate.edu/university-academic-regulations/#english-composition)		
ENGL 1113	Composition I ¹	3
or ENGL 1313	Critical Analysis and Writing I	
Select one of the following:		3
ENGL 1213	Composition II	
ENGL 1413	Critical Analysis and Writing II	
ENGL 3323	Technical Writing	
<i>American History & Government</i>		
Select one of the following:		3
HIST 1103	Survey of American History	
HIST 1483	American History to 1865 (H)	
HIST 1493	American History Since 1865 (DH)	
POLS 1113	American Government	3
<i>Analytical & Quantitative Thought (A)</i>		
MATH 2144	Calculus I (A) ¹	4
MATH 2153	Calculus II (A)	3
<i>Humanities (H)</i>		
ARCH 2003	Architecture and Society (HI)	3
Select 3 Hours		3
ARCH 3083	History and Theory of Baroque Architecture (H)	
ARCH 4173	History and Theory of Skyscraper Design (H)	
ARCH 4293	The Ethics of the Built Environment (H)	
ARCH 4374	International Field Study (HI)	
Any other ARCH (H)		
ART 3603	History of Classical Art (H)	
ART 3623	History of Italian Renaissance Art (H)	
ART 3633	History of Baroque Art (H)	
Any upper-division HIST (H)		
<i>Natural Sciences (N)</i>		
CHEM 1414	General Chemistry for Engineers (LN)	4
PHYS 2014	University Physics I (LN) ¹	4

Select one of the following		4
BIOL 1114	Introductory Biology (LN)	
CHEM 1314	Chemistry I (LN)	
CHEM 1515	Chemistry II (LN)	
GEOG 1114	Physical Geography (LN)	
GEOL 1014	Geology and Human Affairs (LN)	
GEOL 1114	Physical Geology (LN)	
<i>Social & Behavioral Sciences (S)</i>		
Consult the college & departmental requirements		
Any lower division course designated (S)		3
Any upper division course designated (S)		3
Hours Subtotal		43
<i>Diversity (D)</i>		
Any course designated (D)		
Students are encouraged to meet the requirement in their selection of (H) or (S) course work		
<i>International Dimension (I)</i>		
ARCH 2003 meets the (I) requirement		
<i>Scientific Investigation (L)</i>		
Any course designated (L). Normally met by Natural Sciences and/or Basic Science requirements.		
College/Departmental Requirements		
<i>Engineering Science</i>		
ENSC 2113	Statics ¹	3
ENSC 2143	Strength of Materials ¹	3
<i>Architecture</i>		
ARCH 1112	Introduction to Architecture ¹	2
ARCH 1216	Architectural Design Studio I ¹	6
ARCH 2116	Architectural Design Studio II ¹	6
ARCH 2216	Architectural Design Studio III ¹	6
ARCH 2263	Building Systems ¹	3
Hours Subtotal		29
Major Requirements/Professional School		
Admitted to Professional School of Architecture (see requirements for admission to the upper-division)		
<i>Architecture</i>		
ARCH 3223	Structures: Timbers	3
ARCH 3262	Computer Applications in Architecture II	2
ARCH 3323	Structures: Steel I	3
ARCH 4093	Architectural Project Management	3
ARCH 4123	Structures: Concrete I	3
ARCH 4131	Architectural Science Lab	1
ARCH 4134	Architectural Science I: Thermal Systems and Life Safety for Architectural Engineers	4
ARCH 4233	Sustainable Design in Architecture	3
ARCH 4263	Architecture Seminar	3
ARCH 4433	Architectural Science II: Acoustics, Lighting, and Service Systems for Architectural Engineers	3
ARCH 5226	Architectural Engineering Comprehensive Design Studio	6
<i>Mechanical and Aerospace Engineering</i>		
MAE 3223	Thermodynamics II	3

MAE 3233	Heat Transfer	3
<i>Fire Protection and Safety Technology</i>		
FPST 1373	Fire Suppression and Detection Systems	3
<i>Industrial Engineering & Management</i>		
IEM 3503	Engineering Economic Analysis	3
<i>Engineering Science, Engineering</i>		
ENSC 2123	Elementary Dynamics	3
ENSC 2213	Thermodynamics	3
ENSC 2613	Introduction to Electrical Science	3
ENSC 3233	Fluid Mechanics	3
ENGR 1412	Introductory Engineering Computer Programming ¹	2
<i>Mathematics</i>		
MATH 2163	Calculus III	3
MATH 2233	Differential Equations	3
<i>Statistics</i>		
STAT 4033	Engineering Statistics	3
<i>Natural Sciences (N)</i>		
PHYS 2114	University Physics II (LN)	4
<i>Controlled Electives</i>		
Select 12 credit hours from:		12
ARCH 3100	Special Topics in Architecture	
ARCH 4100	Special Topics in Architecture	
FPST 2243	Design and Analysis of Sprinkler Systems	
FPST 2483	Fluid Mechanics for Fire Protection	
FPST 3143	Life Safety Analysis	
FPST 3383	Building Electrical Systems	
FPST 4143	Industrial Ventilation and Smoke Control	
MAE 3293	Fundamentals of Aerodynamics	
MAE 3403	Computer Methods in Analysis and Design	
MAE 4263	Energy Conversion Systems	
MAE 4273	Experimental Fluid Dynamics	
MAE 4703	Design of Indoor Environmental Systems	
MAE 4713	Thermal Systems Realization	
MAE 4733	Mechatronics Design	
Upper division ARCH, FPST, MAE, or ENGR.		
Hours Subtotal		85
Total Hours		157

¹ Courses that must be completed prior to admission to professional school.

Admission to Professional School (required)

- Refer to the OSU Catalog corresponding to your matriculation date for detailed admissions requirements.

Graduation Requirements

- A final grade of 'C' or better in all ARCH prefix courses, substitutions for ARCH prefix courses, and all non-ARCH prefix courses that are a prerequisite to an ARCH prefix course.
- The capstone course for Architectural Engineering majors is ARCH 5226 Architectural Engineering Comprehensive Design Studio.

Additional State/OSU Requirements

- At least: 60 hours at a four-year institution; 30 hours completed at OSU; 15 of the final 30 or 50% of the upper-division hours in the major field completed at OSU.
- Limit of: one-half of major course requirements as transfer work; one-fourth of hours earned by correspondence; 8 transfer correspondence hours.
- Students will be held responsible for degree requirements in effect at the time of matriculation and any changes that are made, so long as these changes do not result in semester credit hours being added or do not delay graduation.
- Degrees that follow this plan must be completed by the end of Summer 2025.