

# ARCHITECTURAL ENGINEERING: STRUCTURES, BEN

**Requirements for Students Matriculating in or before Academic Year 2022-2023.** 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: 140**

Code	Title	Hours
<b>General Education Requirements</b>		
All General Education coursework requirements are satisfied upon completion of this degree plan		
<i>English Composition</i>		
See Academic Regulation 3.5 ( <a href="http://catalog.okstate.edu/university-academic-regulations/#english-composition">http://catalog.okstate.edu/university-academic-regulations/#english-composition</a> )		
ENGL 1113	Composition I <sup>1</sup>	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 &amp; 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 &amp; Quantitative Thought (A)</i>		
MATH 2144	Calculus I (A) <sup>1</sup>	4
MATH 2153	Calculus II (A)	3
<i>Humanities (H)</i>		
ARCH 2003	Architecture and Society (HI)	3
Select 3 hours from the following:		3
ARCH 3083	History and Theory of Renaissance and Baroque Architecture (H)	
ARCH 3473	History and Theory of Structures in 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)		
Any other upper division HIST (H) Any upper ART (H)		
<i>Natural Sciences (N)</i>		
CHEM 1414	General Chemistry for Engineers (LN)	4
PHYS 2014	University Physics I (LN) <sup>1</sup>	4
PHYS 2114	University Physics II (LN)	4
3 hours of (N)		3
<i>Social &amp; Behavioral Sciences (S)</i>		

Select 3 hours lower division (S)		3
<b>Hours Subtotal</b>		<b>43</b>
<b>Diversity (D) &amp; International Dimension (I)</b>		
May be completed in any part of the degree plan		
At least one Diversity (D) course		
At least one International Dimension (I) course		
Scientific Investigation (L) Any course designated (L). Normally met by Natural Sciences and/or Basic Science requirements.		
<b>College/Departmental Requirements</b>		
<i>Architecture</i>		
ARCH 1112	Introduction to Architecture <sup>1</sup>	2
ARCH 1216	Architectural Design Studio I <sup>1</sup>	6
ARCH 2116	Architectural Design Studio II	6
ARCH 2252	Design Communication I: Visual and Graphic Acuity <sup>1</sup>	2
ARCH 2263	Building Systems <sup>1</sup>	3
<i>Engineering Science</i>		
ENGR 1412	Introductory Engineering Computer Programming <sup>1</sup>	2
ENSC 2113	Statics <sup>1</sup>	3
ENSC 2143	Strength of Materials <sup>1</sup>	3
ENSC 2141	Strength of Materials Lab <sup>1</sup>	1
<b>Hours Subtotal</b>		<b>28</b>
<b>Major Requirements</b>		
<i>Architecture</i>		
ARCH 3043	Structural Loadings in Architecture	3
ARCH 3143	Structures: Analysis I	3
ARCH 3262	Design Communication II: Advanced Digital Applications	2
ARCH 3323	Structures: Steel I	3
ARCH 3343	Structures: Steel II	3
ARCH 4093	Architectural Project Management	3
ARCH 4123	Structures: Concrete I	3
ARCH 4143	Structures: Foundations for Buildings	3
ARCH 4163	Architectural Science I: Thermal Systems and Life Safety for Architectural Engineers	3
ARCH 4263	Architecture Seminar	3
ARCH 4343	Structures: Concrete II	3
ARCH 4433	Architectural Science II: Acoustics, Lighting, and Service Systems for Architectural Engineers	3
ARCH 5023	Masonry Design and Analysis	3
ARCH 5226	Architectural Engineering Comprehensive Design Studio	6
<i>Civil Engineering</i>		
CIVE 4711	Basic Soils Testing Laboratory	1
<i>Industrial Engineering &amp; Management</i>		
IEM 3503	Engineering Economic Analysis	3
<i>Engineering Science, Engineering</i>		
ENSC 2123	Elementary Dynamics	3
ENSC 3313	Materials Science	3
<i>Mathematics</i>		
MATH 2163	Calculus III	3

MATH 2233	Differential Equations	3
<i>Statistics</i>		
STAT 4033	Engineering Statistics	3
<b>Hours Subtotal</b>		<b>63</b>
<b>Electives</b>		
Select 6 credit hours from:		6
ARCH 2890	Honors for Topics in Architecture	
ARCH 3100	Special Topics in Architecture	
ARCH 3473	History and Theory of Structures in Architecture (H)	
ARCH 4100	Special Topics in Architecture	
ARCH 4233	Sustainable Design in Architecture	
ARCH 5143	Structures: Special Loadings	
ARCH 6243	Structures: Analysis III	
ARCH 6343	Structures: Steel III	
ARCH 6543	Structures: Concrete III	
CIVE 3623	Engineering Materials Laboratory	
CIVE 3614	Engineering Surveying	
CIVE 5403	Advanced Strength of Materials	
CIVE 5433	Energy Methods in Applied Mechanics	
CIVE 5533	Prestressed Concrete	
CIVE 5573	Timber Design	
Upper division ARCH, FPST, MAE, ENGR, CIVE, CET		
<b>Hours Subtotal</b>		<b>6</b>
<b>Total Hours</b>		<b>140</b>

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Courses that must be completed prior to admission to professional school with a "C" or better.

## Admission to Professional School (required)

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

## Graduation Requirements

1. A minimum GPA of 2.00 Technical GPA. The Technical GPA is calculated from all courses in the curriculum with a prefix belonging to the degree program, or substitutions for these courses.
2. 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 final grade of "C" is however not needed in the terminal courses in a series.
3. 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 2028.