**ARCHITECTURAL ENGINEERING: STRUCTURES, BEN**

Requirements for Students Matriculating in or before Academic Year 2020-2021. Learn more about University Academic Regulation 3.1 ([http://catalog.okstate.edu/university-academic-regulations/#matriculation](http://catalog.okstate.edu/university-academic-regulations/#matriculation)).

**Minimum Overall Grade Point Average:** 2.00  
**Total Hours:** 140

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>ENGL</td>
<td>Composition I</td>
<td>3</td>
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<tr>
<td>or</td>
<td>Critical Analysis and Writing I</td>
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<tr>
<td>ENGL</td>
<td>Composition II</td>
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<tr>
<td>ENGL</td>
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<td>ENGL</td>
<td>Technical Writing</td>
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<tr>
<td>HIST</td>
<td>Survey of American History</td>
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<tr>
<td>HIST</td>
<td>American History to 1865 (H)</td>
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<tr>
<td>HIST</td>
<td>American History Since 1865 (DH)</td>
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<tr>
<td>POLS</td>
<td>American Government</td>
<td>3</td>
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<tr>
<td>MATH</td>
<td>Calculus I (A)</td>
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<tr>
<td>MATH</td>
<td>Calculus II (A)</td>
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<tr>
<td>ARCH</td>
<td>Architecture and Society (HI)</td>
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</tr>
<tr>
<td>ARCH</td>
<td>History and Theory of Renaissance and Baroque Architecture (H)</td>
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<tr>
<td>ARCH</td>
<td>History and Theory of Skyscraper Design (H)</td>
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<tr>
<td>ARCH</td>
<td>The Ethics of the Built Environment (H)</td>
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<tr>
<td>ARCH</td>
<td>International Field Study (HI)</td>
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<tr>
<td>ART</td>
<td>History of Classical Art (H)</td>
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<tr>
<td>ART</td>
<td>History of Italian Renaissance Art (H)</td>
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<tr>
<td>ART</td>
<td>History of Baroque Art (H)</td>
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<tr>
<td>Any other ARCH (H)</td>
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<tr>
<td>CHEM</td>
<td>General Chemistry for Engineers (LN)</td>
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<tr>
<td>PHYS</td>
<td>University Physics I (LN)</td>
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</tr>
<tr>
<td>PHYS</td>
<td>University Physics II (LN)</td>
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**General Education Requirements**

All General Education coursework requirements are satisfied upon completion of this degree plan.

**English Composition**

See [Academic Regulation 3.5](http://catalog.okstate.edu/university-academic-regulations/#english-composition).

**American History & Government**

Select one of the following:

- HIST 1103 Survey of American History  
- HIST 1483 American History to 1865 (H)  
- HIST 1493 American History Since 1865 (DH)  
- POLS 1113 American Government

**Analytical & Quantitative Thought (A)**

- MATH 2144 Calculus I (A)  
- MATH 2153 Calculus II (A)  
- MATH 2163 Calculus III

**Humanities (H)**

- ARCH 2003 Architecture and Society (HI)

Select 3 hours from the following:

- ARCH 3083 History and Theory of Renaissance and 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)

**Natural Sciences (N)**

- CHEM 1414 General Chemistry for Engineers (LN)  
- PHYS 2014 University Physics I (LN)  
- PHYS 2114 University Physics II (LN)

3 hours of (N)

**Social & Behavioral Sciences (S)**

Select 3 hours lower division (S)

**Hours Subtotal** 43

**Diversity (D) & International Dimension (I)**

May be completed in any part of the degree plan.

At least one Diversity (D) course

At least one International Dimension (I) course

**College/Departmental Requirements**

**Architecture**

- ARCH 1112 Introduction to Architecture  
- ARCH 1216 Architectural Design Studio I  
- ARCH 2116 Architectural Design Studio II  
- ARCH 2252 Design Communication I: Visual and Graphic Acuity  
- ARCH 2263 Building Systems

**Engineering Science**

- ENSC 2113 Statics  
- ENSC 2143 Strength of Materials  
- ENSC 2141 Strength of Materials Lab  
- ENGR 1412 Introductory Engineering Computer Programming

**Hours Subtotal** 28

**Major Requirements**

**Architecture**

- ARCH 3043 Structural Loadings in Architecture  
- ARCH 3143 Structures: Analysis I  
- ARCH 3343 Structures: Steel II  
- ARCH 3262 Design Communication II: Advanced Digital Applications  
- ARCH 3323 Structures: Steel I  
- ARCH 4433 Architectural Science II: Acoustics, Lighting, and Service Systems for Architectural Engineers  
- ARCH 4093 Architectural Project Management  
- ARCH 4123 Structures: Concrete I  
- ARCH 4143 Structures: Foundations for Buildings  
- ARCH 4163 Architecture Science 1: Thermal Systems and Life Safety for Architectural Engineers  
- ARCH 4263 Architecture Seminar  
- ARCH 4243 Structures: Concrete II  
- ARCH 5226 Architectural Engineering Comprehensive Design Studio  
- ARCH 5023 Masonry Design and Analysis  
- Civil Engineering  
- CIVE 4711 Basic Soils Testing Laboratory  
- Industrial Engineering & Management  
- IEM 3503 Engineering Economic Analysis  
- Engineering Science, Engineering  
- ENSC 2123 Elementary Dynamics  
- ENSC 3313 Materials Science  
- Mathematics  
- MATH 2163 Calculus III
MATH 2233  Differential Equations  3  
Statistics
STAT 4033  Engineering Statistics  3
Natural/Basic Science

Electives
Select 6 credit hours from:

ARCH 2890  Honors for Topics in Architecture
ARCH 3100  Special Topics in Architecture
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, or ENGR.

Total Hours 140

1 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 2026.