# CIVIL ENGINEERING: ENVIRONMENTAL, BSCV

## 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:** 128

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR 1111</td>
<td>Introduction to Engineering</td>
<td>1</td>
</tr>
<tr>
<td>ENGR 1322</td>
<td>Engineering Design with CAD</td>
<td>2</td>
</tr>
<tr>
<td>ENGR 1412</td>
<td>Introductory Engineering Computer Programming</td>
<td>2</td>
</tr>
<tr>
<td>ENSC 2113</td>
<td>Statics</td>
<td>3</td>
</tr>
<tr>
<td>ENSC 2123</td>
<td>Elementary Dynamics</td>
<td>3</td>
</tr>
<tr>
<td>ENSC 2143</td>
<td>Strength of Materials</td>
<td>3</td>
</tr>
<tr>
<td>CIVE 2041</td>
<td>Civil and Environmental Engineering Seminar</td>
<td>1</td>
</tr>
<tr>
<td>CIVE 3614</td>
<td>Engineering Surveying</td>
<td>4</td>
</tr>
<tr>
<td>CIVE 3813</td>
<td>Environmental Engineering Science</td>
<td>3</td>
</tr>
<tr>
<td>CIVE 3623</td>
<td>Environmental Engineering Laboratory</td>
<td>3</td>
</tr>
<tr>
<td>CIVE 3633</td>
<td>Transportation Engineering</td>
<td>3</td>
</tr>
<tr>
<td>CIVE 4010</td>
<td>Civil Engineering Research</td>
<td>3</td>
</tr>
<tr>
<td>CIVE 4013</td>
<td>Aquatic Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>CIVE 4033</td>
<td>GIS Applications for Water Resources</td>
<td>3</td>
</tr>
<tr>
<td>CIVE 4050</td>
<td>Special Topics in Civil &amp; Environmental Engineering</td>
<td>3</td>
</tr>
<tr>
<td>CIVE 4123</td>
<td>The Legal &amp; Regulatory Environment of Civil Engineering</td>
<td>3</td>
</tr>
<tr>
<td>CIVE 4243</td>
<td>Use and Design of Geosynthetics</td>
<td>3</td>
</tr>
<tr>
<td>CIVE 4863</td>
<td>Advanced Unit Operations in Environmental Engineering</td>
<td>3</td>
</tr>
<tr>
<td>CIVE 4873</td>
<td>Air Pollution Control Engineering</td>
<td>3</td>
</tr>
<tr>
<td>CIVE 4883</td>
<td>Introduction to Environmental Modeling</td>
<td>3</td>
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</table>

**Engineering Science**

**Civil Engineering**

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

May be completed in any part of the degree plan.

Select at least one Diverse (D) course

Select at least one International Dimension (I) course

**College/Departmental Requirements**

<table>
<thead>
<tr>
<th>Basic Science</th>
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</thead>
<tbody>
<tr>
<td>PHYS 2014</td>
<td>University Physics I (LN)</td>
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<tr>
<td>PHYS 2114</td>
<td>University Physics II (LN)</td>
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</table>

## General Education Requirements

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

### English Composition

- ENGL 1113 Composition I $^1$  
- or ENGL 1313 Critical Analysis and Writing I
- ENGL 3323 Technical Writing  
- or ENGL 1213 Composition II  
- or ENGL 1413 Critical Analysis and Writing II

### 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) $^1$  
- MATH 2153 Calculus II (A) $^1$  
- MATH 2163 Calculus III $^1$

### Humanities (H)

Courses designated (H)  

Must include one Laboratory Science (L) course.

- CHEM 1414 General Chemistry for Engineers (LN) $^1$  
- or CHEM 1515 Chemistry II (LN)
- BIOC 2344 Chemistry and Applications of Biomolecules  
- or BIOL 1114 Introductory Biology (LN)

### Social & Behavioral Sciences (S)

- SPCH 2713 Introduction to Speech Communication (S)  
- Select 3 hours of any course designated (S)

**Hours Subtotal**: 42

## College/Departmental Requirements

**Basic Science**

<table>
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<tr>
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## Major Requirements

**Mathematics**

- MATH 2233 Differential Equations $^1$  
- or STAT 4033 Engineering Statistics
- or STAT 4073 Engineering Statistics with Design of Experiments

**Engineering Science**

- ENSC 3233 Fluid Mechanics $^1$  

**Civil Engineering**

- CIVE 3614 Engineering Surveying
- CIVE 3813 Environmental Engineering Science

**Electives**

Select 9 hours of the following:

- CIVE 4010 Civil Engineering Research
- CIVE 4013 Aquatic Chemistry
- CIVE 4033 GIS Applications for Water Resources
- CIVE 4050 Special Topics in Civil & Environmental Engineering
- CIVE 4123 The Legal & Regulatory Environment of Civil Engineering
- CIVE 4243 Use and Design of Geosynthetics
- CIVE 4863 Advanced Unit Operations in Environmental Engineering
- CIVE 4873 Air Pollution Control Engineering
- CIVE 4883 Introduction to Environmental Modeling

**Hours Subtotal**: 47
CIVE 4913  Groundwater Hydrology
CIVE 4923  Environ Risk Assessment
CIVE 4933  Water Treatment
CIVE 4943  Risk and Failure Analysis of Dams
CIVE 4963  Open Channel Flow
CIVE 4983  Residuals & Solid Waste Management

ENGR 4043 or ENGR 4060 may be used for one CIVE elective.

<table>
<thead>
<tr>
<th>Hours Subtotal</th>
<th>9</th>
</tr>
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<td>Total Hours</td>
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</table>

1 Complete courses prior to admission to Professional School.

Other Requirements

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 is required in Professional School coursework (right hand column).
2. A ‘C’ or better is required in each course that is a prerequisite for a CIVE course.
3. The major engineering design experience, capstone course, is satisfied by CIVE 4143 Environmental Engineering Design. If “B” or higher is not earned in ENGL 1113 Composition I, then ENGL 1213 Composition II must be completed.

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.