## 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](http://catalog.okstate.edu/university-academic-regulations/#matriculation)).

Minimum Overall Grade Point Average: 2.00
Total Hours: 128

### Code | Title | Hours
--- | --- | ---

#### General Education Requirements

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

**English Composition**
- ENGL 1113 Composition I 1
- ENGL 1313 Critical Analysis and Writing I

**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)

**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) 6

**Natural Sciences (N)**
- Must include one Laboratory Science (L) course.
  - CHEM 1414 General Chemistry for Engineers (LN) 1
  - BIOC 2344 Chemistry and Applications of Biomolecules
  - or BIOL 1114 Introductory Biology (LN)

**Social & Behavioral Sciences (S)**
- SPCH 2713 Introduction to Speech Communication (S) 3

**Hours Subtotal** 42

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

May be completed in any part of the degree plan.

- Select at least one Diversity (D) course
- Select at least one International Dimension (I) course

#### College/Departmental Requirements

**Basic Science**
- PHYS 2014 University Physics I (LN) 1
- PHYS 2114 University Physics II (LN) 1

**Engineering**
- ENGR 1111 Introduction to Engineering
- ENGR 1322 Engineering Design with CAD
- ENGR 1412 Introductory Engineering Computer Programming

**Engineering Science**
- ENSC 2113 Statics 1
- ENSC 2123 Elementary Dynamics 1
- ENSC 2143 Strength of Materials 1

**Civil Engineering**
- CIVE 2041 Civil and Environmental Engineering Seminar
- CIVE 3614 Engineering Surveying
- CIVE 3813 Environmental Engineering Science 3

**Hours Subtotal** 30

#### Major Requirements

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

**Engineering Science**
- ENSC 3233 Fluid Mechanics 1

**Civil Engineering**
- CIVE 3413 Structural Analysis 1
- CIVE 3523 Reinforced Concrete Design
- CIVE 3853 Environmental Engineering Laboratory
- CIVE 3863 Environmental Engineering Laboratory
- CIVE 3833 Hydrology I
- CIVE 4041 Engineering Practice
- CIVE 4143 Environmental Engineering Design
- CIVE 4273 Construction Engineering and Project Management
- CIVE 4833 Unit Operations in Environmental Engineering

**Industrial Engineering & Management**
- IEM 3503 Engineering Economic Analysis 3

**Hours Subtotal** 47

#### 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
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>CIVE 4913</td>
<td>Groundwater Hydrology</td>
</tr>
<tr>
<td>CIVE 4923</td>
<td>Environ Risk Assessment</td>
</tr>
<tr>
<td>CIVE 4933</td>
<td>Water Treatment</td>
</tr>
<tr>
<td>CIVE 4943</td>
<td>Risk and Failure Analysis of Dams</td>
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<tr>
<td>CIVE 4963</td>
<td>Open Channel Flow</td>
</tr>
<tr>
<td>CIVE 4983</td>
<td>Residuals &amp; Solid Waste Management</td>
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<tr>
<td>ENGR 4043 or ENGR 4060</td>
<td>may be used for one CIVE elective.</td>
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<thead>
<tr>
<th>Hours Subtotal</th>
<th>9</th>
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<tbody>
<tr>
<td>Total Hours</td>
<td>128</td>
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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.