**Civil Engineering, BSCV**

**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:** 128

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Education Requirements</td>
<td></td>
<td></td>
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<tr>
<td>English Composition</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGL 1113</td>
<td>Composition I</td>
<td>3</td>
</tr>
<tr>
<td>or ENGL 1313</td>
<td>Critical Analysis and Writing I</td>
<td></td>
</tr>
<tr>
<td>ENGL 3323</td>
<td>Technical Writing</td>
<td>3</td>
</tr>
<tr>
<td>or ENGL 1213</td>
<td>Composition II</td>
<td></td>
</tr>
<tr>
<td>or ENGL 1413</td>
<td>Critical Analysis and Writing II</td>
<td></td>
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<tr>
<td>American History &amp; Government</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
<td>3</td>
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<tr>
<td>HIST 1103</td>
<td>Survey of American History</td>
<td></td>
</tr>
<tr>
<td>HIST 1483</td>
<td>American History to 1865 (H)</td>
<td></td>
</tr>
<tr>
<td>HIST 1493</td>
<td>American History Since 1865 (DH)</td>
<td></td>
</tr>
<tr>
<td>POLS 1113</td>
<td>American Government</td>
<td>3</td>
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<tr>
<td>Analytical &amp; Quantitative Thought (A)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MATH 2144</td>
<td>Calculus I (A)</td>
<td>4</td>
</tr>
<tr>
<td>MATH 2153</td>
<td>Calculus II (A)</td>
<td>3</td>
</tr>
<tr>
<td>Humanities (H)</td>
<td></td>
<td>6</td>
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<tr>
<td>Courses designated (H)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Natural Sciences (N)</td>
<td></td>
<td></td>
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<tr>
<td>Must include one Laboratory Science (L) course.</td>
<td></td>
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<tr>
<td>CHEM 1414</td>
<td>General Chemistry for Engineers (LN)</td>
<td>4</td>
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<tr>
<td>or CHEM 1314</td>
<td>Chemistry I (LN)</td>
<td></td>
</tr>
<tr>
<td>BIOL 1114</td>
<td>Introductory Biology (LN)</td>
<td>4</td>
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<tr>
<td>or BIOL 1113</td>
<td>Introductory Biology (N)</td>
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</tr>
<tr>
<td>&amp; BIOL 1111</td>
<td>and Introductory Biology Laboratory (LN)</td>
<td></td>
</tr>
<tr>
<td>or GEOL 1114</td>
<td>Physical Geology (LN)</td>
<td></td>
</tr>
<tr>
<td>PHYS 2014</td>
<td>University Physics I (LN)</td>
<td>4</td>
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<tr>
<td>Social &amp; Behavioral Sciences (S)</td>
<td></td>
<td></td>
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<tr>
<td>SPCH 2713</td>
<td>Introduction to Speech Communication (S)</td>
<td>3</td>
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<tr>
<td>Hours Subtotal</td>
<td></td>
<td>40</td>
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</tbody>
</table>

| 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                                                                 |                                                   |       |
| Select one of the following options:                               |                                                   | 5     |

| Major Requirements                                              |                                                   |       |

| Mathematics                                                    |                                                   |       |
| MATH 2163                                                      | Calculus III                                      | 3     |
| Engineering                                                    |                                                   |       |
| ENGR 1111                                                      | Introduction to Engineering                       | 1     |
| ENGR 1322                                                      | Engineering Design with CAD                       | 2     |
| ENGR 1412                                                      | Introductory Engineering Computer Programming     |       |
| Engineering Science                                            |                                                   | 3     |
| ENSC 2113                                                      | Statics                                           |       |
| ENSC 2123                                                      | Elementary Dynamics                               | 3     |
| ENSC 2143                                                      | Strength of Materials                             | 3     |
| ENSC 2141                                                      | Strength of Materials Lab                         | 1     |
| Civil Engineering                                              |                                                   |       |
| CIVE 2041                                                      | Civil and Environmental Engineering Seminar       | 1     |
| CIVE 3614                                                      | Engineering Surveying                             | 4     |
| CIVE 3813                                                      | Environmental Engineering Science                 | 3     |
| Hours Subtotal                                                |                                                   | 31    |

| 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 4103  Construction Simulation
CIVE 4113  Construction Business Management
CIVE 4123  The Legal & Regulatory Environment of Civil Engineering
CIVE 4133  Construction Contracts and Specifications
CIVE 4153  Contract Administration
CIVE 4163  Construction Equipment Management
CIVE 4183  Construction Estimating
CIVE 4193  BIM for Construction
CIVE 4243  Use and Design of Geosynthetics
CIVE 4283  Numerical Methods in Geotechnical Engineering
CIVE 4293  Design and Analysis of Earth Retaining Structures
CIVE 4303  Systems Analysis for Civil Engineers
CIVE 4313  Highway Traffic Operations
CIVE 4323  Civil Infrastructure Systems
CIVE 4343  Urban Transportation Planning
CIVE 4363  Design and Planning of Airports
CIVE 4373  Design of Traffic Control Systems
CIVE 4383  Geometric Design of Highways
CIVE 4403  Advanced Strength of Materials
CIVE 4413  Classical and Matrix Methods of Structural Analysis
CIVE 4513  Advanced Reinforced Concrete Design
CIVE 4523  Advanced Steel Structure Design
CIVE 4533  Prestressed Concrete
CIVE 4563  Structural Dynamics
CIVE 4573  Timber Design
CIVE 4653  Asphalt Materials and Mix Design
CIVE 4673  Concrete Materials and Mix Design
CIVE 4693  Pavement Design and Analysis
CIVE 4723  Foundation Engineering
CIVE 4733  Soil Mechanics
CIVE 4773  Soil-Structure Interaction
CIVE 4743  Project Engineering and Management
CIVE 4753  Engineering Soil Stabilization
CIVE 4873  Air Pollution Control Engineering
CIVE 4863  Advanced Unit Operations in Environmental Engineering
CIVE 4913  Groundwater Hydrology
CIVE 4923  Environ Risk Assessment
CIVE 4933  Water Treatment
CIVE 4943  Risk and Failure Analysis of Dams
CIVE 4983  Residuals & Solid Waste Management
CIVE 4963  Open Channel Flow
CIVE 4973  Concrete Durability

Chem 1515 fulfills the requirements for both CHEM 1414 and CIVE 2081.

Other Requirements
Graduation Requirements
1. A minimum 2.00 Technical GPA. The technical GPA is calculated from all courses counting in the curriculum with a prefix belonging to the degree program, or substitutions for these courses.
2. A ‘C’ or better is required in all CIVE, ENSC, and Math prefixed courses required in the degree.
3. If “B” or higher is not earned in ENGL 1113 Composition I, then ENGL 1213 Composition II must be completed.
4. The major engineering design experience, capstone course, is satisfied by CIVE 4043 Senior Design.

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.