To graduate in this program, a grade of 'C' or better is required in all math, science, and engineering courses used to fulfill degree requirements. Students may accumulate no more than 14 credit hours of 'D' or 'F' in math, science, or engineering courses. Included in this number are multiple repeats of a single class or single repeats of multiple classes, as well as courses transferred from other institutions. Students who exceed 14 credits of 'D' or 'F' will be permanently disqualified from pursuing the B.S. degree in Civil Engineering at the University of Idaho. To complete this degree, all students must show proof of registering for the Fundamentals of Engineering (FE) Exam.

Required course work includes the university requirements (see regulation J-3) and:

- Students must show proof of registering for the Fundamentals of Engineering (FE) Exam.
- A total of 18 credits are required from:
  - CE-prefix 400-level courses
  - GEOE-prefix 400-level courses

Courses to total at least 121 credits for this degree, not counting Math below 170 and English below 102.

### Four-Year Plan

<table>
<thead>
<tr>
<th>Term</th>
<th>Courses</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall Term 1</td>
<td>Fundamentals of Oral Communication</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ENGR 123 First Year Engineering</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>ENGR 210 Engineering Static</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ENGR 335 Engineering Fluid Mechanics</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ENGR 350 Engineering Mechanics of Materials</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ENGR 360 Engineering Economy</td>
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<tr>
<td></td>
<td>GEOL 111 Physical Geology for Science Majors and General Chemistry I Lab</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>MATH 170 Calculus I</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>MATH 175 Calculus II</td>
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</tr>
<tr>
<td></td>
<td>MATH 275 Calculus III</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>MATH 310 Ordinary Differential Equations</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>PHIL 103 Introduction to Ethics</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>or PHIL 208 Business Ethics</td>
<td></td>
</tr>
<tr>
<td></td>
<td>PHYS 211 Engineering Physics I</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>&amp; 211L and Laboratory Physics I</td>
<td></td>
</tr>
<tr>
<td></td>
<td>STAT 301 Probability and Statistics</td>
<td>3</td>
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<td></td>
<td>Select one of the following:</td>
<td>3-4</td>
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<tr>
<td></td>
<td>ECON 201 Principles of Macroeconomics</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ECON 202 Principles of Microeconomics</td>
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</tr>
</tbody>
</table>

### ECON Electives

Select one of the following:

- ECON 272 Foundations of Economic Analysis
- BIOL 114 Organisms and Environments
- BIOL 115 Cells and the Evolution of Life
- CHEM 112 General Chemistry I
- EPPN 154 Microbiology and the World Around Us
- PHYS 212 Engineering Physics II
- PHYS 213 Engineering Physics III
- MATH 330 Linear Algebra
- STAT 431 Statistical Analysis

### Civil Engineering Electives

A total of 18 credits are required from:

- CE-prefix 400-level courses
- GEOE-prefix 400-level courses

Total Hours 113-115

1. Except CE 400, CE 403, CE 411, CE 493, CE 498, and CE 499.
2. Except GEOE 403 and GEOE 499.

American Diversity Course 3

### Fall Term 2

<table>
<thead>
<tr>
<th>courses</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CE 211 Engineering Surveying</td>
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</tr>
<tr>
<td>CHEM 111 General Chemistry I</td>
<td>3</td>
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<tr>
<td>CHEM 111L General Chemistry I Laboratory</td>
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<tr>
<td>ENGR 220 Engineering Dynamics</td>
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<tr>
<td>ENGR 350 Engineering Mechanics of Materials</td>
<td>3</td>
</tr>
<tr>
<td>MATH 275 Calculus III</td>
<td>3</td>
</tr>
<tr>
<td>MATH 310 Ordinary Differential Equations</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 208 Business Ethics</td>
<td></td>
</tr>
<tr>
<td>PHYS 211 Engineering Physics I</td>
<td>4</td>
</tr>
<tr>
<td>&amp; 211L and Laboratory Physics I</td>
<td></td>
</tr>
<tr>
<td>STAT 301 Probability and Statistics</td>
<td>3</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td>3-4</td>
</tr>
<tr>
<td>ECON 201 Principles of Macroeconomics</td>
<td></td>
</tr>
<tr>
<td>ECON 202 Principles of Microeconomics</td>
<td></td>
</tr>
</tbody>
</table>

### Spring Term 2

<table>
<thead>
<tr>
<th>Courses</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CE 215 Civil Engineering Analysis and Design</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 335 Engineering Fluid Mechanics</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 350 Engineering Mechanics of Materials</td>
<td>3</td>
</tr>
<tr>
<td>MATH 310 Ordinary Differential Equations</td>
<td>3</td>
</tr>
<tr>
<td>STAT 301 Probability and Statistics</td>
<td>3</td>
</tr>
<tr>
<td>Fall Term 3</td>
<td>15</td>
</tr>
<tr>
<td>CE 322 Hydraulics</td>
<td>4</td>
</tr>
</tbody>
</table>
## Five-Year Plan

### Fall Term 1
- **ENGL 101**: Writing and Rhetoric I
- **ENGR 123**: First Year Engineering
- **GEOL 111**: Physical Geology for Science Majors
- **GEOL 111L**: Physical Geology for Science Majors Lab
- **MATH 143**: College Algebra
- **MATH 144**: Analytic Trigonometry
- **Humanistic and Artistic Ways of Knowing Course**

**Total Hours**: 16

### Spring Term 1
- **COMM 101**: Fundamentals of Oral Communication
- **CE 105**: Civil Engineering Drafting
- **ENGL 102**: Writing and Rhetoric II
- **MATH 170**: Calculus I

**Total Hours**: 13

### Fall Term 2
- **CE 211**: Engineering Surveying
- **ENGR 210**: Engineering Statics
- **MATH 175**: Calculus II
- **American Diversity Course**

**Total Hours**: 13

### Spring Term 2
- **MATH 275**: Calculus III
- **PHYS 211**: Engineering Physics I
- **PHYS 211L**: Laboratory Physics I
- **International Course**
- **ECON 201 OR ECON 202 OR ECON 272**

**Total Hours**: 13

### Fall Term 3
- **CHEM 111**: General Chemistry I
- **CHEM 111L**: General Chemistry I Laboratory
- **ENGR 220**: Engineering Dynamics
- **Social and Behavioral Ways of Knowing Course**
- **PHIL 103 OR PHIL 208**

**Total Hours**: 13

### Spring Term 3
- **CE 215**: Civil Engineering Analysis and Design
- **ENGR 335**: Engineering Fluid Mechanics
- **ENGR 350**: Engineering Mechanics of Materials
- **MATH 310**: Ordinary Differential Equations
- **STAT 301**: Probability and Statistics

**Total Hours**: 15

### Fall Term 4
- **CE 322**: Hydraulics
- **CE 330**: Fundamentals of Environmental Engineering
- **CE 342**: Theory of Structures
- **CE 357**: Properties of Construction Materials

**Total Hours**: 14

### Spring Term 4
- **CE 325**: Fundamentals of Hydrologic Engineering
- **CE 360**: Fundamentals of Geotechnical Engineering
- **CE 372**: Fundamentals of Transportation Engineering
- **400 level CE or GEOE Technical, Major Elective Course**

**Total Hours**: 13

### Fall Term 5
- **CE 493**: Senior Design I
- **ENGR 360**: Engineering Economy
- **400 level CE or GEOE Technical, Major Elective Course**
- **BIOL 114 OR BIOL 115 OR CHEM 112 OR MATH 330 OR PHYS 212 OR PHYS 213 OR STAT 431**

**Total Hours**: 14

### Spring Term 5
- **CE 494**: Senior Design II
- **Social and Behavioral Ways of Knowing Course**
- **ENGR 220**: Chemical Engineering
- **CHEM 111L**: General Chemistry I Laboratory
- **CHEM 111**: General Chemistry I
- **Fall Term 3**
- **Spring Term 3**
- **Fall Term 4**
- **Spring Term 4**
- **Fall Term 5**
- **Spring Term 5**

The degree map is a guide for the timely completion of your curricular requirements. Your academic advisor or department may be contacted for assistance in interpreting this map. This map is not reflective of your academic history or transcript and it is not official notification of completion of degree or certificate requirements. Please contact the Registrar’s Office regarding your official degree/certificate completion status.

1. By graduation, students will be able to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.
2. By graduation, students will demonstrate an ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors.
3. By graduation, students will be able to communicate effectively with a range of audiences.
4. By graduation, students will be able to recognize ethical and professional responsibilities in engineering situations and make informed judgments.

5. By graduation, students will be able to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.

6. By graduation, students will be able to develop and conduct appropriate testing or experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.

7. By graduation, students will have the ability to acquire and apply new knowledge as needed, without formal instruction or detailed guidance.