The Bachelor of Science in Engineering with a major in environmental engineering requires a minimum of 130 s.h. of credit. Students must have a g.p.a. of at least 2.00 in all college work used to satisfy degree requirements as well as on all coursework attempted at the University of Iowa.

All B.S.E. students are required to take the same collegiate curriculum. For information about these collegiate requirements, see the Bachelor of Science in Engineering, B.S.E. in the Catalog. Students completing the major in environmental engineering fulfill the collegiate statistics requirement by completing STAT:2020 Probability and Statistics for the Engineering and Physical Sciences. The focus area may require specific courses to count toward the General Education Component of the collegiate curriculum; see "Focus Area" below.

The major in environmental engineering requires the following coursework.

**Code** | **Title** | **Hours**
--- | --- | ---
Collegiate Curriculum | | 50
Major Requirements (including one 0 s.h. course) | | 65
Focus Area | | 15
**Total Hours** | | **130**

**Major Requirements**

Major requirements include a set of common courses (58 s.h.), five professional skills courses (4 s.h., including one 0 s.h. course), and one capstone design course (3 s.h.).

**Code** | **Title** | **Hours**
--- | --- | ---
All of these: | | 
CEE:1030 | Introduction to Earth Science (no lab required) | 3
CEE:3155 | Principles of Environmental Engineering (with lab) | 4
CEE:3371 | Principles of Hydraulics and Hydrology | 3
CEE:3430 | Water Treatment (with lab) | 4
CEE:4102 | Groundwater | 3
CEE:4150 | Environmental Chemistry | 3
CEE:4157 | Environmental Engineering Design | 3
CEE:4158 | Solid and Hazardous Wastes | 3
CEE:4159 | Air Pollution Control Technology | 3
CEE:4374 | Water Resource Design | 3
BIOL:1411 | Foundations of Biology | 4
CHEM:1120 | Principles of Chemistry II | 4
CHEM:2210 | Organic Chemistry I (no lab required) | 3
ENGR:2110 | Statics | 2
ENGR:2130 | Thermodynamics | 3
ENGR:2510 | Fluid Mechanics | 4
ENGR:2710 | Dynamics | 3
ENGR:2720 | Materials Science | 3

**Professional Skills**

**Code** | **Title** | **Hours**
--- | --- | ---
All of these: | | 
CEE:1010 | Introduction to Careers in Environmental Engineering | 0
CEE:2010 | Civil and Environmental Engineering Professional Practice and Ethics | 1
CEE:3001 | Leadership Skills for Engineers | 1
CEE:3002 | Technical Communication in Civil and Environmental Engineering | 1
CEE:3003 | Project Management Skills | 1

**Capstone Design Course**

**Code** | **Title** | **Hours**
--- | --- | ---
This course: | | 
CEE:4850 | Project Design and Management in Civil Engineering | 3

**Focus Area**

Students must select focus area courses according to guidelines established by the Department of Civil and Environmental Engineering. Environmental engineering students may choose from a standard focus area developed by the department (environmental or public health) or create an individual focus area tailored to their interests. For a description of the standard focus area options and guidelines for tailored focus areas in environmental engineering, see Environmental Engineering Focus Areas on the Department of Civil and Environmental Engineering website.

Focus areas in environmental engineering consist of content area courses and electives; carefully selected elective courses may contribute to earning a minor and/or certificate.

**Environmental**

Students in the environmental focus area complete two content area courses (6 s.h.) and three additional electives (9 s.h.).

**Environmental Electives**

**Code** | **Title** | **Hours**
--- | --- | ---
Two of these: | | 
CEE:4107/CBE:4410 | Sustainable Systems | 3
CEE:4119 | Hydrology | 3
CEE:4371 | Water Resources Engineering | 3

**Additional Electives**

Students complete 9 s.h. in additional electives. These electives may include any Department of Civil and Environmental Engineering course (prefix CEE) not already taken for the major numbered 3000 or above.

The following courses are additional suggested electives in the environmental focus area.
### Public Health

Students in the public health focus area are required to complete the undergraduate certificate in public health in the College of Public Health. The public health focus area requires CPH:1400 Fundamentals of Public Health as part of the collegiate curriculum General Education Component.

Students in this focus area complete one required course (3 s.h.), three focus area electives (9 s.h.), and one additional elective (3 s.h.).

#### Required Public Health Course

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPH:1600</td>
<td>Public Health Science: Inquiry and Investigation in Public Health</td>
<td>3</td>
</tr>
</tbody>
</table>

#### Public Health Electives

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPH:1800</td>
<td>Social and Psychological Determinants of Health: Changing Behavior, Improving Health</td>
<td>3</td>
</tr>
<tr>
<td>CPH:2400</td>
<td>The U.S. Health System in a Global Context</td>
<td>3</td>
</tr>
<tr>
<td>CPH:3400</td>
<td>Health, Work, and the Environment</td>
<td>3</td>
</tr>
</tbody>
</table>

#### Additional Elective

Students complete 3 s.h. in additional elective(s). This may include any Department of Civil and Environmental Engineering course (prefix CEE) not already taken for the major numbered 3000 or above.

The following courses are additional suggested electives in the public health focus area. Students can view courses applicable for the Certificate in Public Health in the College of Public Health section of the Catalog.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPH:2200</td>
<td>Climageddon: Understanding Climate Change and Associated Impacts on Health</td>
<td>2</td>
</tr>
</tbody>
</table>