**ENVIRONMENTAL FOCUS AREA:**

Department of Civil and Environmental Engineering

---

### General Education (19 sh)

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALL RHET:1030 Rhetoric</td>
<td>4</td>
</tr>
<tr>
<td>F/S Diversity &amp; Inclusion</td>
<td>3</td>
</tr>
<tr>
<td>ALL Be Creative</td>
<td>3</td>
</tr>
<tr>
<td>ALL Approved Gen Ed Course</td>
<td>3</td>
</tr>
<tr>
<td>ALL Approved Gen Ed Course</td>
<td>3</td>
</tr>
<tr>
<td>ALL Approved Gen Ed Course</td>
<td>3</td>
</tr>
</tbody>
</table>

### Math & Basic Science Core (24 sh)

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>F/S MATH:1550 Math I: Single Variable Calculus</td>
<td>4</td>
</tr>
<tr>
<td>(P: ALEKS score ≥ 75 or MPT Level 3 score ≥ 9)</td>
<td></td>
</tr>
<tr>
<td>ALL MATH 1560 Math II: Multivariable Calculus</td>
<td>4</td>
</tr>
<tr>
<td>(P: MATH:1550)</td>
<td></td>
</tr>
<tr>
<td>ALL MATH:2550 Math III: Matrix Algebra</td>
<td>2</td>
</tr>
<tr>
<td>(P: MATH:1550)</td>
<td></td>
</tr>
<tr>
<td>ALL MATH:2560 Math IV: Differential Equations</td>
<td>3</td>
</tr>
<tr>
<td>(P: MATH:1550 &amp; MATH:2550)</td>
<td></td>
</tr>
<tr>
<td>F/S STAT:2020 Probability &amp; Statistics For Engr</td>
<td>3</td>
</tr>
<tr>
<td>&amp; Phys Sci (P: MATH:1560)</td>
<td></td>
</tr>
<tr>
<td>ALL CHEM:1110 Principles of Chemistry I</td>
<td>4</td>
</tr>
<tr>
<td>(P: ALEKS score ≥ 55 or MPT Level 3 score ≥ 9)</td>
<td></td>
</tr>
<tr>
<td>ALL PHYS:1611 Introductory Physics I / Lab</td>
<td>4</td>
</tr>
<tr>
<td>(C: MATH:1550)</td>
<td></td>
</tr>
</tbody>
</table>

### Engineering Core (7 sh)

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>F ENGR:1000 Engineering Success for First-Year</td>
<td>1</td>
</tr>
<tr>
<td>Students (First semester standing)</td>
<td></td>
</tr>
<tr>
<td>F ENGR:1100 Intro to Engineering Problem Solving</td>
<td>3</td>
</tr>
<tr>
<td>F/S ENGR:1300 Intro to Engineering Computing</td>
<td>3</td>
</tr>
<tr>
<td>(C: MATH:1550)</td>
<td></td>
</tr>
</tbody>
</table>

### EnvE Requirements (58 sh)

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALL BIOL:1411 Foundations of Biology</td>
<td>4</td>
</tr>
<tr>
<td>(P: CHEM:1110)</td>
<td></td>
</tr>
<tr>
<td>ALL CHEM:1120 Principles of Chemistry II</td>
<td>4</td>
</tr>
<tr>
<td>(P: CHEM:1110 with a minimum grade of C-)</td>
<td></td>
</tr>
<tr>
<td>ALL CHEM:2210 Organic Chemistry I</td>
<td>3</td>
</tr>
<tr>
<td>(no lab required)</td>
<td></td>
</tr>
<tr>
<td>ALL ENGR:2110 Statics</td>
<td>2</td>
</tr>
<tr>
<td>(P: MATH:1550; C: MATH:2560 &amp; PHYS:1611)</td>
<td></td>
</tr>
<tr>
<td>ALL ENGR:2130 Thermodynamics</td>
<td>3</td>
</tr>
<tr>
<td>(P: CHEM:1110 &amp; PHYS:1611; C: MATH:1560)</td>
<td></td>
</tr>
<tr>
<td>F/S ENGR:2510 Fluid Mechanics</td>
<td>4</td>
</tr>
<tr>
<td>(P: MATH:2560 &amp; ENGR:2710; C: ENGR:2130)</td>
<td></td>
</tr>
<tr>
<td>ALL* ENGR:2710 Dynamics</td>
<td>3</td>
</tr>
<tr>
<td>(P: ENGR:2110 &amp; MATH:1550)</td>
<td></td>
</tr>
<tr>
<td>ALL* ENGR:2720 Materials Science</td>
<td>3</td>
</tr>
<tr>
<td>(P: CHEM:1110; C: MATH:1550)</td>
<td></td>
</tr>
<tr>
<td>ALL EES:1080 Introduction to Environmental Science</td>
<td>3</td>
</tr>
<tr>
<td>(no lab required)</td>
<td></td>
</tr>
<tr>
<td>S CEE:3155 Principles of Environmental Engineering</td>
<td>4</td>
</tr>
<tr>
<td>(with Lab) (P: CHEM:1110)</td>
<td></td>
</tr>
<tr>
<td>S CEE:3371 Principles of Hydraulics and Hydrology</td>
<td>3</td>
</tr>
<tr>
<td>(P: ENGR:2510)</td>
<td></td>
</tr>
<tr>
<td>S CEE:3430 Water Treatment (with Lab)</td>
<td>4</td>
</tr>
<tr>
<td>(P: ENGR:2510 &amp; CEE:3155)</td>
<td></td>
</tr>
<tr>
<td>F CEE:4102 Groundwater</td>
<td>3</td>
</tr>
<tr>
<td>F CEE:4150 Environmental Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>(P: CHEM:1120)</td>
<td></td>
</tr>
<tr>
<td>F CEE:4157 Environmental Engineering Design</td>
<td>3</td>
</tr>
<tr>
<td>(P: CEE:3155)</td>
<td></td>
</tr>
<tr>
<td>F CEE:4158 Solid and Hazardous Wastes</td>
<td>3</td>
</tr>
<tr>
<td>S CEE:4159 Air Pollution Control Technology</td>
<td>3</td>
</tr>
<tr>
<td>F CEE:4374 Water Resources Design</td>
<td>3</td>
</tr>
</tbody>
</table>

### CEE Capstone Design Courses (3 sh)

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>F/S CEE:4850 Project Design &amp; Management in CEE</td>
<td>3</td>
</tr>
<tr>
<td>(P: final semester; C: CEE:3003)</td>
<td></td>
</tr>
</tbody>
</table>

### CEE Professional Skills (4 sh)

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>S CEE:1010 Introduction to Careers in Env.</td>
<td>0</td>
</tr>
<tr>
<td>Engineering</td>
<td></td>
</tr>
<tr>
<td>S CEE:2010 Professional Practice and Ethics</td>
<td>1</td>
</tr>
<tr>
<td>F CEE:3001 Leadership Skills for Engineers</td>
<td>1</td>
</tr>
<tr>
<td>(junior standing)</td>
<td></td>
</tr>
<tr>
<td>S CEE:3002 Technical Communication in CEE</td>
<td>1</td>
</tr>
<tr>
<td>(sophomore standing)</td>
<td></td>
</tr>
<tr>
<td>F CEE:3003 Project Management Skills</td>
<td>1</td>
</tr>
<tr>
<td>(senior standing)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>F/S</td>
<td></td>
</tr>
<tr>
<td>CEE:4102 Groundwater</td>
<td></td>
</tr>
<tr>
<td>F CEE:4150 Environmental Chemistry</td>
<td></td>
</tr>
<tr>
<td>(P: CHEM:1120)</td>
<td></td>
</tr>
<tr>
<td>F CEE:4157 Environmental Engineering Design</td>
<td></td>
</tr>
<tr>
<td>(P: CEE:3155)</td>
<td></td>
</tr>
<tr>
<td>F CEE:4158 Solid and Hazardous Wastes</td>
<td></td>
</tr>
<tr>
<td>S CEE:4159 Air Pollution Control Technology</td>
<td></td>
</tr>
<tr>
<td>F CEE:4374 Water Resources Design</td>
<td></td>
</tr>
<tr>
<td>(P: CEE:3371)</td>
<td></td>
</tr>
</tbody>
</table>

### Required: Environmental (0 sh)

- None required

### Electives: Environmental (15 sh)

- Electives: Focus Area, Minor, Certificate, etc.
  - Select 3 courses from the list below
  - Any 3000 level or above course(s) in CEE
  - S CEE:4107 Sustainable Systems 3
  - F CEE:4119 Hydrology (P: ENGR:2510) 3
  - S CEE:4371 Water Resources Engineering (C: CEE:3371) 3

### Electives: Focus Area, Minor, Certificate, etc.

- Select 3 courses from the list below
  - Any 3000 level or above course(s) in CEE
  - S CEE:4107 Sustainable Systems 3
  - F CEE:4119 Hydrology (P: ENGR:2510) 3
  - S CEE:4371 Water Resources Engineering (C: CEE:3371) 3

### Total Semester Hours Requirements: 130