# MINOR IN ENVIRONMENTAL ENGINEERING

## Requirements

**Effective Fall 2020**

Students must satisfactorily complete the total credits required for the minor. Minors and interdisciplinary minors require 12 or more upper-division (300- to 400-level) credits.

Additional coursework may be required due to prerequisites.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Required Courses</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Select 9 credits from the following:</td>
<td>9</td>
</tr>
<tr>
<td>CIVE 330</td>
<td>Ecological Engineering</td>
<td></td>
</tr>
<tr>
<td>CIVE 438</td>
<td>Fundamentals of Environmental Engr&lt;sup&gt;1&lt;/sup&gt;</td>
<td></td>
</tr>
<tr>
<td>CIVE 440</td>
<td>Nonpoint Source Pollution</td>
<td></td>
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<tr>
<td>CIVE 442</td>
<td>Air Quality Engineering</td>
<td></td>
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<td></td>
<td><strong>Elective Courses</strong></td>
<td></td>
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<tr>
<td></td>
<td>Select 12 credits from the following, of which at least 3 credits must be upper-division:</td>
<td>12</td>
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<tr>
<td>ATS 350</td>
<td>Introduction to Weather and Climate</td>
<td></td>
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<tr>
<td>ATS 351</td>
<td>Introduction to Weather and Climate Lab</td>
<td></td>
</tr>
<tr>
<td>BC 351</td>
<td>Principles of Biochemistry</td>
<td></td>
</tr>
<tr>
<td>BZ 471</td>
<td>Stream Biology and Ecology</td>
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</tr>
<tr>
<td>BZ 472</td>
<td>Stream Biology and Ecology Laboratory</td>
<td></td>
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<tr>
<td>CHEM 245</td>
<td>Fundamentals of Organic Chemistry</td>
<td></td>
</tr>
<tr>
<td>CHEM 246</td>
<td>Fundamentals of Organic Chemistry Laboratory</td>
<td></td>
</tr>
<tr>
<td>CHEM 341</td>
<td>Modern Organic Chemistry I</td>
<td></td>
</tr>
<tr>
<td>CHEM 345</td>
<td>Organic Chemistry I</td>
<td></td>
</tr>
<tr>
<td>CIVE 330</td>
<td>Ecological Engineering&lt;sup&gt;2&lt;/sup&gt;</td>
<td></td>
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<tr>
<td>CIVE 413</td>
<td>Environmental River Mechanics</td>
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<tr>
<td>CIVE 423</td>
<td>Groundwater Engineering</td>
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<tr>
<td>CIVE 437</td>
<td>Wastewater Treatment Facility Design</td>
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</tr>
<tr>
<td>CIVE 440</td>
<td>Nonpoint Source Pollution&lt;sup&gt;2&lt;/sup&gt;</td>
<td></td>
</tr>
<tr>
<td>CIVE 442</td>
<td>Air Quality Engineering&lt;sup&gt;2&lt;/sup&gt;</td>
<td></td>
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<tr>
<td>CIVE 455</td>
<td>Applications in Geotechnical Engineering</td>
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<tr>
<td>ERHS 446</td>
<td>Environmental Toxicology</td>
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<tr>
<td>LIFE 102</td>
<td>Attributes of Living Systems (GT-SC1)</td>
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<tr>
<td>LIFE 320</td>
<td>Ecology</td>
<td></td>
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<tr>
<td>MECH 463</td>
<td>Building Energy Systems</td>
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<tr>
<td>MIP 300</td>
<td>General Microbiology</td>
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<tr>
<td>MIP 432/ESS 432</td>
<td>Microbial Ecology</td>
<td></td>
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<tr>
<td>PHIL 345</td>
<td>Environmental Ethics</td>
<td></td>
</tr>
</tbody>
</table>

**Program Total Credits:** 21

<sup>1</sup> Students in the Civil Engineering major cannot use CIVE 438 for credit in the minor.

<sup>2</sup> May be allowed if not taken as a required course.