# ENVIRONMENTAL AND SUSTAINABLE ENGINEERING, MINOR IN

The minor in environmental and sustainable engineering consists of a minimum of 20 credits, including the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 309</td>
<td>Quantitative Analysis</td>
<td>3</td>
</tr>
<tr>
<td>CLSE 201</td>
<td>Chemical Engineering Fundamentals I: Material Balances</td>
<td>4</td>
</tr>
<tr>
<td>CLSE 202</td>
<td>Chemical Engineering Fundamentals II: Energy Balances and Engineering Thermodynamics</td>
<td>4</td>
</tr>
<tr>
<td>URSP 204</td>
<td>Physical Geography</td>
<td>3</td>
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</tbody>
</table>

**Electives**

Select six credits from the following list.

- CHEM 305: Physical Chemistry for the Life Sciences
- CLSE 580: Sustainable Chemical Engineering
- CLSE 585: Interfacial Phenomena
- ENVS 300: Sustainable Societies: James River Basin
- ENVS 301: Introduction to Meteorology
- ENVS 310: Introduction to Oceanography
- ENVS 311: Politics of the Environment
- ENVS 314: Human-Environment Interactions: Foundations and Applications
- ENVS 315: Energy and the Environment
- ENVS 321: Cartography
- ENVS 330: Environmental Pollution
- ENVS 332: Environmental Management
- ENVS 355: Water
- ENVS 361: Outdoor Team Building and Group Facilitation
- ENVS 368: Nature Writing
- ENVS 370: Applications of Conservation Science

**Total Hours** 20

This program includes the following prerequisites with a minimum grade of C: CHEM 101, CHEM 102, CLSE 115, MATH 200 and MATH 201.