ENVIRONMENTAL ENGINEERING DEGREE

Students must also complete the Undergraduate Registration Requirement (https://catalogs.northwestern.edu/undergraduate/requirements-policies/undergraduate-registration-requirement/) and the degree requirements of their home school.

Requirements (48 units)

Core Courses (27 units)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYSICS 135-2 &amp; PHYSICS 136-3</td>
<td>General Physics and General Physics Laboratory or PHYSICS 125-2 &amp; PHYSICS 126-2</td>
</tr>
<tr>
<td>CHEM 131-0 &amp; CHEM 132-0 &amp; CHEM 141-0 &amp; CHEM 142-0</td>
<td>General Chemistry 1 and General Chemistry Laboratory 1 or CHEM 151-0 &amp; CHEM 152-0 &amp; CHEM 161-0 &amp; CHEM 162-0</td>
</tr>
<tr>
<td>PHYSICS 137-2 &amp; PHYSICS 139-2</td>
<td>General Physics Laboratory &amp; General Physics Laboratory</td>
</tr>
<tr>
<td>PHYSICS 140-2 &amp; PHYSICS 141-2</td>
<td>Fundamentals of Physics &amp; General Physics Laboratory</td>
</tr>
<tr>
<td>CHEM 131-0 &amp; CHEM 132-0 &amp; CHEM 141-0 &amp; CHEM 142-0</td>
<td>General Chemistry 1 and General Chemistry Laboratory 1 or CHEM 151-0 &amp; CHEM 152-0 &amp; CHEM 161-0 &amp; CHEM 162-0</td>
</tr>
<tr>
<td>PHYSICS 137-2 &amp; PHYSICS 139-2</td>
<td>General Physics Laboratory &amp; General Physics Laboratory</td>
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<tr>
<td>PHYSICS 140-2 &amp; PHYSICS 141-2</td>
<td>Fundamentals of Physics &amp; General Physics Laboratory</td>
</tr>
</tbody>
</table>

4 units of basic science:

4 engineering analysis and computer proficiency courses (https://catalogs.northwestern.edu/undergraduate/engineering-applied-science/#requirementstext)

3 design and communications courses (https://catalogs.northwestern.edu/undergraduate/engineering-applied-science/#requirementstext)

7 social sciences/humanities courses (https://catalogs.northwestern.edu/undergraduate/engineering-applied-science/#requirementstext)

5 unrestricted electives (https://catalogs.northwestern.edu/undergraduate/engineering-applied-science/#requirementstext)

Major Program (21 units)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIV_ENV 201-0</td>
<td>Engineering Possibilities: Decision Science in the Age of Smart Technologies</td>
</tr>
<tr>
<td>CIV_ENV 202-0</td>
<td>Biological and Ecological Principles</td>
</tr>
<tr>
<td>CIV_ENV 203-0</td>
<td>Earth in the Anthropocene</td>
</tr>
<tr>
<td>BMD_ENG 250-0</td>
<td>Thermodynamics</td>
</tr>
<tr>
<td>CHEM 215-1</td>
<td>Organic Chemistry I</td>
</tr>
<tr>
<td>CIV_ENV 260-0</td>
<td>Environmental Systems and Processes</td>
</tr>
<tr>
<td>CIV_ENV 340-0</td>
<td>Hydraulics and Hydrology</td>
</tr>
<tr>
<td>CIV_ENV 361-0</td>
<td>Environmental Microbiology</td>
</tr>
<tr>
<td>CIV_ENV 364-0</td>
<td>Ecolodology</td>
</tr>
<tr>
<td>CIV_ENV 365-0</td>
<td>Sustainable Water Systems</td>
</tr>
<tr>
<td>CIV_ENV 367-0</td>
<td>Environmental Laboratory</td>
</tr>
</tbody>
</table>

2 capstone design courses (0.5 units each)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIV_ENV 382-1</td>
<td>Capstone Design I</td>
</tr>
<tr>
<td>CIV_ENV 382-2</td>
<td>Capstone Design II</td>
</tr>
</tbody>
</table>

4 technical elective courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIV_ENV 301-1</td>
<td>Professional Development Seminar I</td>
</tr>
</tbody>
</table>

1 See general requirements (https://catalogs.northwestern.edu/undergraduate/engineering-applied-science/#requirementstext) for details.

2 From an approved list (available in Undergraduate CIV_ENV Handbook) in engineering, mathematics, or science; at least 3 units must be 100% engineering topic; may include only 1 unit of CIV_ENV 399-0 Projects; no 399 course from another department is accepted; no course may be taken P/N.

3 0.34 units may count toward unrestricted electives.