BS with a Major in Earth and Environmental Sciences

Program Codes:
20FT174BS

Degree Requirements
To earn a Bachelor of Science in Liberal Arts and Sciences degree from UIC, students need to complete university, college, and department degree requirements. The Department of Earth and Environmental Sciences degree requirements are outlined below. Students should consult the College of Liberal Arts and Sciences section for additional degree requirements and college academic policies.

Summary of Requirements
<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required Prerequisite and Collateral Courses</td>
<td></td>
<td>26</td>
</tr>
<tr>
<td>Core Courses</td>
<td></td>
<td>20</td>
</tr>
<tr>
<td>Selective Courses</td>
<td></td>
<td>19</td>
</tr>
<tr>
<td>General Education and Electives to reach minimum Total Hours</td>
<td></td>
<td>55</td>
</tr>
<tr>
<td>Total Hours</td>
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<td>120</td>
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</table>

General Education
See General Education and Writing-in-the-Discipline in the College of Liberal Arts and Sciences section for information on meeting these requirements. Students should consult the course lists below and their advisors to determine which courses are counted toward the General Education and Writing-in-the-Discipline requirements.

Required Prerequisite and Collateral Courses

Select one of the following options in general physics:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 131</td>
<td>Introductory Physics for Life Sciences I ^a</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 141</td>
<td>General Physics I (Mechanics) ^a</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 122</td>
<td>Matter and Energy ^b</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 123</td>
<td>Foundations of Chemical Inquiry I ^a,b</td>
<td>2</td>
</tr>
<tr>
<td>MATH 180</td>
<td>Calculus I ^a,c</td>
<td>4</td>
</tr>
<tr>
<td>MATH 181</td>
<td>Calculus II ^a</td>
<td>4</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>CHEM 124 &amp; CHEM 125</td>
<td>Chemical Dynamics and Foundations of Chemical Inquiry II ^a,b</td>
<td>2</td>
</tr>
<tr>
<td>CHEM 130</td>
<td>Survey of Organic and Biochemistry ^a</td>
<td>3</td>
</tr>
</tbody>
</table>

Select one of the following courses in general physics or biology:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 132</td>
<td>Introductory Physics for Life Sciences II ^a</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 142</td>
<td>General Physics II (Electricity and Magnetism) ^a</td>
<td>4</td>
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</tbody>
</table>

Core Courses

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EAES 101</td>
<td>Global Environmental Change ^a</td>
<td>4</td>
</tr>
<tr>
<td>EAES 111</td>
<td>Earth, Energy, and the Environment ^a</td>
<td>4</td>
</tr>
<tr>
<td>EAES 200</td>
<td>Field Work in Missouri ^a</td>
<td>2</td>
</tr>
<tr>
<td>EAES 230</td>
<td>Earth Materials</td>
<td>4</td>
</tr>
<tr>
<td>EAES 285</td>
<td>Earth Systems</td>
<td>4</td>
</tr>
<tr>
<td>EAES 290</td>
<td>Current Topics in Earth and Environmental Sciences</td>
<td>2</td>
</tr>
</tbody>
</table>

Total Hours

20

Selective Courses

Students must select at least 19 hours with at least one course from each of the following groups. In order to reach the 19 hours, one course can be chosen, with permission of the director of undergraduate studies, from an approved list of courses in environmental studies offered in other departments; these courses must be at the 200 level or above.

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<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>EAES 320</td>
<td>Mineralogy</td>
<td>3-10</td>
</tr>
<tr>
<td>EAES 422</td>
<td>Crystal Chemistry</td>
<td>3-10</td>
</tr>
<tr>
<td>EAES 430</td>
<td>Petrology</td>
<td>3-10</td>
</tr>
<tr>
<td>EAES 473</td>
<td>Soils and the Environment</td>
<td>3-10</td>
</tr>
<tr>
<td>Group III: Geochemistry and Geobiology</td>
<td></td>
<td>3-10</td>
</tr>
<tr>
<td>EAES 360</td>
<td>Introduction to Paleontology</td>
<td>3-10</td>
</tr>
<tr>
<td>EAES 415</td>
<td>Environmental Geochemistry</td>
<td>3-10</td>
</tr>
<tr>
<td>EAES 416</td>
<td>Organic Geochemistry</td>
<td>3-10</td>
</tr>
<tr>
<td>EAES 418</td>
<td>Introduction to Biogeochemistry</td>
<td>3-10</td>
</tr>
<tr>
<td>EAES 460</td>
<td>Earth System History</td>
<td>3-10</td>
</tr>
<tr>
<td>EAES 466</td>
<td>Principles of Paleontology</td>
<td>3-10</td>
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b. General Education credit is given for successful completion of both CHEM 122 and CHEM 123 or CHEM 124 and CHEM 125.
c. MATH 180 fulfills the LAS Quantitative Reasoning requirement.

Core Courses

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<td>Earth Systems</td>
<td>4</td>
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<tr>
<td>EAES 290</td>
<td>Current Topics in Earth and Environmental Sciences b</td>
<td>2</td>
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Total Hours

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### Recommended Plan of Study

<table>
<thead>
<tr>
<th>Course</th>
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<td>ENGL 160</td>
<td>Academic Writing I: Writing in Academic and Public Contexts</td>
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<td>CHEM 122</td>
<td>Matter and Energy</td>
<td>3</td>
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<tr>
<td>CHEM 123</td>
<td>Foundations of Chemical Inquiry I</td>
<td>2</td>
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<tr>
<td>EAES 101</td>
<td>Global Environmental Change</td>
<td>4</td>
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<tr>
<td>Foreign Language</td>
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<tr>
<td><strong>Hours</strong></td>
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<td>ENGL 161</td>
<td>Academic Writing II: Writing for Inquiry and Research</td>
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<tr>
<td>CHEM 124</td>
<td>Chemical Dynamics</td>
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<td>CHEM 125</td>
<td>Foundations of Chemical Inquiry II</td>
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<td>EAES 111</td>
<td>Earth, Energy, and the Environment</td>
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<td>Foreign Language</td>
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<td>Earth Materials</td>
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<td>MATH 180</td>
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<td>Foreign Language</td>
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<tr>
<td><strong>Hours</strong></td>
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<tr>
<td>PHYS 131</td>
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<td>4</td>
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<td>PHYS 141</td>
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<tr>
<td>EAES 285</td>
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<tr>
<td>EAES 200</td>
<td>Field Work in Missouri</td>
<td>2</td>
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<td><strong>Hours</strong></td>
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<td><strong>Third Year</strong></td>
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<td>Fall Semester</td>
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<tr>
<td>PHYS 132</td>
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<tr>
<td>PHYS 142</td>
<td>General Physics II (Electricity and Magnetism)</td>
<td>4</td>
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<tr>
<td>BIOS 110</td>
<td>Biology of Cells and Organisms</td>
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<tr>
<td>BIOS 120</td>
<td>Biology of Populations and Communities</td>
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<tr>
<td>MATH 181</td>
<td>Calculus II</td>
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<tr>
<td>Spring Semester</td>
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<tr>
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<tr>
<td>Group I,II,III,IV EAES required course</td>
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<td>Elective</td>
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</tr>
<tr>
<td><strong>Hours</strong></td>
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<td><strong>16-18</strong></td>
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<tr>
<td><strong>Total Hours</strong></td>
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