Environmental Science B.S.
Departments of Biology and Earth & Environmental Sciences
University of Northern Iowa

The Environmental Science B.S. major requires a minimum of 126 total hours to graduate. This total includes Liberal Arts Core requirements and the following specified major requirements, plus electives to complete the minimum of 126 hours. The Environmental Science B.S. program is for a student seeking to attend graduate school, using a foundation of intense coursework and hands-on-research with a faculty member in either Biology or Earth and Environmental Sciences. Students have the option of following a curriculum that is concentrated on the Life Science aspects of the environmental or the Earth Science aspects. Each has a range of courses that provide students with experience in evaluating and responding to environmental issues.

<table>
<thead>
<tr>
<th>Required Courses</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 2051 General Biology: Organismal Diversity</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 3100 Evolution, Ecology &amp; Nature of Science</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 1110 General Chemistry I</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 1120 General Chemistry II</td>
<td>4</td>
</tr>
<tr>
<td>EARTHSCI 1200 Elements of Weather</td>
<td>3</td>
</tr>
<tr>
<td>EARTHSCI 1300 Introduction to Geology</td>
<td>4</td>
</tr>
<tr>
<td>GEOG 3310 Geographic Information System I</td>
<td>3</td>
</tr>
<tr>
<td>MATH 1420 Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 3190 or EARTHSCI 4400 Undergraduate Research in Biology</td>
<td>3</td>
</tr>
<tr>
<td>Electives selected for Earth Science or Life Science Track – details on back</td>
<td>33</td>
</tr>
</tbody>
</table>

**Total Major Hours:** 65

For details visit earth.uni.edu
Or visit the department offices in 121 Latham Hall
# Tracks for Environmental Science B.S. Degree

**Earth Science Track**  (code: 879)

**Required – 13 hr**
- EARTHSCI 1400 Introduction to Environmental Earth Science (3 hr)
- EARTHSCI 3230 Air Quality (4 hr)
- EARTHSCI 3345 Environmental Geology (3 hr)
- EARTHSCI 3350 Environmental Hydrology (3 hr)

**Electives – minimum of 20 hr total from A, B**

**Category A – Physical Environment Courses – select at least 4 courses**
- EARTHSCI 1320 Earth History (4 hr)
- EARTHSCI 3210 Meteorology (4 hr)
- EARTHSCI 3240 Air Quality Modeling (4 hr)
- EARTHSCI 3250 Measurement & Analysis of Air Quality (4 hr)
- EARTHSCI 3310 Structural Geology (4 hr)
- EARTHSCI 3322 Earth Materials (4 hr)
- EARTHSCI 3325 Sedimentary Geology (4 hr)
- EARTHSCI 3327 Palaeoclimatology (3 hr)
- EARTHSCI 3330 Geomorphology (4 hr)
- EARTHSCI 3340 Oceanography (3 hr)
- EARTHSCI 3355 Hydrogeology (3 hr)
- EARTHSCI 3360 Field & Laboratory Methods in Hydrology (3 hr)

**Category B – Cognates, select at least 2 courses**
- BIOL 3112 Invertebrate Zoology (4 hr)
- BIOL 3120 Plant Diversity & Evolution (4 hr)
- BIOL 3170 Entomology (4 hr)
- BIOL 4105 Wildlife Ecology & Management (4 hr)
- BIOL 4108 Biodiversity Conservation Policy (3 hr)
- BIOL 4154 Aquatic Ecology (3 hr)
- BIOL 4164 Mammalogy (4 hr)
- BIOL 4166 Plant Systematics (4 hr)
- BIOL 4168 Ecology (4 hr)
- BIOL 4180 Restoration Ecology (4 hr)
- CHEM 2040 Applied Organic & Biochemistry (4 hr)
  Or CHEM 2210 Organic Chemistry I (3 hr)
- EARTHSCI 1320 Earth History (4 hr)
- EARTHSCI 3210 Meteorology (4 hr)
- EARTHSCI 3230 Air Quality (4 hr)
- EARTHSCI 3310 Structural Geology (4 hr)
- EARTHSCI 3325 Sedimentary Geology (4 hr)
- EARTHSCI 3330 Geomorphology (4 hr)
- EARTHSCI 3340 Oceanography (3 hr)
- EARTHSCI 3355 Hydrogeology (3 hr)
- EARTHSCI 3360 Field & Laboratory Methods in Hydrology (3 hr)
- GEOG 2210 Modern Climate Change: Evidence & Predictions (3 hr)
- GEOG 3220 Environmental Geography (3 hr)
- GEOG 4230 Soils and Landscapes (3 hr)
- GEOG 4230 Rivers (3 hr)
- GEOG 4240 The Ice Age (3 hr)
- GEOG 4320 Geographic Information Systems II (3 hr)
- GEOG 4370 Remote Sensing of the Environment (3 hr)
- MATH 1421 Calculus II (4 hr)

**Life Science Track**  (code: 878)

**Required – 7 hr**
- BIOL 4157 Biostatistics (3 hr)
- BIOL 4168 Ecology (4 hr)

**Electives – minimum of 26 hr total from A, B, C**

**Category A – Policy Related Courses, select at least 2 courses**
- BIOL 4105 Wildlife Ecology & Management (4 hr)
- BIOL 4108 Biodiversity Conservation Policy (3 hr)
- BIOL 4167 Conservation Biology (3 hr)

**Category B – Biology Related Courses, select at least 2 courses**
- BIOL 3112 Invertebrate Zoology (4 hr)
- BIOL 3120 Plant Diversity & Evolution (4 hr)
- BIOL 3170 Entomology (4 hr)
- BIOL 4105 Wildlife Ecology & Management (4 hr)
- BIOL 4108 Biodiversity Conservation Policy (3 hr)
- BIOL 4154 Aquatic Ecology (3 hr)
- BIOL 4164 Mammalogy (4 hr)
- BIOL 4166 Plant Systematics (4 hr)
- BIOL 4168 Ecology (4 hr)
- BIOL 4180 Restoration Ecology (4 hr)
- CHEM 2040 Applied Organic & Biochemistry (4 hr)
  Or CHEM 2210 Organic Chemistry I (3 hr)
- EARTHSCI 1320 Earth History (4 hr)
- EARTHSCI 3210 Meteorology (4 hr)
- EARTHSCI 3230 Air Quality (4 hr)
- EARTHSCI 3310 Structural Geology (4 hr)
- EARTHSCI 3325 Sedimentary Geology (4 hr)
- EARTHSCI 3330 Geomorphology (4 hr)
- EARTHSCI 3340 Oceanography (3 hr)
- EARTHSCI 3355 Hydrogeology (3 hr)
- EARTHSCI 3360 Field & Laboratory Methods in Hydrology (3 hr)
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- GEOG 4370 Remote Sensing of the Environment (3 hr)
- MATH 1421 Calculus II (4 hr)