Environmental Sciences, B.S.

Learning Outcomes

Environmental Sciences Program students will:

• synthesize scientific knowledge and methods across disciplines,
• comprehend and evaluate primary findings in published scientific articles,
• gain experience conducting independent research and/or reviewing scientific areas of interest, and
• effectively communicate scientific findings in written and/or oral form.

Requirements

The Bachelor of Science with a major in environmental sciences requires a minimum of 120 s.h., including 76-79 s.h. of work for the major. Students must maintain a g.p.a. of at least 2.00 in all courses for the major and in all UI courses for the major. They also must complete the College of Liberal Arts and Sciences GE CLAS Core; some courses required for the major in environmental sciences may be used to satisfy GE CLAS Core requirements.

Bachelor of Science students majoring in environmental sciences must complete requirements in three areas: the science and mathematics foundation, the environmental sciences foundation, and one of four environmental sciences tracks. During their third year of study, students are assigned a faculty advisor who specializes in their track.

The science and mathematics foundation develops fundamental skills and comprehension in biology, chemistry, geology, mathematics, and statistics. The environmental sciences foundation includes an introductory course in environmental science and additional courses that focus on remote sensing techniques, design and use of geographic information technologies, the geomorphic and environmental processes that shape the earth's surface, and ecological factors that influence the distribution and abundance of organisms.

Each of the program’s four tracks focuses on areas of specialization within environmental sciences:

• biosciences (green) track—biological systems and ecological approaches;
• chemical sciences (yellow) track—environmental systems and chemistry;
• geosciences (brown) track—earth materials and surficial geologic processes; and
• hydrosciences (blue) track—hydrogeology and hydrogeologic systems, and water chemistry.

The tracks aim to prepare scientists who can tackle problems that require particular areas of expertise, and to help students develop the skills needed for future employment or graduate study.

The B.S. with a major in environmental sciences requires the following course work.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Science and Mathematics Foundation Courses</td>
<td>27</td>
</tr>
<tr>
<td></td>
<td>Environmental Sciences Foundation Courses</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>Environmental Sciences Track Courses</td>
<td>33-36</td>
</tr>
<tr>
<td></td>
<td>Total Hours</td>
<td>76-79</td>
</tr>
</tbody>
</table>

Science and Mathematics Foundation

Students must complete at least 27 s.h. of course work, as follows.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>All of these:</td>
<td></td>
</tr>
<tr>
<td>BIOL:1411</td>
<td>Foundations of Biology</td>
<td>4</td>
</tr>
<tr>
<td>BIOL:1412</td>
<td>Diversity of Form and Function</td>
<td>4</td>
</tr>
<tr>
<td>CHEM:1110</td>
<td>Principles of Chemistry I</td>
<td>4</td>
</tr>
<tr>
<td>CHEM:1120</td>
<td>Principles of Chemistry II</td>
<td>4</td>
</tr>
<tr>
<td>EES:1050</td>
<td>Introduction to Geology</td>
<td>4</td>
</tr>
<tr>
<td>MATH:1850</td>
<td>Calculus I</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>One of these:</td>
<td></td>
</tr>
<tr>
<td>CHEM:2021</td>
<td>Fundamentals of Chemical Measurements (must be taken by chemical sciences track students)</td>
<td>3</td>
</tr>
<tr>
<td>STAT:3510/ IGPI:3510</td>
<td>Biostatistics</td>
<td>3</td>
</tr>
<tr>
<td>STAT:4200/ IGPI:4200</td>
<td>Statistical Methods and Computing</td>
<td>3</td>
</tr>
</tbody>
</table>

Environmental Sciences Foundation

Students must complete 16 s.h. of course work, as follows.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>All of these:</td>
<td></td>
</tr>
<tr>
<td>ENVS:1085/ EES:1085</td>
<td>Fundamentals of Environmental Science</td>
<td>4</td>
</tr>
<tr>
<td>ENVS:2010/ EES:2010/ GEOG:2010</td>
<td>Interdisciplinary Environmental Seminar</td>
<td>1</td>
</tr>
<tr>
<td>ENVS:2673/ BIOL:2673</td>
<td>Ecology</td>
<td>3</td>
</tr>
<tr>
<td>ENVS:3010/ EES:3010/ GEOG:3003</td>
<td>Interdisciplinary Environmental Seminar</td>
<td>1</td>
</tr>
<tr>
<td>ENVS:3020/ EES:3020/ GEOG:3020</td>
<td>Earth Surface Processes</td>
<td>3</td>
</tr>
<tr>
<td>GEOG:1050</td>
<td>Foundations of GIS</td>
<td>4</td>
</tr>
</tbody>
</table>

Environmental Sciences Track Courses

Students majoring in environmental sciences must choose one of the following four tracks. Each track includes required general sciences courses, track foundation courses, field study courses, and elective courses.
**Biosciences (Green) Track**

The biosciences track provides the essential skills for entry-level positions that require a good knowledge of biotic systems and the ability to inventory biologic resources. The track’s aim is to produce scientists who are capable of tackling environmental problems in which links and interactions with life sciences are crucial and in which a substantial knowledge of biological/ecological sciences is required. The track also provides a strong foundation for graduate or professional training in disciplines such as ecology, wildlife management, and natural resource management.

Students must complete at least 33 s.h., including one field study course, as follows.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL:2512</td>
<td>Fundamental Genetics</td>
<td>4</td>
</tr>
<tr>
<td>BIOL:3172</td>
<td>Evolution</td>
<td>4</td>
</tr>
<tr>
<td>GEOG:2374/BIOL:2374</td>
<td>Biogeography</td>
<td>3</td>
</tr>
</tbody>
</table>

At least 9 s.h. from these:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL:2246</td>
<td>Entomology Lab</td>
<td>4</td>
</tr>
<tr>
<td>BIOL:4373/IGPI:4373</td>
<td>Molecular Evolution: Genes, Genomes, and Organisms</td>
<td>3</td>
</tr>
<tr>
<td>ENVS:3100/EES:3100 or GEOG:3500/IGPI:3500</td>
<td>Introduction to Applied Remote Sensing</td>
<td>3-4</td>
</tr>
<tr>
<td>EES:3030/ENVS:3030</td>
<td>Conservation Paleobiology</td>
<td>4</td>
</tr>
<tr>
<td>EES:3070/ENVS:3070</td>
<td>Marine Ecosystems and Conservation</td>
<td>3</td>
</tr>
<tr>
<td>EES:3220</td>
<td>Evolution of the Vertebrates</td>
<td>3</td>
</tr>
<tr>
<td>GEOG:2950</td>
<td>Environmental Conservation</td>
<td>3</td>
</tr>
<tr>
<td>GEOG:3350</td>
<td>Urban Ecology</td>
<td>3</td>
</tr>
</tbody>
</table>

Iowa Lakeside Laboratory courses (prefix IALL) may be approved in consultation with an environmental sciences advisor

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENVS:3095</td>
<td>Field Ecology</td>
<td>4</td>
</tr>
<tr>
<td>ENVS:3096</td>
<td>Winter Ecology</td>
<td>2</td>
</tr>
<tr>
<td>ENVS:3097</td>
<td>Introduction to Bird Study</td>
<td>2</td>
</tr>
<tr>
<td>IALL:3034</td>
<td>Topics in Ecology and Sustainability</td>
<td>2</td>
</tr>
<tr>
<td>IALL:3103</td>
<td>Aquatic Ecology</td>
<td>4</td>
</tr>
<tr>
<td>IALL:3109</td>
<td>Ecology and Systematics of Algae</td>
<td>4</td>
</tr>
<tr>
<td>IALL:3117</td>
<td>Ecology and Systematics of Diatoms</td>
<td>4</td>
</tr>
<tr>
<td>IALL:3122</td>
<td>Prairie Ecology</td>
<td>4</td>
</tr>
<tr>
<td>IALL:3126</td>
<td>Ornithology</td>
<td>2</td>
</tr>
</tbody>
</table>

Other Iowa Lakeside Laboratory courses (prefix IALL) may be approved in consultation with an environmental sciences advisor

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL:1261</td>
<td>Introduction to Botany</td>
<td>4</td>
</tr>
<tr>
<td>BIOL:3244</td>
<td>Animal Behavior</td>
<td>3</td>
</tr>
<tr>
<td>BIOL:3663</td>
<td>Plant Response to the Environment</td>
<td>3</td>
</tr>
<tr>
<td>BIOL:3676</td>
<td>Evolution Lab</td>
<td>4</td>
</tr>
<tr>
<td>BIOL:3994</td>
<td>Introduction to Research (no more than 6 s.h. of research credit may count toward the major)</td>
<td>2-3</td>
</tr>
<tr>
<td>BIOL:4999</td>
<td>Honors Research in Biology (no more than 6 s.h. of research credit may count toward the major)</td>
<td>arr.</td>
</tr>
<tr>
<td>CEE:5440</td>
<td>Foundations of Environmental Chemistry and Microbiology</td>
<td>3</td>
</tr>
<tr>
<td>CHEM:2210</td>
<td>Organic Chemistry I</td>
<td>3</td>
</tr>
<tr>
<td>CHEM:3110</td>
<td>Analytical Chemistry I</td>
<td>3</td>
</tr>
<tr>
<td>CHEM:3120</td>
<td>Analytical Chemistry II</td>
<td>3</td>
</tr>
<tr>
<td>EES:2200/ENVS:2200</td>
<td>Historical Geology</td>
<td>4</td>
</tr>
<tr>
<td>EES:3080</td>
<td>Introduction to Oceanography</td>
<td>2</td>
</tr>
<tr>
<td>EES:3110/ENVS:3110</td>
<td>Chemical Evolution of the Oceans</td>
<td>3</td>
</tr>
<tr>
<td>EES:3210</td>
<td>Principles of Paleontology</td>
<td>3</td>
</tr>
<tr>
<td>ENVS:3230</td>
<td>Special Topics</td>
<td>1-4</td>
</tr>
<tr>
<td>GEOG:2310/EES:2310</td>
<td>Introduction to Climatology</td>
<td>3</td>
</tr>
<tr>
<td>GEOG:3310</td>
<td>Landscape Ecology</td>
<td>3</td>
</tr>
<tr>
<td>GEOG:3320/EES:3260</td>
<td>Wetlands: Function, Geography, and Management</td>
<td>3</td>
</tr>
<tr>
<td>GEOG:3570</td>
<td>Light Detection and Ranging (LiDAR): Principles and Applications</td>
<td>3</td>
</tr>
<tr>
<td>STAT:6513/PSQF:6243</td>
<td>Intermediate Statistical Methods</td>
<td>4</td>
</tr>
</tbody>
</table>

**Biosciences Track: Field Study**

At least 3 s.h. from these:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENVS:3095</td>
<td>Field Ecology</td>
<td>4</td>
</tr>
<tr>
<td>ENVS:3096</td>
<td>Winter Ecology</td>
<td>2</td>
</tr>
<tr>
<td>ENVS:3097</td>
<td>Introduction to Bird Study</td>
<td>2</td>
</tr>
<tr>
<td>IALL:3034</td>
<td>Topics in Ecology and Sustainability</td>
<td>2</td>
</tr>
<tr>
<td>IALL:3103</td>
<td>Aquatic Ecology</td>
<td>4</td>
</tr>
<tr>
<td>IALL:3109</td>
<td>Ecology and Systematics of Algae</td>
<td>4</td>
</tr>
<tr>
<td>IALL:3117</td>
<td>Ecology and Systematics of Diatoms</td>
<td>4</td>
</tr>
<tr>
<td>IALL:3122</td>
<td>Prairie Ecology</td>
<td>4</td>
</tr>
<tr>
<td>IALL:3126</td>
<td>Ornithology</td>
<td>2</td>
</tr>
</tbody>
</table>

Other Iowa Lakeside Laboratory courses (prefix IALL) may be approved in consultation with an environmental sciences advisor

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL:1260</td>
<td>Plants and Human Affairs</td>
<td>3</td>
</tr>
<tr>
<td>ECON:3625/URP:3135</td>
<td>Environmental and Natural Resource Economics</td>
<td>3</td>
</tr>
<tr>
<td>GEOG:1070</td>
<td>Contemporary Environmental Issues</td>
<td>3</td>
</tr>
<tr>
<td>GEOG:3340</td>
<td>Ecosystem Services: Human Dependence on Natural Systems</td>
<td>3</td>
</tr>
<tr>
<td>GEOG:3400</td>
<td>Iowa Environmental Policy in Practice</td>
<td>3</td>
</tr>
<tr>
<td>GEOG:4750/URP:4750</td>
<td>Environmental Impact Analysis</td>
<td>3</td>
</tr>
</tbody>
</table>

**Biosciences Track: Electives**

Biosciences track students must complete at least 6 s.h. of elective course work, additional field study and foundation courses may be approved for elective credit.
Chemical Sciences (Yellow) Track

The chemical sciences track provides the essential skills for entry-level positions that require a basic understanding of chemical principles and a working knowledge of basic chemical concepts as applied in the environment. The track's aim is to produce scientists who are capable of tackling environmental problems in which chemical and molecular processes play an important role. The track also provides a strong foundation for graduate or professional training in environmental chemistry.

Students must complete at least 33 s.h. of course work, as follows.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM:2210</td>
<td>Organic Chemistry I</td>
<td>3</td>
</tr>
<tr>
<td>CHEM:3120</td>
<td>Analytical Chemistry II</td>
<td>3</td>
</tr>
<tr>
<td>CHEM:3250</td>
<td>Inorganic Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>CHEE:3430</td>
<td>Analytical Measurements</td>
<td>3</td>
</tr>
<tr>
<td>CHEM:3440</td>
<td>Physical Measurements</td>
<td>3</td>
</tr>
<tr>
<td>CHEM:3530</td>
<td>Inorganic Chemistry Laboratory</td>
<td>3</td>
</tr>
</tbody>
</table>

Chemical Sciences Track: Foundation

These three courses:

**CHEM:2210** Organic Chemistry I 3
**CHEM:3120** Analytical Chemistry II 3
**CHEM:3250** Inorganic Chemistry 3

And 9 s.h. from this list (at least 3 s.h. must be lab hours):

**CHEM:3440** Physical Measurements 3
**CHEM:3530** Inorganic Chemistry Laboratory 3
**CHEM:4431** Physical Chemistry I 3
**CHEM:4432** Physical Chemistry II 3
**CHEM:4450** Synthesis and Measurement 3

Chemical Sciences Track: Lab and Field Study

This course:

**CHEM:3430** Analytical Measurements 3

Chemical Sciences Track: Electives

Chemical sciences track students must complete at least 9 s.h. of elective courses chosen from the following lists; students may petition the chemistry department's environmental sciences advisor to use appropriate Department of Chemistry courses numbered 3000 and above as electives; additional foundation courses may be approved for elective credit:

**EES:2200** Historical Geology 4
**ENVS:2200** Historical Geology 4
**ENVS:3110/ EES:3110** Chemical Evolution of the Oceans 3
**ENVS:3230** Special Topics (no more than 6 s.h. may count toward the major) 1-4
**BIOL:3110** Biochemistry 3
**CEE:4150/CBE:4420** Environmental Chemistry 3
**CEE:4158/ OEH:4920** Solid and Hazardous Wastes 3
**CHEM:3994** Undergraduate Research (no more than 6 s.h. of research credit may count toward the major) 1-4
**CHEM:4760** Radiochemistry: Energy, Medicine, and the Environment 3
**CHEM:4873** Atmospheric and Environmental Chemistry 3
**EES:3100/ ENVS:3100** Introduction to Applied Remote Sensing 4
**EES:4490** Elements of Geochemistry 3
**EES:4520** Isotope Geochemistry 3
**GEOG:2310/ EES:2310** Introduction to Climatology 3
**GEOG:2950** Environmental Conservation 3
**GEOG:3500/ IGPI:3500** Introduction to Environmental Remote Sensing 3
**GEOG:1070** Contemporary Environmental Issues 3
**GEOG:2930** Water Resources 3
**GEOG:3340** Ecosystem Services: Human Dependence on Natural Systems 3
**GEOG:3400** Iowa Environmental Policy in Practice 3
**GEOG:4750/ URP:4750** Environmental Impact Analysis 3
**GEOG:4770/ GHS:4770** Environmental Justice 3

Geosciences (Brown) Track

The geosciences track provides the essential skills for entry-level positions that require a basic understanding of geologic principles and a working knowledge of basic geologic concepts applied in the environmental industry. The track's aim is to produce scientists who are capable of tackling environmental problems in which earth materials and surficial geologic processes are of primary importance. The track also lays a strong foundation for graduate study in environmental geology, engineering geology, and natural hazards assessment.

Students must complete at least 35 s.h. of course work, as follows.

...
<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Geosciences Track: General Sciences</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>These two courses:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MATH:1860</td>
<td>Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>PHYS:1400</td>
<td>Basic Physics</td>
<td>4</td>
</tr>
<tr>
<td>Students are strongly encouraged to take additional course work in physics</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Geosciences Track: Foundation</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>These two courses:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EES:2410</td>
<td>Mineralogy</td>
<td>4</td>
</tr>
<tr>
<td>EES:3300</td>
<td>Sedimentary Geology</td>
<td>4</td>
</tr>
<tr>
<td>And 7 s.h. from these:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EES:2200/ENVS:2200</td>
<td>Historical Geology</td>
<td>4</td>
</tr>
<tr>
<td>EES:3360/GEOG:3360</td>
<td>Soil Genesis and Geomorphology</td>
<td>3</td>
</tr>
<tr>
<td>EES:3500</td>
<td>Igneous and Metamorphic Petrology</td>
<td>4</td>
</tr>
<tr>
<td>EES:3840</td>
<td>Structural Geology</td>
<td>4</td>
</tr>
<tr>
<td>EES:4630</td>
<td>Hydrogeology</td>
<td>3</td>
</tr>
<tr>
<td>EES:4790</td>
<td>Engineering Geology</td>
<td>3</td>
</tr>
<tr>
<td><strong>Geosciences Track: Field Study</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>One of these:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EES:2831</td>
<td>Geologic Field Methods</td>
<td>3</td>
</tr>
<tr>
<td>EES:4680</td>
<td>Field Methods in Hydrologic Science</td>
<td>3</td>
</tr>
<tr>
<td>EES:4832</td>
<td>Geologic Field Analysis</td>
<td>3</td>
</tr>
<tr>
<td>GEOG:4010</td>
<td>Field Methods in Physical Geography</td>
<td>3</td>
</tr>
<tr>
<td><strong>Geosciences Track: Electives</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Geosciences track students must complete at least 6 s.h. of elective courses chosen from the following list, additional field study or foundation courses may be approved for elective credit:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENVS:3100/EES:3100</td>
<td>Introduction to Applied Remote Sensing</td>
<td>4</td>
</tr>
<tr>
<td>ENVS:3110/EES:3110</td>
<td>Chemical Evolution of the Oceans</td>
<td>3</td>
</tr>
<tr>
<td>ENVS:3230</td>
<td>Special Topics</td>
<td>1-4</td>
</tr>
<tr>
<td>CEE:4158/OEH:4920</td>
<td>Solid and Hazardous Wastes</td>
<td>3</td>
</tr>
<tr>
<td>EES:1290</td>
<td>Energy and the Environment</td>
<td>3</td>
</tr>
<tr>
<td>EES:1400</td>
<td>Natural Disasters</td>
<td>3</td>
</tr>
<tr>
<td>EES:3030/ENVS:3030</td>
<td>Conservation Paleobiology</td>
<td>4</td>
</tr>
<tr>
<td>EES:3070</td>
<td>Marine Ecosystems and Conservation</td>
<td>3</td>
</tr>
<tr>
<td>EES:3080</td>
<td>Introduction to Oceanography</td>
<td>2</td>
</tr>
<tr>
<td>EES:3190</td>
<td>Directed Study (no more than 6 s.h. may count toward the major)</td>
<td>arr.</td>
</tr>
<tr>
<td>EES:3350</td>
<td>Active Tectonics</td>
<td>3</td>
</tr>
<tr>
<td>EES:3380/CEE:3328</td>
<td>Fluvial Geomorphology</td>
<td>3</td>
</tr>
<tr>
<td>EES:3390</td>
<td>Integrated Watershed Analysis</td>
<td>3</td>
</tr>
<tr>
<td>EES:3770</td>
<td>Global Stratigraphy</td>
<td>3</td>
</tr>
<tr>
<td>EES:4490</td>
<td>Elements of Geochemistry</td>
<td>3</td>
</tr>
<tr>
<td>EES:4520</td>
<td>Isotope Geochemistry</td>
<td>3</td>
</tr>
<tr>
<td>EES:4630</td>
<td>Hydrogeology</td>
<td>3</td>
</tr>
<tr>
<td>EES:4720</td>
<td>Glacial and Pleistocene Geology</td>
<td>3</td>
</tr>
<tr>
<td>EES:4800</td>
<td>Solid Earth Geophysics</td>
<td>3</td>
</tr>
<tr>
<td>EES:4820</td>
<td>Tectonics and Basin Analysis</td>
<td>3</td>
</tr>
<tr>
<td>GEOG:2310/EES:2310</td>
<td>Introduction to Climatology</td>
<td>3</td>
</tr>
<tr>
<td>GEOG:2950</td>
<td>Environmental Conservation</td>
<td>3</td>
</tr>
<tr>
<td>GEOG:3570</td>
<td>Light Detection and Ranging (LiDAR): Principles and Applications</td>
<td>3</td>
</tr>
<tr>
<td><strong>Geosciences Track: Policy</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Geosciences track students must complete at least one of the following courses:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIOL:1260</td>
<td>Plants and Human Affairs</td>
<td>3</td>
</tr>
<tr>
<td>ECON:3625/URP:3135</td>
<td>Environmental and Natural Resource Economics</td>
<td>3</td>
</tr>
<tr>
<td>GEOG:1070</td>
<td>Contemporary Environmental Issues</td>
<td>3</td>
</tr>
<tr>
<td>GEOG:3340</td>
<td>Ecosystem Services: Human Dependence on Natural Systems</td>
<td>3</td>
</tr>
<tr>
<td>GEOG:3400</td>
<td>Iowa Environmental Policy in Practice</td>
<td>3</td>
</tr>
<tr>
<td>GEOG:3760/GHS:3760</td>
<td>Hazards and Society</td>
<td>3</td>
</tr>
<tr>
<td>GEOG:4750/URP:4750</td>
<td>Environmental Impact Analysis</td>
<td>3</td>
</tr>
<tr>
<td>GEOG:4770/GHS:4770</td>
<td>Environmental Justice</td>
<td>3</td>
</tr>
</tbody>
</table>

**Hydrosciences (Blue) Track**

The hydrosciences track provides the essential skills for entry-level positions that require a basic understanding of geologic principles and a working knowledge of hydrogeology and hydrogeochemistry. The track’s aim is to produce scientists who are capable of tackling environmental problems that emphasize hydrogeologic systems and for which substantial knowledge of hydrogeology and water chemistry are essential. The track also lays a strong foundation for graduate education in hydrogeology, hydrology, geochemistry, and aqueous chemistry.

Students must complete at least 36 s.h. of course work, as follows.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Hydrosciences Track: General Sciences</strong></td>
<td></td>
<td></td>
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<tr>
<td>These three courses:</td>
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<tr>
<td>MATH:1860</td>
<td>Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>PHYS:1511</td>
<td>College Physics I</td>
<td>4</td>
</tr>
<tr>
<td>PHYS:1512</td>
<td>College Physics II</td>
<td>4</td>
</tr>
<tr>
<td><strong>Hydrosciences Track: Foundation</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>These two courses:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EES:4630</td>
<td>Hydrogeology</td>
<td>3</td>
</tr>
<tr>
<td>EES:4790</td>
<td>Engineering Geology</td>
<td>3</td>
</tr>
<tr>
<td>And 6 s.h. from these:</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
EES:3380/CEE:3328  Fluvial Geomorphology  3
EES:3390     Integrated Watershed  3
              Analysis
EES:4490     Elements of Geochemistry  3
EES:4800     Solid Earth Geophysics  3
ENVS:3110/  Chemical Evolution of the  3
          EES:3110  Oceans
Hydrosciences Track: Field Study
This course:  EES:4680  Field Methods in Hydrologic  3
              Science
Hydrosciences Track: Electives
Hydrosciences track students must complete at least 6 s.h. of elective courses chosen from  
the following list, additional field study and foundation courses may be approved for elective  
credit:
CEE:3371  Principles of Hydraulics and  3
          Hydrology
CEE:4103  Water Quality  3
CEE:4378  Hydrometeorology  3
CEE:5153  Fundamentals of  3
          Environmental Sampling and  
          Analysis
CEE:5440  Foundations of  3
          Environmental Chemistry  
          and Microbiology
ENVS:2200/  Historical Geology  4
          ENVS:2200
EES:3080  Introduction to  2
          Oceanography
EES:3190  Directed Study (no more  arr.
          than 6 s.h. may count  
          toward the major)
EES:3300  Sedimentary Geology  4
EES:3350  Active Tectonics  3
ENVS:3110/  The History and Science of  3
          GEOG:3360  Oil
EES:4660/CEE:4104  Groundwater Modeling  3
EES:4800  Solid Earth Geophysics  3
ENVS:3100/  Introduction to Applied  4
          EES:3100  Remote Sensing
ENVS:3230  Special Topics  1-4
GEOG:2310/  Introduction to Climatology  3
          EES:2310
GEOG:2950  Environmental Conservation  3
GEOG:3320/  Wetlands: Function,  3
          EES:3260  Geography, and  
          Management
GEOG:3570  Light Detection and Ranging  3
          (LiDAR): Principles and  
          Applications
Hydrosciences Track: Policy
Hydrosciences track students must complete at least one of the following courses:
ENVS:1115/  The History and Science of  3
          GEOG:1115/  Oil
          HIST:1115
BIOL:1260  Plants and Human Affairs  3
ECON:3625/  Environmental and Natural  3
          URP:3135  Resource Economics
GEOG:1070  Contemporary  3
           Environmental Issues
GEOG:2930  Water Resources  3
GEOG:3780/  Ecosystem Services: Human  3
          GHS:3780/  Dependence on Natural  
          HIST:3240  Systems
GEOG:3400  Iowa Environmental Policy in  3
          Practice
GEOG:3780/  U.S. Energy Policy in Global  3
          GHS:3780/  Context
          HIST:3240
GEOG:4750/  Environmental Impact  3
          URP:4750  Analysis
GEOG:4770/  Environmental Justice  3
          GHS:4770
Teacher Licensure
Majors interested in earning licensure to teach in elementary  
and/or secondary schools must complete the College  
of Education’s Teacher Education Program (TEP) in addition  
the requirements for the major and all requirements for  
graduation. The TEP requires several College of Education  
courses and student teaching. Contact the Office of Student  
Services in the College of Education for details.

Students must satisfy all degree requirements and complete  
TEP licensure before degree conferral.

Students with a strong interest in science teaching may  
complete a science education major. Students choose one of  
five emphases—biology, chemistry, earth science, physics,  
or all-science. They may apply for admission to the TEP. See  
the B.S. in science education in the Teaching and Learning  
(College of Education) section of the Catalog.

Honors

Honors in the Major

Students have the opportunity to graduate with honors in  
the major. Honors study provides students with opportunities  
to engage in independent research under the guidance  
of a faculty sponsor chosen from affiliated faculty of the  
Environmental Sciences Program. The program draws faculty  
members from the Departments of Anthropology, Biology,  
Chemistry, Civil and Environmental Engineering, Earth and  
Environmental Sciences, and Geographical and Sustainability  
Sciences. Honors students learn how to write the results of  
their research in the format of a scientific paper, and they  
have the experience of formally presenting their research as  
either a short seminar or a poster.

Students must fulfill the following requirements:
complete a B.S. with a major in environmental sciences  
with a g.p.a. of at least 3.33 in all work for the major;  
submit a research proposal to the honors director within  
two months of the beginning of the semester in which  
the research is initiated;
complete a minimum of 6 s.h. of honors research taken  
over two semesters in BIOL:4999 Honors Research in  
Biology, CHEM:3994 Undergraduate Research, EES:3190  
Directed Study, or GEOG:3992 Undergraduate Research,
Depending on the departmental affiliation of the faculty sponsor;
prepare a thesis presenting the research in the format of a scientific paper with abstract, introduction, methods, results, discussion, and conclusions; the thesis must include a title page and an abstract formatted according to the specifications of the honors program and must be submitted to the honors director at least one week before the honors program deadline for submission; and present either a short seminar or a poster about the research at a professional meeting and/or at the University of Iowa.

Beginning in their sophomore or junior year, students should identify potential faculty sponsors by conducting a web-based survey of the research interests of the program's affiliated faculty. The student should contact potential sponsors to determine who would be willing to sponsor an honors student and what research projects the student might undertake. Students who choose a sponsor whose faculty appointment is not in the College of Liberal Arts and Sciences (CLAS) must choose a cosponsor who has a faculty appointment in CLAS.

After the student has identified a sponsor and the two have agreed on a project, the sponsor guides the student in the preparation of a research proposal that identifies the background, goals, methods, and significance of the research project. The proposal serves as the foundation of the honors thesis, which the student prepares under the sponsor's supervision upon completion of the research. Once the thesis is nearing completion or is completed, the student presents a short seminar or a poster detailing the purpose of the research.

For examples of honors projects in environmental sciences, see Honors Projects on the Environmental Sciences Program website.

University of Iowa Honors Program

In addition to honors in the major, students have opportunities for honors study and activities through membership in the University of Iowa Honors Program. Visit Honors at Iowa to learn about the University's honors program.

Membership in the UI Honors Program is not required to earn honors in the environmental sciences major.

Academic Plans

Four-Year Graduation Plan

The Four-Year Graduation Plan is not available for the environmental sciences major. Students work with their advisors on individual graduation plans.

Sample Plans of Study

Sample plans represent one way to complete a program of study. Actual course selection and sequence will vary and should be discussed with an academic advisor. For additional sample plans, see MyUI.

Environmental Sciences, B.S.

- Biosciences (Green) Track [p. 6]
- Chemical Sciences (Yellow) Track [p. 7]
- Geosciences (Brown) Track [p. 8]
- Hydrosciences (Blue) Track [p. 9]
### First Year

#### Fall
- **CHEM:1120** Principles of Chemistry I \(^{a,b}\) 4
- **ENVS:1085** Fundamentals of Environmental Science \(^a\) 4
- **ENGL:1200** \(\text{The Interpretation of Literature or Rhetoric}\) \(^c\) 3 - 4
- **GE CLAS Core: Diversity and Inclusion** 3

#### Total Hours: 14-15

#### Spring
- **ENVS:3000** GE CLAS Core: World Languages First Level Proficiency or elective course \(^e\) 4 - 5
- **BIOL:1411** Foundations of Biology 4
- **CHEM:2021** Fundamentals of Chemical Measurements \(^g\) 3
- **CHEM:2210** Organic Chemistry I 3

#### Total Hours: 14-15

### Second Year

#### Fall
- **GE CLAS Core: World Languages Second Level Proficiency or elective course** \(^e\) 4 - 5
- **BIOL:1412** Diversity of Form and Function 4
- **Major: environmental chemical sciences track foundation “select 9 s.h.” course** \(^h\) 3
- **GE CLAS Core: International and Global Issues** \(^e\) 3

#### Total Hours: 14-15

#### Spring
- **GE CLAS Core: World Languages Fourth Level Proficiency or elective course** \(^e\) 4 - 5
- **CHEM:3120** Analytical Chemistry II 3
- **CHEM:3250** Inorganic Chemistry 3
- **Major: environmental chemical sciences policy course** \(^i\) 3

#### Total Hours: 13-14

### Third Year

#### Fall
- **GE CLAS Core: Historical Perspectives** \(^e\) 3
- **GE CLAS Core: Social Sciences** \(^e\) 3

#### Total Hours: 15

### Fourth Year

#### Fall
- **ENVS:2673** Ecology 3
- **Major: environmental chemical sciences track foundation “select 9 s.h.” course** \(^j\) 3
- **Major: environmental chemical sciences elective course** \(^j\) 3
- **GE CLAS Core: Historical Perspectives** \(^e\) 3

#### Total Hours: 15

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**CHEM:2021** or **STAT:3510** or **STAT:4200**

**Fundamentals of Chemical Measurements or Biostatistics or Statistical Methods and Computing**

**GE CLAS Core: Diversity and Inclusion** 3

**Hours: 14-15**

**Spring**
- **ENGL:1200** or **RHET:1030** \(\text{The Interpretation of Literature or Rhetoric}\) \(^c\) 3 - 4
- **CHEM:1120** Principles of Chemistry II 4
- **ENVS:3000** \(^c\) 1
- **MATH:1850** Calculus I \(^a,d\) 4
- **GE CLAS Core: Values and Culture** \(^e\) 3

**Hours: 15-16**

**Fall**
- **GE CLAS Core: World Languages First Level Proficiency or elective course** \(^e\) 4 - 5
- **BIOL:1411** Foundations of Biology 4
- **CHEM:2021** Fundamentals of Chemical Measurements \(^g\) 3
- **CHEM:2210** Organic Chemistry I 3

**Hours: 14-15**

**Spring**
- **GE CLAS Core: World Languages Second Level Proficiency or elective course** \(^e\) 4 - 5
- **BIOL:1412** Diversity of Form and Function 4
- **Major: environmental chemical sciences track foundation “select 9 s.h.” course** \(^h\) 3
- **GE CLAS Core: International and Global Issues** \(^e\) 3

**Hours: 14-15**

**Fall**
- **GE CLAS Core: World Languages Fourth Level Proficiency or elective course** \(^e\) 4 - 5
- **CHEM:3120** Analytical Chemistry II 3
- **CHEM:3250** Inorganic Chemistry 3
- **Major: environmental chemical sciences policy course** \(^i\) 3

**Hours: 13-14**

**Spring**
- **GE CLAS Core: Historical Perspectives** \(^e\) 3
- **GE CLAS Core: Social Sciences** \(^e\) 3

**Hours: 15**

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**Chemical Sciences (Yellow) Track**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>First Year</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Fall</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>ENGL:1200</strong></td>
<td>The Interpretation of Literature or Rhetoric</td>
<td>3 - 4</td>
</tr>
<tr>
<td><strong>ENVS:1085</strong></td>
<td>Fundamentals of Environmental Science (^a)</td>
<td>4</td>
</tr>
<tr>
<td><strong>CHEM:1110</strong></td>
<td>Principles of Chemistry I (^a,b)</td>
<td>4</td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>ENVS:3000</strong></td>
<td>GE CLAS Core: Historical Perspectives (^e)</td>
<td>3</td>
</tr>
<tr>
<td><strong>GE CLAS Core: Social Sciences</strong> (^e)</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

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**Notes:**
- Fulfill a major requirement and may fulfill a GE requirement.
- Enrollment in chemistry courses requires completion of a placement exam.
- Students complete ENVS:3000 twice for a total of 2 s.h.
- Enrollment in math courses requires completion of a placement exam.
- GE CLAS Core courses may be completed in any order unless used as a prerequisite for another course. Students should consult with an advisor about the best sequencing of courses.
- Students who have completed four years of a single language in high school have satisfied the GE CLAS Core World Languages requirement. Enrollment in world languages courses requires a placement exam, unless enrolling in a first-semester-level course.
- Refer to the General Catalog for course options.
- Students may use elective courses to earn credit towards the total s.h. required for graduation or to complete a double major, minors, or certificates.
- Please see Academic Calendar, Office of the Registrar website for current degree application deadlines. Students should apply for a degree for the session in which all requirements will be met. For any questions on appropriate timing, contact your academic advisor. For more information visit http://commencement.uiowa.edu/. If applicable search for "Early and Late Participation" to find this page (e.g. walk in graduation ceremony in May, degree conferred in August).
Spring
ENVS:3000 Analytical Measurements 3
CHEM:3430 Foundations of GIS 4
GEOG:1050 Introduction to Geology 4
Major: environmental chemical sciences elective 4
GE CLAS Core: Literary, Visual, and Performing Arts 3
GE CLAS Core: Diversity and Inclusion 3

Degree Application: apply on MyUI before deadline (typically in February for spring, September for fall)

Hours 17
Total Hours 119-127

a Fulfills a major requirement and may fulfill a GE requirement.
b Enrollment in chemistry courses requires completion of a placement exam.
c Students complete ENVS:3000 twice for a total of 2 s.h.
d Enrollment in math courses requires completion of a placement exam.
e GE CLAS Core courses may be completed in any order unless used as a prerequisite for another course. Students should consult with an advisor about the best sequencing of courses.
f Students who have completed four years of a single language in high school have satisfied the GE CLAS Core World Languages requirement. Enrollment in world languages courses requires a placement exam, unless enrolling in a first-semester-level course.
g This course is required for the statistics requirement in the major for all chemical sciences track students.
h The department recommends taking CHEM:2220.
i The department recommends taking CHEM:3110.
j Refer to the General Catalog for course options.
k Students may use elective courses to earn credit towards the total s.h. required for graduation or to complete a double major, minors, or certificates.
l This course must be a lab course. See the General Catalog for options.
m Please see Academic Calendar, Office of the Registrar website for current degree application deadlines. Students should apply for a degree for the session in which all requirements will be met. For any questions on appropriate timing, contact your academic advisor. For more information visit http://commencement.uiowa.edu/. If applicable search for "Early and Late Participation" to find this page (e.g. walk in graduation ceremony in May, degree conferral in August).

Geosciences (Brown) Track

Course First Year Title Hours
ENGL:1200 The Interpretation of Literature 3 - 4
or RHET:1030 or Rhetoric
ENVS:1085 Fundamentals of Environmental Science 4
CHEM:1110 Principles of Chemistry I 4
or CHEM:1120 Principles of Chemistry II 4
EES:1050 Introduction to Geology 4
CSI:1600 Success at Iowa 2

Hours 17-18

Spring
RHET:1030 Rhetoric 3 - 4
or ENGL:1200 or The Interpretation of Literature
CHEM:1120 Principles of Chemistry II 4
ENVS:3000 Analytical Measurements 3
MATH:1850 Calculus I 4

GE CLAS Core: Values and Culture 3

Hours 15-16

Second Year
Fall
GE CLAS Core: World Languages First Level Proficiency or elective course 4 - 5
BIOL:1411 Foundations of Biology 4
MATH:1860 Calculus II 4
EES:2410 Mineralogy 4

Hours 16-17

Spring
GE CLAS Core: World Languages Second Level Proficiency or elective course 4 - 5
BIOL:1412 Diversity of Form and Function 4
GEOG:1050 Foundations of GIS 4
GE CLAS Core: Historical Perspectives 3

Hours 15-16

Summer
Major: geosciences track field study course 3 - 4

Hours 3-4

Third Year
Fall
GE CLAS Core: World Languages Second Level Proficiency or elective course 4 - 5
ENVS:3020 Earth Surface Processes 3
PHYS:1400 Basic Physics 4
EES:3300 Sedimentary Geology 4

Hours 15-16

Spring
GE CLAS Core: World Languages Fourth Level Proficiency or elective course 4 - 5
CHEM:2021 or STAT:3510 or Biostatistics or Statistical Methods and Computing 3
or STAT:4200 or Biostatistics
or Fundamental of Chemical Measurements
or Biostatistics

Major: environmental geosciences foundation 3 - 4
"select 7 s.h." course
GE CLAS Core: Diversity and Inclusion 3

Hours 13-15

Fourth Year
Fall
ENVS:2673 Ecology 3
Major: environmental geosciences foundation 3 - 4
"select 7 s.h." course
Major: environmental geosciences elective 3
GE CLAS Core: Literary, Visual, and Performing Arts 3

Hours 12-13

Spring
ENVS:3000 Analytical Measurements 3
Major: geosciences track policy course 3
Major: environmental geosciences elective 3
GE CLAS Core: International and Global Issues 3
GE CLAS Core: Social Sciences 3
Degree Application: apply on MyUI before deadline (typically in February for spring, September for fall)  
---
<table>
<thead>
<tr>
<th>Hours</th>
<th>13</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Hours</td>
<td>119-128</td>
</tr>
</tbody>
</table>

a. Fulfills a major requirement and may fulfill a GE requirement.
b. Enrollment in chemistry courses requires completion of a placement exam.
c. Students complete ENVS:3000 twice for a total of 2 s.h.
d. Enrollment in math courses requires completion of a placement exam.
e. GE CLAS Core courses may be completed in any order unless used as a prerequisite for another course. Students should consult with an advisor about the best sequencing of courses.
f. Students who have completed four years of a single language in high school have satisfied the GE CLAS Core World Languages requirement. Enrollment in world languages courses requires a placement exam, unless enrolling in a first-semester-level course.
g. It is recommended that students take EES:2831 whenever possible.
h. Choose from EES:3360, EES:3500, EES:3840, EES:4790.
i. Refer to the General Catalog for course options.
j. Please see Academic Calendar, Office of the Registrar website for current degree application deadlines. Students should apply for a degree for the session in which all requirements will be met. For any questions on appropriate timing, contact your academic advisor. For more information visit http://commencement.uiowa.edu/. If applicable search for "Early and Late Participation" to find this page (e.g. walk in graduation ceremony in May, degree conferral in August).

### Hydrosciences (Blue) Track

<table>
<thead>
<tr>
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<th>Title</th>
<th>Hours</th>
</tr>
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<tbody>
<tr>
<td><strong>First Year</strong></td>
<td></td>
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</tr>
<tr>
<td><strong>Fall</strong></td>
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</tr>
<tr>
<td>ENGL:1200 or RHEI:1030</td>
<td>The Interpretation of Literature or Rhetoric</td>
<td>3 - 4</td>
</tr>
<tr>
<td>ENVS:1085</td>
<td>Fundamentals of Environmental Science</td>
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<tr>
<td>CHEM:1110</td>
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<td><strong>Spring</strong></td>
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<td>The Interpretation of Literature</td>
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<td><strong>Second Year</strong></td>
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<td>4 - 5</td>
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<td>Foundations of Biology</td>
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<td>MATH:1860</td>
<td>Calculus II</td>
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<td>GE CLAS Core: Historical Perspectives</td>
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<td>GE CLAS Core: World Languages Second Level Proficiency or elective course</td>
<td>4 - 5</td>
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<tr>
<td>BIOL:1412</td>
<td>Diversity of Form and Function</td>
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<td>College Physics I</td>
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<tr>
<td><strong>Fall</strong></td>
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<tr>
<td>GE CLAS Core: History of World Languages</td>
<td>4 - 5</td>
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<td>PHYS:1512</td>
<td>College Physics II</td>
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<td>EES:4790</td>
<td>Engineering Geology</td>
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<td>EES:4630</td>
<td>Hydrogeology</td>
<td>3</td>
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<tr>
<td>STAT:3510</td>
<td>Biostatistics</td>
<td>3</td>
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<tr>
<td>or STAT:4200 or CHEM:2021</td>
<td>Computing or Fundamentals of Chemical Measurements</td>
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<tr>
<td>GE CLAS Core: International and Global Issues</td>
<td>3</td>
<td></td>
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<tr>
<td>Elective course</td>
<td>1 - 3</td>
<td></td>
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<tr>
<td><strong>Fourth Year</strong></td>
<td></td>
<td></td>
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<tr>
<td><strong>Fall</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Major: hydrosciences track elective course</td>
<td>3</td>
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<tr>
<td>Major: hydrosciences track elective course</td>
<td>3 - 4</td>
<td></td>
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<tr>
<td>ENVS:2673</td>
<td>Ecology</td>
<td>3</td>
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<tr>
<td>GEOG:1050</td>
<td>Foundations of GIS</td>
<td>4</td>
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<tr>
<td>GE CLAS Core: Literary, Visual, and Performing Arts</td>
<td>3</td>
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<tr>
<td><strong>Spring</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Major: hydrosciences track elective course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Major: hydrosciences track policy course</td>
<td>3</td>
<td></td>
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<tr>
<td>ENVS:3000</td>
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<td>1</td>
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<tr>
<td>GE CLAS Core: Social Sciences</td>
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<tr>
<td>GE CLAS Core: Diversity and Inclusion</td>
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<tr>
<td>Degree Application: apply on MyUI before deadline (typically in February for spring, September for fall)</td>
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<tr>
<td><strong>Total Hours</strong></td>
<td>122-132</td>
<td></td>
</tr>
</tbody>
</table>

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a. Fulfills a major requirement and may fulfill a GE requirement.
b. Enrollment in chemistry courses requires completion of a placement exam.
c. Students complete ENVS:3000 twice for a total of 2 s.h.
d. Enrollment in math courses requires completion of a placement exam.
e. GE CLAS Core courses may be completed in any order unless used as a prerequisite for another course. Students should consult with an advisor about the best sequencing of courses.
f. Students who have completed four years of a single language in high school have satisfied the GE CLAS Core World Languages requirement. Enrollment in world languages courses requires a placement exam, unless enrolling in a first-semester-level course.
g. Refer to the General Catalog for course options.
h Students may use elective courses to earn credit towards the total s.h. required for graduation or to complete a double major, minors, or certificates.

i Choose from EES:3380, EES:3390, EES:4490.

j Please see Academic Calendar, Office of the Registrar website for current degree application deadlines. Students should apply for a degree for the session in which all requirements will be met. For any questions on appropriate timing, contact your academic advisor. For more information visit http://commencement.uiowa.edu/. If applicable search for “Early and Late Participation” to find this page (e.g. walk in graduation ceremony in May, degree conferral in August).

Career Advancement

Graduates are prepared for careers in conservation, environmental assessment, hazardous waste management, park inspection and compliance, or pollution control and monitoring.

The undergraduate degree program also prepares students for graduate study in disciplines such as biology, chemistry, ecosystem sciences, environmental engineering, environmental law, environmental science, environmental sustainability, geoscience, hydrologic sciences, natural resource management, remote sensing and landscape modeling, renewable energy, and urban and regional planning.

The Pomerantz Career Center offers multiple resources to help students find internships and jobs.