Environmental Science and Policy, B.A.

The Gulf oil spill. Global climate change. Drought and water supply. Fukushima. Each of these topics illustrates the continuing need for environmental professionals with training in the natural sciences and social sciences. The Environmental Science and Policy B.A. prepares students interested in environmental problem solving by linking an understanding of natural science with socioeconomic factors and public policy.

The curriculum combines a quantitative understanding of environmental science, chemistry, and biology with law, policy, and economics to provide a foundation for careers in environmental policy, resource management, education, environmental law, urban and environmental design, and related fields.

Students may be admitted to the Environmental Science and Policy major upon entering the university as freshmen, via change of major, or as transfer students from other colleges and universities. Information about change of major policies is available from the Physical Sciences student affairs office and the UCI Change of Major Criteria website (http://changeofmajor.uci.edu/).

The Environmental Science and Policy major provides students with a solid foundation to recognize the impacts of human activities on the environment, and in turn, the impacts of environmental change on society. Students are taught the mechanisms by which key institutions, policies, and regulations impact ecosystems and the physical environment.

Once the core course work is complete, students are encouraged to focus on a particular area within Environmental Science and Policy, and to choose electives that build a coherent core of knowledge. Focus areas include, but are not limited to, urban planning, public policy, sociology, economics, climatology, water resources, water quality, agriculture, air pollution, resource management, and atmospheric sciences.

All students must meet the University Requirements (http://catalogue.uci.edu/informationforadmittedstudents/requirementsforabachelorsdegree/).

A. Complete:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>EARTHSS 40A</td>
<td>Earth System Chemistry</td>
</tr>
<tr>
<td>or CHEM 1A-CHEM 1B-CHEM 1C-CHEM 1LC-CHEM 1LD</td>
<td></td>
</tr>
<tr>
<td>or CHEM H2A-CHEM H2B-CHEM H2C-CHEM H2LA-CHEM H2LB-CHEM H2LC</td>
<td></td>
</tr>
<tr>
<td>EARTHSS 40B</td>
<td>Earth System Biology</td>
</tr>
<tr>
<td>or BIO SCI 93-BIO SCI 94</td>
<td></td>
</tr>
<tr>
<td>EARTHSS 40C</td>
<td>Earth System Physics</td>
</tr>
<tr>
<td>or PHYSICS 3A-PHYSICS 3B-PHYSICS 3C-PHYSICS 3LC-PHYSICS 3LD</td>
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</tr>
<tr>
<td>or PHYSICS 7C-PHYSICS 7D-PHYSICS 7E-PHYSICS 7LC-PHYSICS 7LD</td>
<td></td>
</tr>
<tr>
<td>UPPP 8</td>
<td>Introduction to Environmental Analysis and Design</td>
</tr>
<tr>
<td>UPPP 5</td>
<td>Introduction to Urban Planning and Policy</td>
</tr>
<tr>
<td>STATS 7</td>
<td>Basic Statistics</td>
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<tr>
<td>or STATS 8</td>
<td></td>
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<tr>
<td>or SOCECOL 13</td>
<td></td>
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<tr>
<td>or SO SCI 10A-SOC SCI 10B-SOC SCI 10C</td>
<td></td>
</tr>
<tr>
<td>EARTHSS 70A</td>
<td>Sustainable Energy Systems</td>
</tr>
<tr>
<td>EARTHSS 70B</td>
<td>Sustainable Food and Water Systems</td>
</tr>
<tr>
<td>EARTHSS 116</td>
<td>Introduction to Environmental Data Science</td>
</tr>
<tr>
<td>EARTHSS 192</td>
<td>Careers in Earth System Science</td>
</tr>
<tr>
<td>SOCECOL 10</td>
<td>Research Design</td>
</tr>
</tbody>
</table>

B. Select one of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOCECOL 195</td>
<td>Field Study (4 units)</td>
</tr>
<tr>
<td>SOCECOL 195W</td>
<td>Field Study Writing Seminar ^</td>
</tr>
<tr>
<td>SOCECOL 195B</td>
<td>Advanced Field Study ^</td>
</tr>
<tr>
<td>SOCECOL 195CW</td>
<td>Advanced Field Study ^</td>
</tr>
<tr>
<td>UC Washington, D.C. (UCDC) Academic Internship Program ^3</td>
<td></td>
</tr>
<tr>
<td>UC Center Sacramento Academic Internship Program ^3</td>
<td></td>
</tr>
</tbody>
</table>

C. Select three of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>UPPP 117</td>
<td>Environmental Justice</td>
</tr>
<tr>
<td>UPPP 131</td>
<td>Environmental Sustainability I</td>
</tr>
</tbody>
</table>
### Environmental Science and Policy, B.A.

<table>
<thead>
<tr>
<th>Upper Division Courses</th>
<th>Departments</th>
</tr>
</thead>
<tbody>
<tr>
<td>UPPP 133</td>
<td>Environmental Law and Policy</td>
</tr>
<tr>
<td>UPPP 139</td>
<td>Water Resource Policy</td>
</tr>
<tr>
<td>UPPP 142</td>
<td>Environmental Hazards in an Urbanizing World</td>
</tr>
<tr>
<td>UPPP 145</td>
<td>Environmental Governance</td>
</tr>
<tr>
<td>UPPP 146</td>
<td>Principles of Economics for Planning and Policy</td>
</tr>
</tbody>
</table>

**D. Seven 4-unit upper-division courses from the list below, with at least two courses from UPPP and two courses from EARTHSS:**

<table>
<thead>
<tr>
<th>UPPP or EARTHSS courses (100-196)</th>
<th>EARTHSS 199</th>
<th>Undergraduate Research</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOCECOL 199</td>
<td>Special Studies</td>
<td></td>
</tr>
<tr>
<td>SOCECOL H190A</td>
<td>Honors Research</td>
<td></td>
</tr>
<tr>
<td>or SOCECOL H190W</td>
<td>Honors Research in Earth System Science</td>
<td></td>
</tr>
<tr>
<td>EARTHSS H199A</td>
<td>Honors Research in Earth System Science</td>
<td></td>
</tr>
<tr>
<td>or EARTHSS H199B</td>
<td>Honors Research in Earth System Science</td>
<td></td>
</tr>
<tr>
<td>or EARTHSS H199C</td>
<td>Honors Research in Earth System Science</td>
<td></td>
</tr>
</tbody>
</table>

Courses used to count toward degree requirements may not be used as electives. Up to two of the seven electives can be satisfied with 4-unit EARTHSS 199, EARTHSS H199A, EARTHSS H199B, EARTHSS H199C, and/or 4-unit SOCECOL 199 or SOCECOL H190W courses. For this requirement, SOCECOL 199 courses can be counted as UPPP electives.

### Optional Geographic Information Systems (GIS) Specialization for Environmental Science and Policy majors

The optional GIS Specialization for Environmental Science and Policy majors is met by completing one of the following options as specified below:

#### Option 1:

<table>
<thead>
<tr>
<th>UPPP 120</th>
<th>Introduction to GIS for Planning and Policy</th>
</tr>
</thead>
<tbody>
<tr>
<td>UPPP 125</td>
<td>Advanced Geographic Information Systems (GIS)</td>
</tr>
<tr>
<td>UPPP 127</td>
<td>Spatial Analysis Project</td>
</tr>
</tbody>
</table>

#### Option 2:

<table>
<thead>
<tr>
<th>EARTHSS 134</th>
<th>Fundamentals of GIS for Environmental Science</th>
</tr>
</thead>
<tbody>
<tr>
<td>UPPP 127</td>
<td>Spatial Analysis Project</td>
</tr>
</tbody>
</table>

Courses taken for the GIS Specialization can be used toward the Environmental Science and Policy major. Courses must be taken for a letter grade in order to count for the GIS Specialization.

For students double majoring in Urban Studies and Environmental Science and Policy, the optional GIS Specialization can only be applied to one major.

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1. Students who score a minimum of 3 on the AP Statistics exam do not have to take STATS 7 or its equivalents.
2. Site must be listed within one of the following sections of the Field Study Catalog (https://fieldstudy.soceco.uci.edu/pages/field-study-catalog/): Environment, Planning, or Public Policy. For more information, visit the Social Ecology Field Study website (https://fieldstudy.soceco.uci.edu/).
3. See Field Study website for more information. Specific course work is required - 12 units minimum.

**NOTE:** This major is open to all students. However, courses being applied to another major cannot also be counted as upper-division electives for the B.A. in Environmental Science and Policy.

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### Freshman

<table>
<thead>
<tr>
<th>Fall</th>
<th>Winter</th>
<th>Spring</th>
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</thead>
<tbody>
<tr>
<td>EARTHSS 40A</td>
<td>EARTHSS 40B</td>
<td>EARTHSS 40C</td>
</tr>
<tr>
<td>UPPP 8</td>
<td>STATS 7</td>
<td>UPPP 5</td>
</tr>
<tr>
<td>General Education/Elective</td>
<td>General Education/Elective</td>
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<td>General Education/Elective</td>
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<td>Elective</td>
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</table>

### Sophomore

<table>
<thead>
<tr>
<th>Fall</th>
<th>Winter</th>
<th>Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOCECOL 10</td>
<td>EARTHSS 70B</td>
<td>EARTHSS 70A</td>
</tr>
<tr>
<td>General Education/Elective</td>
<td>General Education/Elective</td>
<td>General Education/Elective</td>
</tr>
<tr>
<td>Elective</td>
<td>General Education/Elective</td>
<td>General Education/Elective</td>
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<tr>
<td>Elective</td>
<td>Elective</td>
<td>Elective</td>
</tr>
<tr>
<td>EARTHSS 116</td>
<td>EARTHSS upper-division elective</td>
<td>UPPP 133</td>
</tr>
<tr>
<td>EARTHSS 192</td>
<td>Elective</td>
<td>UPPP upper-division elective</td>
</tr>
</tbody>
</table>

**UCI General Catalogue 2023-24**
Environmental Science and Policy students may complete either the Earth System Science Honors Program or the Social Ecology Honors Program.

In a year-long honors course sequence, Environmental Science and Policy students admitted into the Environmental Science and Policy honors program pursue research with faculty in the Earth Systems Science or Urban Planning and Public Policy Departments, and prepare a written thesis of their work. Visit the Earth System Science honors program website and the Social Ecology Honors Program (https://students.soceco.uci.edu/pages/social-ecology-honors-program/) for more information.

The Environmental Science and Policy major provides a strong interdisciplinary foundation for students to pursue a range of public and private sector positions, including environmental management, resource management, environmental law, environmental consulting, work with nonprofit organizations and non-governmental agencies, and related areas. Students are poised to pursue graduate studies (professional Masters degree or Ph.D.) in the following fields: environmental science, environmental studies, public policy, public administration, urban and regional planning, geography and related fields.

- Earth and Atmospheric Sciences, Minor
- Earth System Science, B.S.
- Earth System Science, Ph.D.