# Bachelor of Arts in Environmental Studies

## B.A. in Environmental Studies - Track A
(Program Code: ENVA)

**Requirements (78-79 units)**

**Total units required for graduation: 180**

### Requirements for the B.A. in Environmental Studies - Track A

#### Lower-division requirements (28)

- BIOL 100 Topics in Biology 5
- CHEM 205 Fundamentals of Chemistry I: General Chemistry 5
- GEOG 201 Map Interpretation 4
- A minimum of fourteen units chosen from: 14
  - ANTH 100 Introduction to Anthropology: Human Evolution
  - CHEM 206 Fundamentals of Chemistry II: Organic Chemistry
  - GEOG 103 Physical Geography
  - GEOL 101 Introductory Geology
  - HSCI 120 Health and Society: An Ecological Approach
  - PHYS 100 Physics in the Modern World
    or PHYS 121 Basic Concepts of Physics I

#### Upper-division requirements (30-31)

- BIOL 349 Biology of Ecosystems 4-5
  or GEOG 370 Landscape Analysis
- ECON 360 Economics of the Environment 4
  or HSCI 478 Environmental Health Management
- Four units chosen from:
  - GEOG 304 Field Methods in Geography
  - GEOG 306 Remote Sensing of the Environment
  - GEOG 406 Digital Image Processing
- GEOG 350 Conservation and Natural Resources 4
- GEOG 360 Weather and Climate 4
  or GEOG 365 Climate Change
- GEOG 480 Geomorphology 4
  or GEOL 312 Geology of California
- GEOG 305 Geographic Statistics and Research Methods 4
  or MATH 165 Introductory Statistics and Hypothesis Testing
  Note: MATH 165 can only be taken with approval of Environmental Studies coordinator
- GEOG 500 Senior Seminar 2

### Group 1

- ECON 360 Economics of the Environment 4
- GEOG 370 Landscape Analysis 4
- GEOG 415 Urban Planning and Land Development 4
- GEOG 470 Hydrology and Water Resources 4
- GEOG 480 Geomorphology 4
- GEOL 312 Geology of California 4
- HSCI 322 Air Pollution 2
- HSCI 352 Principles of Environmental Health 4
- HSCI 401 Advanced Environmental Health 5
- PSCI 342 The Politics of Environment 4

### Group 2

- GEOG 202 Introduction to Geographic Information Systems and Cartography 5
- GEOG 304 Field Methods in Geography 4
- GEOG 308 Advanced Geographic Information Systems 5
- GEOG 402 Geographic Information Systems Applications 5
- GEOG 406 Digital Image Processing 4
- GEOL 301 Introduction to Geologic Mapping 4
- HSCI 324 Radiological Health and Safety 2
- HSCI 478 Environmental Health Management 4

Students are encouraged to use approved independent study courses and approved internships for Group 1 and 2 electives.

### Group 1

- ECON 360 Economics of the Environment 4
- GEOG 370 Landscape Analysis 4
- GEOG 415 Urban Planning and Land Development 4
- GEOG 470 Hydrology and Water Resources 4
- GEOG 480 Geomorphology 4
- GEOL 312 Geology of California 4
- HSCI 322 Air Pollution 2
- HSCI 352 Principles of Environmental Health 4
- HSCI 401 Advanced Environmental Health 5
- PSCI 342 The Politics of Environment 4

### B.A. in Environmental Studies - Track B
(Program Code: ENVB)

**Requirements (79 units)**

**Total units required for graduation: 180**

### Requirements for the B.A. in Environmental Studies - Track B

#### Lower-division requirements (32)

- BIOL 200 Biology of the Cell 5
- BIOL 201 Biology of Organisms 5
- BIOL 202 Biology of Populations 5
- CHEM 215 General Chemistry I: Atomic Structure and Chemical Bonding 6
- CHEM 216 General Chemistry II: Principles of Chemical Reactions 6
- Five units chosen from:
  - PHYS 100 Physics in the Modern World
  - PHYS 121 Basic Concepts of Physics I

#### Upper-division requirements (31)

- CHEM 345 Modern Quantitative Analysis 5
- Four units chosen from:
  - ECON 360 Economics of the Environment
  - HSCI 478 Environmental Health Management
- Four units chosen from:
  - GEOG 304 Field Methods in Geography
  - GEOG 306 Remote Sensing of the Environment

<table>
<thead>
<tr>
<th>Group 1</th>
<th>Group 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 360</td>
<td>Introduction to Geographic Information Systems and Cartography</td>
</tr>
<tr>
<td>GEOG 370</td>
<td>Field Methods in Geography</td>
</tr>
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<td>GEOG 415</td>
<td>Advanced Geographic Information Systems</td>
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<td>HSCI 324</td>
<td>Radiological Health and Safety</td>
</tr>
<tr>
<td>HSCI 478</td>
<td>Environmental Health Management</td>
</tr>
</tbody>
</table>

Students are encouraged to use approved independent study courses and approved internships for Group 1 and 2 electives.

### Electives (20)

A minimum of 20 units chosen from Groups 1 and 2: (Students must take at least two courses from each of the following groups provided that none have been used elsewhere to meet requirements of this major.)

**Total Units** 78-79
### Bachelor of Arts in Environmental Studies

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOG 406</td>
<td>Digital Image Processing</td>
<td>4</td>
</tr>
<tr>
<td>GEOG 350</td>
<td>Conservation and Natural Resources</td>
<td>4</td>
</tr>
<tr>
<td>GEOG 360</td>
<td>Weather and Climate</td>
<td>4</td>
</tr>
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<td>GEOG 365</td>
<td>Climate Change</td>
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</tr>
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<td>GEOL 312</td>
<td>Geology of California</td>
<td>4</td>
</tr>
<tr>
<td>GEOG 500</td>
<td>Senior Seminar</td>
<td>2</td>
</tr>
<tr>
<td>GEOG 305</td>
<td>Geographic Statistics and Research Methods</td>
<td>4</td>
</tr>
<tr>
<td>MATH 165</td>
<td>Introductory Statistics and Hypothesis Testing</td>
<td>4</td>
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**Note:** MATH 165 can only be taken with approval of Environmental Studies coordinator.

### Electives (16)

A minimum of 16 units chosen from one of the following Groups 1 or 2 below.

Total Units: 79

#### Group 1 (16)

<table>
<thead>
<tr>
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<th>Units</th>
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</thead>
<tbody>
<tr>
<td>GEOG 370</td>
<td>Landscape Analysis</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 450</td>
<td>Ecology</td>
<td>5</td>
</tr>
<tr>
<td>BIOL 455</td>
<td>Marine Biology and Ecology</td>
<td>5</td>
</tr>
</tbody>
</table>

A minimum of seven units chosen from:

- BIOL 319 Local Flora
- CHEM 221A Organic Chemistry I Lecture
- CHEM 221B Organic Chemistry I Lab
- CHEM 222A Organic Chemistry II Lecture
- CHEM 222B Organic Chemistry II Lab
- GEOG 103 Physical Geography
- or GEOL 101 Introductory Geology
- HSCI 352 Principles of Environmental Health
- HSCI 401 Advanced Environmental Health

Total Units: 16

#### Group 2 (16)

<table>
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<th>Units</th>
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</thead>
<tbody>
<tr>
<td>CHEM 221A</td>
<td>Organic Chemistry I Lecture</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 221B</td>
<td>Organic Chemistry I Lab</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 222A</td>
<td>Organic Chemistry II Lecture</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 222B</td>
<td>Organic Chemistry II Lab</td>
<td>1</td>
</tr>
</tbody>
</table>

A minimum of eight units chosen from:

- BIOL 319 Local Flora
- GEOG 370 Landscape Analysis
- GEOG 406 Digital Image Processing
- or BIOL 455 Marine Biology and Ecology
- GEOG 103 Physical Geography
- or GEOL 101 Introductory Geology
- GEOL 322 Introduction to Geochemistry
- HSCI 352 Principles of Environmental Health
- HSCI 401 Advanced Environmental Health

Total Units: 16

Students are encouraged to use approved independent study courses and approved internships for Group 1 and 2 electives.