## Bachelor of Arts in Environmental Studies - Quantitative Reasoning Category III/IV and Stretch English

120 Total Units Required
Minimum Number of Units in the Major: 43

This roadmap is a suggested plan of study and does not replace meeting with an advisor. Please note that students may need to adjust the actual sequence of courses based on course availability. Please consult an advisor in your major program for further guidance.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td><strong>First Semester</strong></td>
<td></td>
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<tr>
<td>ENG 104</td>
<td>Writing the First Year: Finding Your Voice Stretch I</td>
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<tr>
<td>ENVS 130</td>
<td>Environmental Studies (Major Core, ES)</td>
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<tr>
<td>GE Area A</td>
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<tr>
<td>GE Area B: Quantitative Reasoning (B4)</td>
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<tr>
<td>B4 Support Course</td>
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<tr>
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<td><strong>14-15</strong></td>
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<tr>
<td><strong>Second Semester</strong></td>
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<tr>
<td>Select One (Major Core):</td>
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<tr>
<td>CHEM 115</td>
<td>General Chemistry I: Essential Concepts of Chemistry</td>
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<tr>
<td>CHEM 180</td>
<td>Chemistry for the Energy and the Environment (B1, B3, ES)</td>
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<td>ENG 105</td>
<td>Writing the First Year: Finding Your Voice Stretch II (A2)</td>
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<tr>
<td>Physical Environment - Select One (Major Elective):</td>
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<tr>
<td>ERTH 230</td>
<td>Environmental Geology (B1, B3, ES)</td>
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<td>GEOG 101</td>
<td>Our Physical Environment (B1, ES)</td>
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<tr>
<td>GE Area A</td>
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<tr>
<td>GE Area D</td>
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<tr>
<td><strong>Units</strong></td>
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<td><strong>Third Semester</strong></td>
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<tr>
<td>ENVS 224</td>
<td>Research Methods for Environmental Studies (Major Elective)</td>
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<td>GE Area B: Life Science (B2)</td>
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<tr>
<td>GE Area C</td>
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### Total Units
120-123

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<tr>
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<tr>
<td><strong>Fourth Semester</strong></td>
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<tr>
<td>GE Area C - Take Two</td>
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<td>GE Area D</td>
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<tr>
<td>Complementary Studies or SF State Studies or University Elective - Take Two</td>
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<td><strong>Fifth Semester</strong></td>
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<td>BIOL 313</td>
<td>Principles of Ecology (Major Elective)</td>
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<td>CHEM 380</td>
<td>Chemistry Behind Environmental Pollution (Major Core, UD-B, ES)</td>
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<td>ENVS 680</td>
<td>Environmental Studies Internship (Major Core)</td>
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<td>Guided Electives (11-12 units total) - Take One</td>
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<tr>
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<td><strong>Sixth Semester</strong></td>
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<tr>
<td>ENVS 450GW</td>
<td>Environmental Law and Policy - GWAR</td>
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<td>Sustainability and Social Justice - Select One (Major Elective)</td>
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<tr>
<td>Global/International - Select One (Major Elective)</td>
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<tr>
<td>Guided Electives (11-12 units total) - Take One</td>
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</tr>
<tr>
<td>Complementary Studies or SF State Studies or University Elective</td>
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<td><strong>Seventh Semester</strong></td>
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<td>Guided Electives (11-12 units total) - Take One</td>
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<td>GE Area UD-C: Upper-Division Arts and/or Humanities (Consider SF State Studies Course)</td>
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<tr>
<td>GE Area UD-D: Upper-Division Social Sciences (Consider SF State Studies Course)</td>
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<td>Complementary Studies or SF State Studies or University Elective - Take Two</td>
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<tr>
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<td><strong>Eighth Semester</strong></td>
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<tr>
<td>ENVS 690</td>
<td>Senior Seminar in Environmental Studies (Major Core)</td>
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<td>Guided Electives (11-12 units total) - Take One</td>
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<tr>
<td>Complementary Studies or SF State Studies or University Elective - Take Four</td>
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Total Units: 120-123
ENG 114 can only be taken if you complete Directed Self-Placement (DSP) and select ENG 114; if you choose ENG 104/ENG 105 through DSP you will satisfy A2 upon successful completion of ENG 105 in the second semester; multilingual students may be advised into alternative English courses.

To avoid taking additional units, it is recommended that you meet SF State Studies (AERM, GP, ES, SJ) and Ethnic Studies requirements within your GE or major.

Depending on courses completed through Early Start, students in Pathway/Category III or IV may be required to enroll in a support course to complement their Quantitative Reasoning/B4 requirement. There are multiple course options for this pathway. Before enrolling in a B4 course, students should verify their MATH Pathway/Category in their Student Center (http://cms.sfsu.edu/content/student-center/). Information regarding the courses that correspond with your MATH Pathway/Category can be found on the Developmental Studies Office Website (http://developmentalstudies.sfsu.edu/).

Complementary Studies
Boston of Arts students must complete at least 12 units of Complementary Studies outside of the primary prefix for the major. (Note: Students may not use an alternate prefix that is cross-listed with the primary prefix for the major.)

Students who complete two majors or a major and a minor automatically complete the Complementary Studies requirement. Additional ways for students in the Environmental Studies B.A. program to satisfy the requirement is with one or more languages other than English, partial completion of a minor, partial completion of a certificate, or a coherent group of courses approved by a major advisor as complementary to the major.

All Complementary Studies units must be approved by an advisor and all of the units must be separate from the units used to satisfy major requirements. Courses that fulfill Complementary Studies units may be lower- or upper-division units, resident or transfer units, or units taken in approved study abroad programs.
Guided Electives (11-12 units)
Select 11-12 units not used to satisfy the other major requirements. Electives should be organized into a coherent area of study; three suggested pathways are shown below. Environmental Sustainability and Social Justice, The Urban Environment, and Humanities and the Environment. These pathways are not mandatory; students interested in alternative routes through the elective portion of the major should consult with an advisor.

Guided Elective Pathway 1: Environmental Sustainability and Social Justice
The Environmental Sustainability and Social Justice guided electives provide students with a theoretical and applied understanding of the issues of sustainability and the connections between social justice and environmental problems and solutions. Students study the roles that values and social, political, and economic structures play in contributing to the environmental crisis. With the help of an advisor, students obtain depth by selecting elective courses from political science, American Indian studies, sociology, philosophy and religion, economics, urban studies and planning, geography, women and gender studies, and other related fields.
Take 11-12 units. Two courses must be from the shortlist. Courses used to meet other requirements of the major cannot also be used to meet the environmental sustainability and social justice emphasis requirements.

Shortlist:
- ENVS 460 Energy, Justice, and Sustainability (3 units)
- ENVS 470 Climate Politics and Policy (3 units) (ES, GP)
- ENVS 480 Climate Change Adaptation and Justice (3 units)
- ENVS 530 Environmental Leadership and Organizing (3 units)
- ENVS 570 Applied Local Sustainability (3 units) (ES)
- GEOG 421 Future Environments (3 units) (UD-D, ES, SJ)
- PLSI 354 Politics, the Environment, and Social Change (4 units) (UD-D, ES, SJ)
- USP 514 Sustainable Development in Cities (4 units) (ES, SJ)
- USP 515/GEOG 667 Environmental Justice: Race, Poverty, and the Environment (4 units) (ES, GP, SJ)

Longlist:
- AIS 310 American Indian Religion and Philosophy (3 units) (UD-C, AERM, GP, SJ)
- BECA 502 Environmental Communication on Electronic Media (3 units) (UD-C, ES, SJ)
- BIOL 349 Bioethics (3 units) (UD-B, SJ)
- BUS 450 Greening of Business (3 units)
- CINE 344 Film Genre (3 units)
- CST 300/PLSI 386 Introduction to Critical Social Thought (3 units) (UD-D, SJ)
- ECON 550 Environmental Economics (3 units)
- ECON 620 Economic Development (3 units)
- ENG 490 Grant Writing (3 units) (SJ)
- ENVS 306/ECON 306 Economics and the Environment (3 units)
- ENVS 331/IR 331 Global Environmental Crisis (4 units) (ES, GP, SJ)
- GEOG 422 Environmental Perception (3 units)
- GEOG 425 Economic Geography (3 units)
- GEOG 427 Agriculture and Food Supply (4 units) (ES, GP)
- GEOG 600/ENVS 600 Environmental Problems and Solutions (3 units) (UD-D, ES, GP)
- GEOG 647 Geography of Water Resources (4 units)
- GEOG 652/USP 652 Environmental Impact Analysis (4 units)
- GEOG 666 Geography of Garbage: Recycling and Waste Reduction (3 units) (ES)
- GPS 315/IR 315/PHIL 315 Introduction to Global Peace Studies (3 units) (UD-C, ES, GP, SJ)
I R 334 International Organizations: New World Order (4 units)
I R 520 Globalization and Development (4 units)
LS 401 International Development and Resource Justice (3 units)
(UD-D, ES, GP)
LS 430 Future of the Forests (3 units) (UD-B, ES, GP)
LS 460 Childhood, Nature, and Society (3 units)
LS 681/HIST 681 Community Service Learning in the Schools (3 units)
PH 655 Environmental Health (3 units)
PHIL 365 Science and Civilization (3 units)
PHIL 470 Environmental Ethics (3 units) (UD-C, ES, SJ)
PLSI 355/PHIL 355 Politics and Ethics of the Consumer Society (3 units) (UD-D, ES, SJ)
SOC 410/RRS 410 Grassroots Organizing for Change in Communities of Color (3 units) (UD-D, AERM, SJ)
SOC 477 Environmental Sociology (3 units) (UD-D, ES, GP)
SOC 483 Global Sociology (4 units) (UD-D, GP)
USP 456/S W 456 Urban Community Organizing and Citizen Action (3 units)
The Urban Environment Emphasis (11–12 units)
The Urban Environment guided electives provide students with a strong interdisciplinary theoretical and empirical understanding for dealing with environmental issues in urban settings. With the help of an advisor, students obtain depth by selecting elective courses focusing on sustainable urban development, environmental justice, land-use planning, environmental policy, and the urban environment in a global perspective.
Take 11-12 units. Two courses must be from the shortlist. Courses used to meet other requirements of the major cannot also be used to meet the Urban Environment emphasis requirements.
Shortlist:
ENVS 460 Energy, Justice, and Sustainability (3 units)
ENVS 480 Climate Change Adaptation and Justice (3 units)
GEOG 433/USP 433 Urban Transportation (4 units)
GEOG 652/USP 652 Environmental Impact Analysis (4 units)
GEOG 658/USP 658 Land-Use Planning (4 units)
GEOG 667/USP 515 Environmental Justice: Race, Poverty, and the Environment (4 units) (ES, GP, SJ)
USP 514 Sustainable Development in Cities (4 units) (ES, SJ)
Longlist:
BUS 450 Greening of Business (3 units)
ECON 535/USP 535 Urban Economics (3 units)
ECON 550 Environmental Economics (3 units)
ENVS 306/ECON 306 Economics and the Environment (3 units)
ENVS 570 Applied Local Sustainability (3 units) (ES)
ENVS 699 Independent Study (1-3 units)
GEOG 425 Economic Geography (3 units)
GEOG 432/USP 432 Urban Geography (4 units) (ES,GP)
GEOG 433/USP 433 Urban Transportation (4 units)
GEOG 600/ENVS 600 Environmental Problems and Solutions (3 units) (UD-D, ES, GP)
GEOG 651/USP 651 San Francisco Bay Area Environmental Issues (4 units) (UD-B, ES)
GEOG 652/USP 652 Environmental Impact Analysis (4 units)
GEOG 666 Geography of Garbage: Recycling and Waste Reduction (3 units) (ES)
I R 331/ENVS 331 Global Environmental Crisis (4 units) (ES, GP, SJ)
PHIL 355/PLSI 355 Politics and Ethics of the Consumer Society (3 units) (UD-D, ES, SJ)
RPT 440 Urban Recreation and Parks (3 units) (UD-D, AERM, SJ)
SOC 480/USP 470 City in a Global Society (4 units)
USP 530 Alternative Urban Futures (3 units)
Humanities and the Environment Emphasis (11–12 units)
The Humanities and the Environment guided electives explore the varied and complex ways that different cultures—past and present—view and communicate about the environment. With an advisor, students choose coursework in disciplines dealing with verbal or visual communication, such as communication studies, creative writing, technical and professional writing, ethnic studies, journalism, photography, design, electronic media, and cinema.
Take 11-12 units. Two courses must be from the shortlist. Courses used to meet other requirements of the major cannot also be used to meet the Humanities and the Environment emphasis requirements.
Shortlist:
BECA 502 Environmental Communication on Electronic Media (3 units) (ES, SJ)
C W 508 Introduction to Environmental Literature (3 units) (UD-C, ES)
ENG 535 Literature and Ecology (3 units) (UD-C, ES)
JOUR 580 Environmental Journalism (3 units) (ES)
PHIL 470 Environmental Ethics (3 units) (UD-C, ES, SJ)
PLSI 354 Politics, the Environment, and Social Change (4 units) (UD-D, ES, SJ)
WS 593 Gender, Health, and the Environment (3 units) (UD-D, ES, GP)
Longlist:
ANTH 321 Endangered Cultures (3 units)
CINE 344 Film Genre (3 units)
CST 300/PLSI 386 Introduction to Critical Social Thought (3 units) (UD-D, SJ)
COMM 348GW Writing About Environmental Rhetoric - GWAR (4 units) (ES)
ENVS 460 Energy, Justice, and Sustainability (3 units)
ENVS 480 Climate Change Adaptation and Justice (3 units)
HUM 380 Nature and Human Values (3 units) (UD-C, ES)
HUM 450/AMST 410 California Culture (3 units) (UD-C)
I R 334 International Organizations: New World Order (4 units)
I R 520 Globalization and Development (4 units)
LTNS 450 Indigenismo: Indigenous Cultures of the Americas (3 units) (UD-C, AERM, ES, GP)
LS 460 Childhood, Nature, and Society (3 units)*
LS 681/HIST 681 Community Service Learning in the Schools (3 units)*
PHIL 150/PLSI 150 Contemporary Moral/Political Issues (3 units) (C2, SJ)
PHIL 351 Philosophy of Risk (3 units) (UD-B, ES)
PHIL 355/PLSI 355 Politics and Ethics of the Consumer Society (3 units) (UD-D, ES, SJ)
PHIL 365 Science and Civilization (3 units)
PHIL 383 Ethics in Medicine (3 units) (UD-C, SJ)
SOC 477 Environmental Sociology (3 units) (UD-D, ES, GP)
Sustainability and Social Justice
ENVS 306/ECON 306 Economics and the Environment (3 units)
ENVS 460 Energy, Justice, and Sustainability (3 units)
ENVS 570 Applied Local Sustainability (3 units) (ES)
PHIL 470 Environmental Ethics (3 units) (UD-C, ES, SJ)
USP 514 Sustainable Development in Cities (4 units) (ES, SJ)
USP 515/GEOG 667 Environmental Justice: Race, Poverty, and the Environment (4 units) (ES, GP, SJ)
Global/International
ENVS 470 Climate Politics and Policy (3 units) (ES, GP)
ENVS 480 Climate Change Adaptation and Justice (3 units)
IR 331/ENVS 331 Global Environmental Crisis (4 units) (ES, GP, SJ)
IR 428/GEOG 428 International Political Economy of Food and
Hunger (4 units)

* Students may take either LS 460 or LS 681 but not both.