Bachelor of Arts in Environmental Studies

The Environmental Studies major, offered by the Department of Geography and Urban Studies, examines the nature, causes and consequences of human interactions with the environment. Students in Environmental Studies gain the intellectual and methodological tools to understand and address the crucial environmental issues of our time and the impact on individuals, society, and the planet.

The Environmental Studies gateway courses are designed to develop the theoretical and methodological frameworks and tools necessary to understand the relationships between people and their environment as they interact through local to global connections. Environmental studies majors are introduced to environmental processes, the geography of natural resources, geospatial technologies, and qualitative and quantitative social science research methods. In required courses and electives, students examine environmental policy and the role of political institutions; environmental decision-making; natural hazards and risk assessment; environmental ethics and legal issues; health and the environment, and environmental justice. The electives give students the opportunity to develop an area of emphasis around their particular interests.

Summary of Degree Requirements

University Requirements:

- MATH 0701 (4 s.h.) and/or ENG 0701 (4 s.h.), if required by placement testing.
- All Temple students must take a minimum of two writing-intensive courses as part of the major. The specific courses required for this major are ENST 2097 and ENST 4198.
- Students must complete requirements of the General Education (GenEd) Program. See the General Education section (http://bulletin.temple.edu/undergraduate/general-education) of the Undergraduate Bulletin for more details.

College of Liberal Arts Requirements:

- Completion of a minimum of 123 credits, including:
  - 90 credits in CLA/CST courses;
  - 45 credits of which must be at the upper level (numbered 2000-4999).
    - For Social Science majors, 6 upper level credits (numbered 2000-4999) must be taken in Humanities Subject Areas: Arabic, Chinese, English, French, German, Greek (Ancient), Greek and Roman Classics, Hebrew, Hindi, Italian, Japanese, Latin, Philosophy, Religion, Russian, and Spanish in the College of Liberal Arts, Art History in the Tyler School of Art, or any department in the College of Science and Technology.
  - A minimum GPA of 2.0, cumulatively, in CLA/CST coursework, and in the major.
  - Only courses in which a student receives a grade of at least C- can satisfy GenEd, major, minor, or CLA Foreign Language and Global Studies requirements.
- Professional Development Requirement
  - All students in the College of Liberal Arts are required to take a 1 credit seminar in professional development. CLA 1002 Professional Development for Liberal Arts Majors is the appropriate course option for this major. Other courses that fulfill this requirement may be found on the CLA College Requirements page. Only one course in this category may count towards graduation.
- Foreign Language/Global Studies Requirements:
  - All students must complete or test out of the first and second levels of a foreign language - these courses are numbered 1001 and 1002;
  - All students must complete at least one course from the GenEd Global/World Society category; and
  - All Bachelor of Arts students must complete one of the following options:
    - Third semester of a foreign language;
    - Demonstrated proficiency beyond the third semester in a foreign language (placement exam or certification from the language department);
    - Take one Global Studies course from the list on the CLA College Requirements (http://bulletin.temple.edu/undergraduate/liberal-arts/# collegerequirements#text) page;
    - Study Abroad at an approved program; or
    - Take a second General Education Global/World Society course.
- Notes on Foreign Language Study
  - The third level of language is numbered 1003 in French, German, Spanish, and Portuguese and numbered 2001 in all other foreign language subjects.
  - Students are strongly encouraged to take the third level of a foreign language as it is the minimum required for election to the prestigious honor society Phi Beta Kappa. (Taking the course does not guarantee admission but not taking it guarantees exclusion.)
  - See the College of Liberal Arts Policies (http://bulletin.temple.edu/undergraduate/liberal-arts/# policiestext) section of this Bulletin for more information on the Foreign Language Placement, Regression in Coursework, and guidelines for students' other experiences with language.
**General Electives** are typically one-third of a student’s program of study and can be focused on a second major, a minor, or towards some other personal enrichment or professional goals. See an academic advisor for assistance in developing an academic plan for these courses.

**Major Requirements (40-41 credits in Environmental Studies and related coursework):**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gateway courses</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENST 2001</td>
<td>Environment and Society</td>
<td>3</td>
</tr>
<tr>
<td>ENST 2002</td>
<td>Physical Geography</td>
<td>4</td>
</tr>
<tr>
<td><strong>Research Methods courses</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENST 2097</td>
<td>Research Design in Environmental Studies</td>
<td>3</td>
</tr>
<tr>
<td>ENST 3062</td>
<td>Fundamentals of Geographic Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>ENST 3161</td>
<td>Spatial Statistics</td>
<td>3</td>
</tr>
<tr>
<td><strong>Research Methods elective</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>ENST 3061</td>
<td>Fundamentals of Cartography</td>
<td></td>
</tr>
<tr>
<td>ENST 3063</td>
<td>Environmental Remote Sensing</td>
<td></td>
</tr>
<tr>
<td>ENST 3064</td>
<td>Qualitative Methods</td>
<td></td>
</tr>
<tr>
<td>ENST 3068</td>
<td>Environmental Impact Assessment</td>
<td></td>
</tr>
<tr>
<td>ENST 4066</td>
<td>Environmental GIS</td>
<td></td>
</tr>
<tr>
<td><strong>Advanced Environmental Studies courses:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENST 3004</td>
<td>Geography of Natural Resources</td>
<td>3</td>
</tr>
<tr>
<td>ENST 4198</td>
<td>Senior Research Seminar</td>
<td>3</td>
</tr>
<tr>
<td><strong>Electives</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Select three upper-level courses in ENST numbered 2003-4999.</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>Select one ENST course numbered 0800-4999.</td>
<td>3</td>
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</tr>
<tr>
<td>Select one course numbered 2003-4999 in ENST or from the approved electives list below.</td>
<td>3-4</td>
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</tr>
<tr>
<td><strong>Total Credit Hours</strong></td>
<td></td>
<td>40-41</td>
</tr>
</tbody>
</table>

1. No electives may double-count between the Environmental Studies major and either the Geography & Urban Studies major or minor.
2. One General Education course taken in Environmental Studies may count towards the major.

**Double-Counting Across Curricula**

Many students elect to take a combination of the Environmental Studies major or minor and the Geography and Urban Studies major or minor as they are complementary programs.

The ONLY courses that can double-count between the Geography and Urban Studies and Environmental Studies majors are: GUS 3161/ENST 3161, GUS 2197/ENST 2097, and ENST 3062/GUS 3062. When used for the major in either program, these courses may not be used to fulfill the minor elective requirements of the other program.

Note GUS 4198 and ENST 4198 are NOT cross-listed seminars. Anyone pursuing a double major in Geography & Urban Studies and Environmental Studies must take both capstone courses.

Students may not combine a major or minor in Environmental Studies and a major or minor in Environmental Science in the College of Science and Technology.

**Environmental Studies Approved (non-ENST) Electives List**

Students may use one elective from the list below toward the Environmental Studies Major to fulfill the Approved Elective requirement. This requirement can also be fulfilled with any ENST elective numbered 2003+.

Note: Upper-level Science and Liberal Arts courses from this list can be used to satisfy the CLA 45 credit upper-level distribution requirement, but not all courses below are offered within the College of Liberal Arts or College of Science and Technology. Please consult with a CLA Academic Advisor.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 2705</td>
<td>Fundamentals of Biological Anthropology</td>
<td>4</td>
</tr>
<tr>
<td>ANTH 3774</td>
<td>Environmental Physiology and Health</td>
<td>3</td>
</tr>
</tbody>
</table>
Bachelor of Arts in Environmental Studies

BIOL 2227 Principles of Ecology 3
BIOL 3244 Experimental Marine Biology 4
BIOL 3245 Marine Ecology 4
BIOL 3316 Tropical Marine Biology 4
BIOL 3336 Freshwater Ecology 4
BIOL 4327 Biological Impacts of Global Climate Change 3
BOT 1112 Plant Ecology 1 3
CEE 4531 Life Cycle Assessment and Carbon Footprinting 3
CTRP 2114 Urban Form and Design 3
CTRP 2213 Environmental Planning 3
CTRP 3256 Sustainable Community Design and Development 3
ECON 3513 Economics of State and Local Governments 3
ECON 3512 Public Finance 3
EES 2096 Climate Change: Oceans To Atmosphere 4
EES 2021 Sedimentary Environments 4
EES 2061 Introduction to Geochemistry 4
EES 3011 Remote Sensing and GIS 4
EES 3021 Groundwater Hydrology 4
ENVH 2102 Environmental Health 3
ENVT 4761 Environmental Regulations 3
HORT 2114 Soils 3
HORT 2334 Food Crops I 3
HORT 2353 Food Crops II 3
HORT 2552 Trees in the Urban Landscape 2
HORT 2575 Introduction to Public Horticulture 3
HORT 3514 Landscape Restoration 3
JRN 3253 Health and Environmental Writing 3
LARC 2144 Landscape Architecture Design Studio II 6
LARC 2496 Landscape Traditions 3
LARC 2758 Summer Field Ecology 3

Note: Only one course numbered below 1999 can count for the electives requirement.

Distinction in Major

Environmental Studies majors may graduate with distinction in major with a 3.5 in Environmental Studies coursework and a 3.0 GPA overall.

Suggested Academic Plan

Bachelor of Arts in Environmental Studies

Requirements for New Students starting in the 2018-2019 Academic Year

Year 1
Fall

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
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</thead>
<tbody>
<tr>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
<td>4</td>
</tr>
<tr>
<td>GenEd Quantitative Literacy Course [GQ]</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>Foreign Language 1001 - first level</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
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<td>3</td>
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Term Credit Hours 15

Spring

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
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</thead>
<tbody>
<tr>
<td>IH 0851 or 0951</td>
<td>Intellectual Heritage I: The Good Life [GY]</td>
<td>3</td>
</tr>
<tr>
<td>Foreign Language 1002 - second level</td>
<td></td>
<td>4</td>
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<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
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<tr>
<td>GenEd Breadth Course</td>
<td></td>
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</table>
## Bachelor of Arts in Environmental Studies

### Year 2

#### Fall

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>IH 0852 or 0952</td>
<td>Intellectual Heritage II: The Common Good [GZ]</td>
<td>3</td>
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<tr>
<td>CLA/CST 0800-4999</td>
<td>Elective</td>
<td>3</td>
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<tr>
<td>ENST 2001</td>
<td>Environment and Society</td>
<td>3</td>
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<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
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<tr>
<td>Select one of the following:</td>
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<tr>
<td>Foreign Language - third level</td>
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<tr>
<td>GenEd World Society Course</td>
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<tr>
<td>Internationally Focused Course From Approved List</td>
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### Term Credit Hours

16

#### Spring

<table>
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<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
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<tr>
<td>ENST 2002</td>
<td>Physical Geography</td>
<td>4</td>
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<tr>
<td>ENST 2097</td>
<td>Research Design in Environmental Studies [WI]</td>
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<tr>
<td>CLA 1002</td>
<td>Professional Development for Liberal Arts Majors</td>
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<td>GenEd Breadth Course</td>
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<td>CLA/CST 0800-4999 Elective</td>
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### Term Credit Hours

15

### Year 3

#### Fall

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<th>Course Code</th>
<th>Course Title</th>
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<tr>
<td>ENST 3062</td>
<td>Fundamentals of Geographic Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>ENST 3004</td>
<td>Geography of Natural Resources</td>
<td>3</td>
</tr>
<tr>
<td>ENST Major Elective 0800-4999</td>
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</tr>
<tr>
<td>GenEd Breadth Course</td>
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<tr>
<td>CLA/CST 2000+ Humanities/CST Course</td>
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</tr>
<tr>
<td>One 0800-4999 Elective in Any School or College</td>
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### Term Credit Hours

17

#### Spring

<table>
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<tr>
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<th>Course Title</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>ENST 3161</td>
<td>Spatial Statistics</td>
<td>3</td>
</tr>
<tr>
<td>ENST Research Methods Course (from list)</td>
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<tr>
<td>ENST Major Elective 2003-4999</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>CLA/CST 2000+ Humanities/CST Course</td>
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</tr>
<tr>
<td>CLA/CST 0800-4999 Elective</td>
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### Term Credit Hours

15

### Year 4

#### Fall

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<th>Course Code</th>
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<tr>
<td>CLA/CST 2000+ Electives</td>
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<tr>
<td>ENST Major Electives 2003-4999</td>
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<tr>
<td>ENST Major Elective 2003-4999 or Elective from Approved List (see major description)</td>
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### Term Credit Hours

14

#### Spring

<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>ENST 4198</td>
<td>Senior Research Seminar [WI]</td>
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</tr>
<tr>
<td>CLA/CST 0800-4999 Electives</td>
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</table>

### Term Credit Hours

16

### Total Credit Hours:

123