GENERAL REQUIREMENTS FOR STUDENTS MATRICULATING IN ACADEMIC YEAR: 2016-2017

DEGREE: BACHELOR OF SCIENCE

MAJOR: ENVIRONMENTAL EARTH SCIENCE

MINIMUM CUMULATIVE GRADE POINT AVERAGE: 2.0

MINIMUM MAJOR GRADE POINT AVERAGE: 2.0

TOTAL CREDITS: 120

**CORE CURRICULUM REQUIREMENTS**

<table>
<thead>
<tr>
<th>Area</th>
<th>Credits</th>
<th>To Be Selected From</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Year Writing</td>
<td>4</td>
<td>ENGL 1010 or Equivalent</td>
</tr>
<tr>
<td>TIDES – 1 course in fall semester</td>
<td>1-1.5</td>
<td></td>
</tr>
<tr>
<td>Foreign Language – Competence at 1020-Level (1-2 courses depending on placement and language)</td>
<td>3-8</td>
<td>Arabic, Chinese, French, German, Greek, Hebrew, Italian, Japanese, Latin, Portuguese, Russian, or Spanish</td>
</tr>
<tr>
<td>Cultural Knowledge – 1 Humanities 1 Fine Arts</td>
<td>6</td>
<td>Courses designated Humanities and Fine Arts</td>
</tr>
<tr>
<td>Cultural Knowledge – Social Science</td>
<td>6</td>
<td>Courses designated Social Science</td>
</tr>
<tr>
<td>Quantitative Reasoning 2 Math courses</td>
<td>8</td>
<td>MATH 1210 or equivalent and 1220</td>
</tr>
<tr>
<td>Scientific Inquiry – 1 Lab Science 1 Science or Math</td>
<td>4-8</td>
<td>Courses from departments designated Science and Math</td>
</tr>
<tr>
<td>Writing Intensive</td>
<td>4</td>
<td>Consult Major</td>
</tr>
<tr>
<td>Public Service – 1st Tier 2nd Tier</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Western Traditions</td>
<td>3</td>
<td>Refer to Undergraduate Core Curriculum Guide</td>
</tr>
<tr>
<td>Outside Western Traditions Or Comparative Cultures Intl. Perspectives</td>
<td>3</td>
<td>Refer to Undergraduate Core Curriculum Guide</td>
</tr>
</tbody>
</table>

**MAJOR REQUIREMENTS**

I. Courses Required Outside EENS (seven courses)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EBIO 1010</td>
<td></td>
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<tr>
<td>MATH 1210</td>
<td></td>
</tr>
<tr>
<td>MATH 1220</td>
<td></td>
</tr>
<tr>
<td>CHEM 1070/1075</td>
<td></td>
</tr>
<tr>
<td>CHEM 1080/1085</td>
<td></td>
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<tr>
<td>CHEM 2500</td>
<td></td>
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<tr>
<td>PHYS 1210/1211</td>
<td></td>
</tr>
</tbody>
</table>

II. Foundational Courses (three courses)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EENS 1110/1115</td>
<td></td>
</tr>
<tr>
<td>EENS 1300/1305</td>
<td></td>
</tr>
<tr>
<td>EENS 2020</td>
<td></td>
</tr>
</tbody>
</table>

III. Core Courses (five courses)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EENS 2070</td>
<td></td>
</tr>
<tr>
<td>EENS 2090 (C- or better required for major)</td>
<td></td>
</tr>
<tr>
<td>EENS 3150/3151</td>
<td></td>
</tr>
<tr>
<td>EENS 4020</td>
<td></td>
</tr>
<tr>
<td>EENS 4300</td>
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</tr>
</tbody>
</table>

IV. Electives (five courses)

Any five EENS Environmental courses at or above the 2000-level; a minimum of three electives must be at the 3000-4000 level. Environmental electives include the following courses:

- EENS 2080 Severe Weather
- EENS 2230 Oceanography
- EENS 3050 Natural Disasters
- EENS 3600 The Science of Climate Change
- EENS 3720 Infrastructure of Sustainable Urban Environments
- EENS 3980 Environmental Field Study
- EENS 4030 Environmental Spatial Analysis
- EENS 4180 Intro to Remote Sensing
- EENS 4250 Isotopes in the Environment
- EENS 4360 Environmental Geochemistry
- EENS 4800 Air Pollution Fundamentals and Modelling
- EENS 4820 Soil and Water Pollution
- EENS 4960 Environmental Sampling, Analysis, and Practice

Students are strongly encouraged to include Remote Sensing and Environmental Geochemistry in their electives. **No capstone course is required for this major.**

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**Minor requirements for Environmental Earth Science:**

I. Foundational course

- EENS 1300/1305-Earth as a Living Planet (lecture and lab)

II. Two courses from:

- EENS 2070 – Weather & Climate
- EENS 2080 – Severe Weather
- EENS 2090 – Surface Water Hydrology
- EENS 2230 – Oceanography

III. Electives (three courses)

Any three environmental electives at or above the 3000-level. Environmental electives include the following courses:

- EENS 2080 Severe Weather
- EENS 2230 Oceanography
- EENS 3050 Natural Disasters
- EENS 3600 The Science of Climate Change
- EENS 3720 Infrastructure of Sustainable Urban Environments
- EENS 3980 Environmental Field Study
- EENS 4030 Environmental Spatial Analysis
- EENS 4180 Intro to Remote Sensing
- EENS 4250 Isotopes in the Environment
- EENS 4360 Environmental Geochemistry
- EENS 4800 Air Pollution Fundamentals and Modelling
- EENS 4820 Soil and Water Pollution
- EENS 4960 Environmental Sampling, Analysis, and Practice

Students are strongly encouraged to include Remote Sensing and Environmental Geochemistry in their electives. **No capstone course is required for this major.**
What Can I Do with a Major in...
Environmental Earth Science

GENERAL INFORMATION
• Gaining relevant work experience through internships, part-time jobs, or volunteer positions is critical.
• A bachelor’s degree will qualify you for work as a laboratory assistant, technician, technologist or research assistant in education, industry, government, museums and parks.
• Develop strong computer, mathematics and communication skills.
• Join professional organizations to stay abreast of current issues in your field(s) of interest and to develop networking contacts.
• Read scientific journals in your areas of interest.
• If you are interested in attending graduate or professional school, become familiar with admission requirements and maintain a high GPA.
• Attend seminars, conferences and workshops sponsored by professional associations or public interest groups.

SKILLS
• Ability to operate scientific equipment
• Good interpersonal, written, and verbal communication skills
• Attention to detail
• Critical thinking and problem solving skills
• Gathering information, conducting research and laboratory experimentation
• Analyzing and evaluating data, writing and preparing reports
• Capacity to calculate, compute and apply formulas
• Ability to develop ideas and problem-solve
• Ability to coordinate work with others
• Ability to conduct research and organize
• Capacity to interpret technical/scientific data
• Able to learn laboratory procedures rapidly

CAREER AREAS
<table>
<thead>
<tr>
<th>PLANNING</th>
<th>EMPLOYERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air Quality</td>
<td>Aviation</td>
</tr>
<tr>
<td>Building/Zoning</td>
<td>Land-Use</td>
</tr>
<tr>
<td>Consulting</td>
<td>Recreation</td>
</tr>
<tr>
<td>Transportation</td>
<td>Water Resources</td>
</tr>
<tr>
<td>Hazardous or Solid Waste</td>
<td>Management</td>
</tr>
<tr>
<td>Air or Water Quality Management</td>
<td>Architectural firms</td>
</tr>
<tr>
<td></td>
<td>Nonprofit groups/organizations</td>
</tr>
<tr>
<td></td>
<td>Federal, state, regional, and local government</td>
</tr>
<tr>
<td></td>
<td>National &amp; state parks</td>
</tr>
<tr>
<td></td>
<td>Corporations</td>
</tr>
<tr>
<td></td>
<td>Consulting firms</td>
</tr>
<tr>
<td></td>
<td>Real estate development companies</td>
</tr>
<tr>
<td></td>
<td>Law firms</td>
</tr>
</tbody>
</table>

ENVIRONMENTAL EDUCATION OR COMMUNICATION
| Teacher/Professor       | Journalism           |
| Tourism                 | Lobbyist             |
| Law                     |                      |
|                          | Market research companies |
|                          | Colleges/universities |
|                          | Two-year community colleges |
|                          | Public and private schools (K-12) |

SOLID OR HAZARDOUS WASTE MANAGEMENT
| Chemistry                | Hydrology            |
| Logistics                | Recycling            |
| Transportation           | Hydrogeology         |
| Quality Control          | Risk Assessment      |
| Industrial Hygiene       | Law                  |
| Biology                  | Geology              |
| Public and Environmental Health | Private waste management firms |
| Environmental or Chemical Engineering | Hazardous waste management firms |
|                          | Federal, state, regional, and local government |

LAND AND WATER CONSERVATION
| Biology                  | Ecology              |
| Planning                 | Law                  |
| Geographic Information Systems | Soil Conservation |
| Preserve Management      |                      |
| Natural Resource Management |                      |
|                          | Nonprofit groups/organizations |
|                          | Federal, state, regional, and local government |
|                          | US Department of Agriculture |
|                          | Bureau of Land Management |
|                          | National & state parks |

If you think you might be interested in this major, but you are not absolutely sure, an exploratory advisor can help you explore major and career options, please go to: Explore.Tulane.edu

If you are interested in information about Law Professions, please go to: LawProfessions.Tulane.edu

If you are interested in information about Health Professions, please go to: HealthProfessions.Tulane.edu
### AIR OR WATER QUALITY MANAGEMENT
- Analytical Chemistry
- Meteorology
- Safety & Health Management
- Project Development
- Biology
- Civil/Environmental Engineering
- Drinking Water Treatment/Supply
- Groundwater Protection
- Surface Water Management
- Industrial Engineering
- Law
- Environmental Quality
- Risk Assessment
- Toxicology
- Aquatic Ecology
- Hydrogeology
- Hydrology
- Wastewater Treatment
- Estuary Management
- Wetlands Protection
- Nonprofit groups/organizations
- Treatment plants
- Federal, state, regional, and local government
- US Department of Agriculture
- National & state parks

### FISHERY & WILDLIFE MANAGEMENT
- Aquaculture
- Data Management
- Hatchery Management
- Ecology
- Research
- Botany
- Biology
- Marine Biology
- Education
- Planning
- Federal, state, regional, and local government
- Bureau of Land Management
- National & state parks

### PARKS AND OUTDOOR RECREATION
- Law Enforcement
- Research
- Site Operations and Maintenance
- Direct Mail Merchandising
- Natural Resource Management
- Administration and Management
- Recreation Planning
- Ecotourism
- Federal, state, regional, and local government
- Bureau of Land Management
- National & state parks

### FORESTRY
- Consulting
- Hydrology
- Research
- Urban Forestry
- Natural Resource Management
- Entomology
- Planning
- International Forestry
- Federal, state, regional, and local government
- Bureau of Land Management
- National & state parks

## Professional Organizations
- National Association for Environmental Management: [www.naem.org](http://www.naem.org)
- National Association for Environmental Professionals: [www.naep.org](http://www.naep.org)
- National Registry of Environmental Professionals: [www.nrep.org](http://www.nrep.org)
- American Society of Landscape Architects: [www.asla.org](http://www.asla.org)
- Coalition to Restore Coastal Louisiana: [www.crcl.org](http://www.crcl.org)
- Soil Science Society of America: [www.soils.org](http://www.soils.org)
- Air & Waste Management Association: [www.awma.org](http://www.awma.org)
- Ecological Society of America: [www.esa.org](http://www.esa.org)
- The Environmental Careers Organization: [www.eca.org](http://www.eca.org)
- Marine Conservation Biology Institute: [www.mcbi.org](http://www.mcbi.org)
- AIBS: American Institute of Biological Sciences: [www.aibs.org](http://www.aibs.org)
- AAAS: American Association for the Advancement of Science: [www.aaas.org](http://www.aaas.org)
- National Academy of Science: [www.nas.edu](http://www.nas.edu)

## Related Websites & Associations
- Environmental Protection Agency: [www.epa.gov](http://www.epa.gov)
- Environmental Career Opportunities: [www.ecojobs.com](http://www.ecojobs.com)
- E Jobs: Environmental Jobs and Careers: [www.ejobs.org](http://www.ejobs.org)
- Science Jobs: [www.sciencejobs.com](http://www.sciencejobs.com)
- USA Jobs: [www.usajobs.gov](http://www.usajobs.gov)
- Sustainable Business: Green Dream Jobs: [www.sustainablebusiness.com/jobs](http://www.sustainablebusiness.com/jobs)
- Nature Career Resources: [www.nature.com](http://www.nature.com)
- Careers in Science and Engineering: [www.nap.edu/readingroom/books/careers](http://www.nap.edu/readingroom/books/careers)
- Guide to Graduate Education in Science, Engineering and Public Policy: [www.aas.org/spp/sepp/index.htm](http://www.aas.org/spp/sepp/index.htm)
- ScienceCareers.org: [http://sciencecareers.sciencemag.org](http://sciencecareers.sciencemag.org)

### For Jobs, internships, resume assistance, interviews, and self-assessments, please go to:

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[![advising Tulane.edu](https://www.tulane.edu/advising)](https://www.tulane.edu/advising)