# Environmental Studies, Bachelor of Arts - ENVS

## Major Requirements (40-75 Hours)

The following are required. In addition, at least one concentration must be chosen.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENVS 161</td>
<td>Introduction to Environmental Studies</td>
<td>3</td>
</tr>
<tr>
<td>ENVS 171</td>
<td>Introduction to Environmental Science</td>
<td>3</td>
</tr>
<tr>
<td>ENVS 217</td>
<td>Environmental Policy</td>
<td>3</td>
</tr>
<tr>
<td>COMM 418</td>
<td>Seminar on Women, Leadership, and Communication</td>
<td>3</td>
</tr>
<tr>
<td>ENVS 385</td>
<td>Interdisciplinary Environmental Research</td>
<td>3</td>
</tr>
<tr>
<td>ENVS 386</td>
<td>Current Issues in Environmental Studies</td>
<td>1</td>
</tr>
<tr>
<td>ENVS 495</td>
<td>Comprehensive Project Seminar</td>
<td>3</td>
</tr>
</tbody>
</table>

### Concentration

Select at least one of the following Concentrations: 21-56

- Environmental STEM Concentration (p. 1)
- Global Environmental Policy Concentration (p. 1)
- Nature Culture Arts Concentration (p. 2)
- Spirituality Justice Ethics Concentration (p. 2)

### Total Credits

40-75

## Concentrations

### Environmental STEM Concentration

Please note that the Earth and Water Science Area Focus is only available to students pursuing the dual degree in Engineering at the University of Notre Dame.

<table>
<thead>
<tr>
<th>Code</th>
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<tbody>
<tr>
<td>PHIL 256</td>
<td>Environmental Ethics</td>
<td>3</td>
</tr>
<tr>
<td>BIO 316</td>
<td>Conservation Biology</td>
<td>4</td>
</tr>
<tr>
<td>or BIO 323</td>
<td>Ecology</td>
<td></td>
</tr>
</tbody>
</table>

### Environmentally-Related Science Elective

Select one of the following: 3-4

- BIO 308 Vertebrate Natural History
- BIO 316 Conservation Biology
- BIO 323 Ecology
- BIO 332 Ornithology
- CHEM 311 Thermodynamics
- PHYS 235 Nuclear Astrophysics
- PHYS 215 Materials Science
- PHYS 343 Thermodynamics

### Area Focus Courses

Select four courses from one of the following areas: 12-13

- MATH 231 Calculus III
- MATH 326 Linear Algebra and Differential Equations
- MATH 335 Differential Equations II

## Required Supporting Courses

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 121</td>
<td>Principles of Chemistry I</td>
<td>8</td>
</tr>
<tr>
<td>&amp; CHEM 122</td>
<td>Principles of Chemistry II</td>
<td></td>
</tr>
<tr>
<td>PHYS 121</td>
<td>General Physics I: Mechanics and Waves</td>
<td>8</td>
</tr>
<tr>
<td>&amp; PHYS 122</td>
<td>General Physics II: Temperature, Electricity, and Light</td>
<td></td>
</tr>
<tr>
<td>MATH 131</td>
<td>Calculus I</td>
<td>4-8</td>
</tr>
<tr>
<td>&amp; MATH 132</td>
<td>Calculus II</td>
<td></td>
</tr>
<tr>
<td>or MATH 133</td>
<td>Theory and Application of Calculus</td>
<td></td>
</tr>
</tbody>
</table>

Select one of the following: 3-6

- MATH 345 Probability
- & MATH 346 and Statistics (Applied Mathematics focus)
- ACMS 30440 Probability and Statistics (Earth & Water Science focus)

### Total Credits

45-54

1. With program permission, the following earth or water science courses offered at Notre Dame may be used to fulfill this requirement: CE 20110 – Planet Earth, CE 20520 – Environmental Mineralogy, CE 20320 – Environmental Aquatic Chemistry.

## Global Environmental Policy Concentration

### STEM Elective

Select one of the following: 3-4

- ANTH 254 Survey II: Human Prehistory
- BIO 109 Introduction to Marine Biology
- BIO 308 Vertebrate Natural History
- BIO 312 Evolution
- BIO 316 Conservation Biology
- BIO 323 Ecology
- BIO 332 Ornithology
- CHEM 102 Chemistry in Everyday Life
- MATH 107 Mathematics for Sustainability

### Arts and Humanities Elective

Select one of the following: 3

- ART 236 Sustainable Textiles
- ART 274 Introduction to Design and the Environment
- ART 354 Picturing Biodiversity: The Art of Natural History
- ART 356 Environment in Contemporary Art
- ART 374 Design and the Environment Studio II
- EDUC 466 Communicating Climate Science
- ENLT 211 Animals in Literature and Society
- ENLT 213 Environmental Literature
- ENLT 251 African-American Literature

or MATH 338 Numerical Analysis

Environmental Science (at Notre Dame)

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<tr>
<td>CE 20110</td>
<td>Planet Earth</td>
<td></td>
</tr>
<tr>
<td>CE 20320</td>
<td>Environmental Aquatic Chemistry</td>
<td></td>
</tr>
<tr>
<td>CE 20520</td>
<td>Environmental Mineralogy</td>
<td></td>
</tr>
<tr>
<td>CE 30300</td>
<td>Intro to Environmental Engineering</td>
<td></td>
</tr>
<tr>
<td>CE 30320</td>
<td>Water Chemistry and Treatment</td>
<td></td>
</tr>
<tr>
<td>CE 30455</td>
<td>Environmental Hydrology</td>
<td></td>
</tr>
</tbody>
</table>
ENVS 331  Human Ecology and Spirituality
PHIL 254  Social Justice
PHIL 256  Environmental Ethics
RLST 351  Religion and Science

Microeconomics Course
ECON 252  Principles of Microeconomics  3

Society and Environment
Select one of the following:  3
ANTH 141  People and Nature
ANTH 253  Survey I: Culture and Language
SOC 203  Social Problems (approved sections)

Advanced Area Courses
Select three of the following:  9
ANTH 390  Special Topics
COMM 307  Organizational Communication
ECON 354  Economic Development
ECON 390  Topics in Economics (Approved Sections)
POSC 319  The Global Politics of International Development
POSC 326  Global Environmental Politics
SOC 306  Consumer Society

Required Supporting Courses
MATH 114  Introduction to Statistics  3
or MATH 346  Statistics

Total Credits  24-25

1  With program permission and permission of the relevant department, PSYC 324 Statistics in Psychology or SOC 371 Sociological Statistics Lab may be substituted for MATH 114 Introduction to Statistics.

Nature, Culture, Arts Concentration

Code  Title  Credits
Stem Elective
Select one of the following:  3-4
ANTH 254  Survey II: Human Prehistory
BIO 109  Introduction to Marine Biology
BIO 308  Vertebrate Natural History
BIO 312  Evolution
BIO 316  Conservation Biology
BIO 323  Ecology
BIO 332  Ornithology
CHEM 102  Chemistry in Everyday Life
MATH 107  Mathematics for Sustainability

Environment and Society Elective
Select one of the following:  3
ANTH 141  People and Nature
ANTH 253  Survey I: Culture and Language
COMM 307  Organizational Communication
ECON 354  Economic Development
ECON 390  Topics in Economics (Approved Sections)
JUST 250  Introduction to Justice Studies
POSC 319  The Global Politics of International Development
POSC 326  Global Environmental Politics
SOC 203  Social Problems (approved sections)

SOC 306  Consumer Society

Explorations Courses
Select four of the following:  12
ANTH 253  Survey I: Culture and Language
ART 236  Sustainable Textiles
ART 274  Introduction to Design and the Environment
ART 354  Picturing Biodiversity: The Art of Natural History
ART 356  Environment in Contemporary Art
ART 374  Design and the Environment Studio II
EDUC 466  Communicating Climate Science
ENLT 211  Animals in Literature and Society
ENLT 213  Environmental Literature
ENLT 251  African-American Literature
ENVS 331  Human Ecology and Spirituality
HUST 103  Lives and Times (approved sections)
PHIL 254  Social Justice
PHIL 256  Environmental Ethics
RLST 351  Religion and Science

Theoretical Applications Course
Select one of the following:  3
ANTH 320  Anthropology of Race and Racism
ANTH 346  Gender in Cross-Cultural Perspective
ANTH 390  Special Topics (approved topics)
ENLT 385  Critical Theory
GWS 350  Feminist Theory

Total Credits  21-22

1  No more than two courses may be taken in a single discipline (as indicated by course prefix).

Spirituality, Justice, Ethics Concentration

Code  Title  Credits
STEM Elective
Select one of the following:  3-4
ANTH 254  Survey II: Human Prehistory
BIO 109  Introduction to Marine Biology
BIO 308  Vertebrate Natural History
BIO 312  Evolution
BIO 316  Conservation Biology
BIO 323  Ecology
BIO 332  Ornithology
CHEM 102  Chemistry in Everyday Life
MATH 107  Mathematics for Sustainability

Arts and Culture Elective
Select one of the following:  3
ANTH 141  People and Nature
ANTH 253  Survey I: Culture and Language
ART 236  Sustainable Textiles
ART 274  Introduction to Design and the Environment
ART 354  Picturing Biodiversity: The Art of Natural History
ART 356  Environment in Contemporary Art
ART 374  Design and the Environment Studio II
COMM 307  Organizational Communication
ECON 390  Topics in Economics (Approved Sections)
EDUC 466  Communicating Climate Science
ENLT 211  Animals in Literature and Society
ENLT 213  Environmental Literature
ENLT 251  African-American Literature
SOC 306  Consumer Society

**Environment and Spirituality**
RLST 240  Catholic Social Thought  3
or RLST 251  The Christian Tradition

**Environment and Justice**
Select one of the following:  3
JUST 250  Introduction to Justice Studies
PHIL 254  Social Justice

**Environmental Ethics**
PHIL 256  Environmental Ethics  3

**Advanced Courses**
Select two courses in any suitable SJE topic from the following:  6
ENVS 331  Human Ecology and Spirituality
JUST 301  The Quest for Human Rights
PHIL 354  Ethics
POSC 319  The Global Politics of International Development
RLST 351  Religion and Science

Total Credits  21-22

1  A 3-credit internship may be substituted for one advanced course.

**Advanced Writing Proficiency**
Students fulfill this proficiency requirement by receiving approval for a portfolio of three writing projects drawn from multiple disciplines contributing to environmental studies. The portfolio will include the paper completed in ENVS 495 Comprehensive Project Seminar; the other two projects included will vary with the student’s major concentration and selection of courses.

**Senior Comprehensive**
The Senior Comprehensive requirement in Environmental Studies is fulfilled by successful completion of ENVS 495 Comprehensive Project Seminar and department approval of the paper and oral presentation based on the student’s comprehensive project.