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>
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</tbody>
</table>

Concentration
Select at least one of the following Concentrations: 21-56
- Environmental STEM Concentration (p. 1)
- Global Environmental Policy Concentration (p. 2)
- 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.

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<thead>
<tr>
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<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>
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</table>

Environmentally-Related Science Elective
Select one of the following: 1 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
- Applied Mathematics:
  - MATH 231 Calculus III
  - MATH 326 Linear Algebra and Differential Equations
  - MATH 335 Differential Equations II
- or MATH 336 Numerical Analysis
- Earth and Water Science (at Notre Dame):
  - CE 20110 Planet Earth
  - CE 20320 Environmental Aquatic Chemistry
  - CE 20520 Environmental Mineralogy
  - CE 30300 Intro to Environmental Engineering
  - CE 30320 Water Chemistry and Treatment
  - CE 30455 Environmental Hydrology

Required Supporting Courses
- CHEM 121 Principles of Chemistry I
- & CHEM 122 and Principles of Chemistry II
- PHYS 121 General Physics I: Mechanics and Waves
- & PHYS 122 and General Physics II: Temperature, Electricity, and Light
- MATH 131 Calculus I
- & MATH 132 and Calculus II
- or MATH 133 Theory and Application of Calculus

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

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| 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
Environmental Studies, Bachelor of Arts - ENVS

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 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

Total Credits 24-25

Explorations Courses
Select four of the following: 1 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 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

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<td>CHEM 102</td>
<td>Chemistry in Everyday Life</td>
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<td>MATH 107</td>
<td>Mathematics for Sustainability</td>
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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: 1 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

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<td>Select one of the following:</td>
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<td>CHEM 102</td>
<td>Chemistry in Everyday Life</td>
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<td>MATH 107</td>
<td>Mathematics for Sustainability</td>
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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
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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>ECON 390</td>
<td>Topics in Economics (Approved Sections)</td>
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</tr>
<tr>
<td>EDUC 466</td>
<td>Communicating Climate Science</td>
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<tr>
<td>ENLT 211</td>
<td>Animals in Literature and Society</td>
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<td>ENLT 251</td>
<td>African-American Literature</td>
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</tr>
<tr>
<td>SOC 306</td>
<td>Consumer Society</td>
<td></td>
</tr>
<tr>
<td>RLST 240</td>
<td>Catholic Social Thought</td>
<td>3</td>
</tr>
<tr>
<td>or RLST 251</td>
<td>The Christian Tradition</td>
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**Environment and Spirituality**

**Select one of the following:** 3

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<tr>
<td>JUST 250</td>
<td>Introduction to Justice Studies</td>
</tr>
<tr>
<td>PHIL 254</td>
<td>Social Justice</td>
</tr>
<tr>
<td>PHIL 256</td>
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**Environmental Ethics**

**Advanced Courses**

Select two courses in any suitable SJE topic from the following: 6

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<td>Human Ecology and Spirituality</td>
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<tr>
<td>JUST 301</td>
<td>The Quest for Human Rights</td>
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<td>PHIL 354</td>
<td>Ethics</td>
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<td>POSC 319</td>
<td>The Global Politics of International Development</td>
</tr>
<tr>
<td>RLST 351</td>
<td>Religion and Science</td>
</tr>
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</table>

**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.