

MINOR IN ENVIRONMENTAL STUDIES

Program Learning Outcomes for the Minor in Environmental Studies

Upon completing the minor in Environmental Studies, students will be able to:

1. Understand the fundamental science that drives earth/natural systems, and that frames and makes comprehensible current environmental issues.
2. Evaluate the nexus of human activity with environmental processes to examine and understand sustainable (or unsustainable) practices.
3. Develop a cross-disciplinary perspective to better understand environmental issues and solutions through a focus within the natural sciences and/or engineering and a focus within the humanities, social sciences, and/or architecture.

Requirements for the Minor in Environmental Studies

Students pursuing the minor in Environmental Studies must complete:

- A minimum of 6 courses (18 credit hours) to satisfy minor requirements.
- A minimum of 3 courses (9 credit hours) taken at the 300-level or above.
- A maximum of 2 courses (6 credit hours) from study abroad or transfer credit may be applied toward specific minor requirements. For additional program guidelines regarding transfer credit, see the [Policies](#) (p. 2) tab.

The Environmental Studies minor was specifically created to provide undergraduates from a broad range of academic backgrounds with a cohesive program offering foundational literacy in the social, cultural, and scientific dimensions of environmental issues, and a cross-disciplinary holistic understanding of the challenges and solutions for creating a sustainable world. Students completing the minor will be able to synthesize frameworks, tools, and perspectives from multiple disciplines; master sustainability terminology; understand major environmental issues from multiple perspectives; develop and assess environmental solutions in an informed and logical manner; and convey knowledge and insights about environmental issues in multiple formats.

The courses listed below satisfy the requirements for this minor. In certain instances, courses not on this official list may be substituted upon approval of the minor's academic advisor, or where applicable, the Program Director. (Course substitutions must be formally applied and entered into Degree Works by the minor's [Official Certifier](https://registrar.rice.edu/facstaff/degreeworks/officialcertifier/) (<https://registrar.rice.edu/facstaff/degreeworks/officialcertifier/>)). Students and their academic advisors should identify and clearly document the courses to be taken.

Summary

Code	Title	Credit Hours
Total Credit Hours Required for the Minor in Environmental Studies		18

Minor Requirements

Code	Title	Credit Hours
Core Requirements		
Core Course		
ENST 100 / ARCH 105	ENVIRONMENT, CULTURE AND SOCIETY	3
Introductory Course		
<i>Select 1 course from the following:</i> ¹		3
BIOS 122	BIOLOGY FOR VOTERS	
BIOS 124	INTRODUCTION TO ECOLOGY AND EVOLUTIONARY BIOLOGY ³	
EEPS 101	THE EARTH	
EEPS 107	CLIMATE CHANGE AND EXTREME WEATHER	
EEPS 109	OCEANOGRAPHY	
EEPS 110	THE EARTH SYSTEM, ENVIRONMENT, AND SOCIETY	
EEPS 111	INHABITING PLANET EARTH	
Elective Requirements ¹		
Schools of Architecture, Humanities, and Social Sciences		
<i>Select 2 courses from the following:</i>		6
ANTH 320	CLIMATE CHANGE AND SOCIAL INEQUALITY	
ANTH 332 / ENST 332	THE SOCIAL LIFE OF CLEAN ENERGY	
ANTH 348	ANTHROPOLOGIES OF NATURE	
ANTH 391 / ENST 391	SPECULATIVE FUTURES	
ARCH 313 / ENST 313	CASE STUDIES IN SUSTAINABLE DESIGN	
ARCH 322 / ENST 322	CASE STUDIES IN SUSTAINABILITY: THE REGENERATIVE REPOSITIONING OF NEW OR EXISTING RICE CAMPUS BLDGS	
ECON 437 / ENST 437	ENERGY ECONOMICS	
ECON 480 / ENST 480	ENVIRONMENTAL ECONOMICS	
ECON 485	THE ECONOMICS OF SUSTAINABILITY, CONSERVATION, AND PANDEMICS	
ENGL 269 / ENST 265	SCIENCE FICTION AND THE ENVIRONMENT	
ENGL 310	NONFICTION NATURE WRITING	
ENGL 358	CONSUMPTION AND CONSUMERISM	
ENGL 368 / ENST 368	LITERATURE AND THE ENVIRONMENT	
ENGL 459	STUDIES IN LITERATURE AND ECOLOGY	
ENST 205	RECKONING WITH THE ANTHROPOCENE	
ENST 210	SUSTAINABLE FUTURES: AN EXPLORATION OF GLOBAL SUSTAINABILITY CHALLENGES AND SOLUTIONS	
ENST 238	SPECIAL TOPICS ²	
ENST 250	UNDERSTANDING ENERGY: ENERGY LITERACY AND CIVICS	

ENST 301	ENVIRONMENTAL JUSTICE
ENST 311	TOPICS IN ENVIRONMENTAL JUSTICE
ENST 312	JUSTICE IN THE FOOD SYSTEM
ENST 314	CULTURES AND MEDIA OF ENVIRONMENTAL HEALTH
ENST 316 / SOCI 316	ENVIRONMENTAL FILM
ENST 445	SEMINAR IN URBAN SUSTAINABILITY AND LIVABILITY RESEARCH METHODS AND APPLICATIONS
ENST 446	LAB IN ENGAGED URBAN SUSTAINABILITY AND LIVABILITY RESEARCH
FILM 324	ENVIRONMENTAL FILMMAKING
HART 302	FROM THE SUBLIME TO THE SUSTAINABLE: ART, ARCHITECTURE AND NATURE
HIST 312	ENVIRONMENT, MEDICINE AND PUBLIC HEALTH IN LATIN AMERICA
HIST 321	US ENVIRONMENTAL HISTORY
HIST 470	ENCOUNTERING THE ENVIRONMENT: CASE STUDIES FROM THE GARDEN OF EDEN TO THE SPACE AGE
HUMA 202 / ENST 202	CULTURE, ENERGY AND THE ENVIRONMENT: AN INTRODUCTION TO ENERGY HUMANITIES
POLI 441 / ENST 441	GOVERNING THE ENVIRONMENTAL COMMONS
SOCI 304 / ENST 302	ENVIRONMENTAL ISSUES: RICE INTO THE FUTURE
SPAN 403	LITERATURE AND THE ENVIRONMENT IN LATIN AMERICA

Schools of Engineering and Natural Sciences

Select 2 courses from the following:

6

BIOS 204	ENVIRONMENTAL SUSTAINABILITY: THE DESIGN & PRACTICE OF COMMUNITY AGRICULTURE
BIOS 271	ENVIRONMENTAL MANAGEMENT
BIOS 280	SUSTAINABLE DEVELOPMENT AND REPORTING
BIOS 319	TROPICAL FIELD BIOLOGY
BIOS 320	ECOLOGY AND CONSERVATION OF BRAZILIAN WETLANDS LABORATORY
BIOS 322	CONSERVATION BIOLOGY LAB
BIOS 327	BIOLOGICAL DIVERSITY
BIOS 332	ECOLOGY ³
BIOS 336	PLANT DIVERSITY
BIOS 373	CORAL REEF ECOSYSTEMS
BIOS 374	GLOBAL CHANGE BIOLOGY
BIOS 423	CONSERVATION BIOLOGY
CEVE 302 / ENGI 302	SUSTAINABLE DESIGN
CEVE 307 / EEPS 307 / ENST 307	ENERGY AND THE ENVIRONMENT
CEVE 310	PRINCIPLES OF ENVIRONMENTAL ENGINEERING

CEVE 314 / BIOE 365 / GLHT 314	SUSTAINABLE WATER PURIFICATION FOR THE DEVELOPING WORLD
CEVE 323	APPLIED SUSTAINABLE PLANNING AND DESIGN
CEVE 406 / ENST 406	INTRODUCTION TO ENVIRONMENTAL LAW
CEVE 415	URBAN INFRASTRUCTURE, ENVIRONMENT AND SUSTAINABILITY
CEVE 421	CLIMATE RISK MANAGEMENT
CHBE 281 / ENST 281	ENGINEERING SUSTAINABLE COMMUNITIES
CHBE 382	INNOVATION AND SUSTAINABILITY
EEPS 309 / FOTO 390	VISUALIZING NATURE
EEPS 321	EARTH AND PLANETARY SURFACE ENVIRONMENTS
EEPS 325	OCEANS, ATMOSPHERES AND CLIMATE
EEPS 415	GEOCHEMISTRY OF EARTH'S SURFACE
EEPS 433	CLIMATE DYNAMICS
EEPS 434	CLIMATE OF THE COMMON ERA
EEPS 435	REMOTE SENSING
EEPS 436	GIS FOR SCIENTISTS AND ENGINEERS
EEPS 437	EARTH'S NATURAL RESOURCES FOR THE ENERGY TRANSITION
EEPS 439	GEOMICROBIOLOGY
EEPS 450	GEOPHYSICAL DATA ANALYSIS: DIGITAL SIGNAL PROCESSING
EEPS 471	EARTH SYSTEMS MODELING I: PHILOSOPHY AND FUNDAMENTALS
ELEC 365 / MSNE 365	
HEAL 375	THE BUILT ENVIRONMENT AND PUBLIC HEALTH

Total Credit Hours**18****Footnotes and Additional Information**

- ¹ Given the wide range of courses at Rice related to Environmental Studies, students are encouraged to contact the Minor Director to suggest courses to include on the list of approved electives.
- ² ENST 238 must be taken for at least 3 credit hours in order to fulfill Elective Requirements.
- ³ Current/former Biosciences majors (or Ecology and Evolutionary Biology majors) are eligible to substitute BIOS 332 (formerly EBIO 325) in place of BIOS 124 (formerly EBIO 124) to meet the introductory course requirement from the natural sciences.

Policies for the Minor in Environmental Studies**Program Restrictions and Exclusions**

Students pursuing the minor in Environmental Studies should be aware of the following program restriction:

- As noted in *Majors, Minors, and Certificates* (<https://ga.rice.edu/undergraduate-students/academic-opportunities/majors-minors-certificates/>), i.) students may declare their intent to pursue a minor

only after they have first declared a major, and ii.) students may not major and minor in the same subject.

Transfer Credit

For Rice University's policy regarding transfer credit, see [Transfer Credit \(https://ga.rice.edu/undergraduate-students/academic-policies-procedures/transfer-credit/\)](https://ga.rice.edu/undergraduate-students/academic-policies-procedures/transfer-credit/). Some departments and programs have additional restrictions on transfer credit. The Office of Academic Advising maintains the university's official list of [transfer credit advisors \(https://oaa.rice.edu/advising-network/transfer-credit-advisors/\)](https://oaa.rice.edu/advising-network/transfer-credit-advisors/) on their website: <https://oaa.rice.edu>. Students are encouraged to meet with their academic program's transfer credit advisor when considering transfer credit possibilities.

Program Transfer Credit Guidelines

Students pursuing the minor in Environmental Studies should be aware of the following program-specific transfer credit guidelines:

- Requests for transfer credit will be considered by the program director (and/or the program's official transfer credit advisor) on an individual case-by-case basis.
- No more than 2 courses (6 credit hours) of transfer credit from U.S. or international universities of similar standing as Rice may apply towards the minor as follows:
 - No more than 2 courses (6 credit hours) of transfer credit from study abroad or international universities of similar standing as Rice may fulfill the minor's Elective Requirements.
 - Transfer credit from U.S. universities of similar standing as Rice may fulfill the minor's Elective Requirements, at the discretion of the program director.

Distribution Credit Information

The determination of distribution credit eligibility is done initially as part of the [new course creation process \(https://registrar.rice.edu/facstaff/courseprocess/\)](https://registrar.rice.edu/facstaff/courseprocess/). Additionally, as part of an [annual roll call \(https://registrar.rice.edu/facstaff/distribution_credit/\)](https://registrar.rice.edu/facstaff/distribution_credit/) coordinated each Spring by the Office of the Registrar, course distribution credit eligibility is routinely reviewed and reaffirmed by the Dean's Offices of each of the academic schools.

Faculty and leadership in the academic schools are responsible for ensuring that the courses identified as distribution-credit-eligible meet the criteria as set in the [General Announcements \(https://ga.rice.edu/undergraduate-students/academic-policies-procedures/graduation-requirements/#text\)](https://ga.rice.edu/undergraduate-students/academic-policies-procedures/graduation-requirements/#text). Students are responsible for ensuring that they meet graduation requirements (<https://ga.rice.edu/undergraduate-students/academic-policies-procedures/graduation-requirements/#text>) by completing coursework designated as distribution-credit-eligible at the time of course registration.

Distribution courses from Environmental Studies (ENST) are broadly scoped and thematically diverse and prompt students to explore the cultural, social, and political dimensions of human-environmental relations and environmental systems. They present students with an interdisciplinary spectrum of relevant methods and skills and help students to develop analytical, expressive, and critical knowledge of the relationship of environment, culture, and society across the world. They are introductions to the study of human-environment relations and environmental systems.

Additional Information

For additional information, please see the Environmental Studies website: <https://enst.rice.edu/>

Opportunities for the Minor in Environmental Studies

Academic Honors

The university recognizes academic excellence achieved over an undergraduate's academic history at Rice. For information on university honors, please see [Latin Honors \(https://ga.rice.edu/undergraduate-students/honors-distinctions/university/\)](https://ga.rice.edu/undergraduate-students/honors-distinctions/university/) (*summa cum laude*, *magna cum laude*, and *cum laude*) and [Distinction in Research and Creative Work \(https://ga.rice.edu/undergraduate-students/honors-distinctions/university/\)](https://ga.rice.edu/undergraduate-students/honors-distinctions/university/). Some departments have department-specific Honors awards or designations.

Additional Information

For additional information, please see the Environmental Studies website: <https://enst.rice.edu/>

See <https://humanities.rice.edu/student-life> (<https://humanities.rice.edu/student-life/>) for tables of fellowships, prizes, and internships/practica that may be relevant to this minor.