

BACHELOR OF SCIENCE IN ENVIRONMENTAL STUDIES

The B.S. in Environmental Studies program is designed to provide a comprehensive understanding of environmental affairs. That means learning about the scientific diagnosis of environmental issues and having enough knowledge to work with scientists, in addition to the social, cultural, and technological causes of those issues. It also means understanding the diversity of approaches needed to treat the problems. In the pursuit of these objectives, the Environmental Studies program brings together philosophical, theoretical and practical perspectives on a wide range of environmental concerns. In this way, the program prepares students with the knowledge, skills and experience to work for a more ecologically sustainable and socially just world.

Students may enter the Bachelor of Science program as first-year students or as transfer students. In the first two years of the program, students develop a foundation in the social sciences, humanities, and natural sciences as they relate to environmental affairs. During that time, students also fulfill SUNY general education requirements and take some open elective courses.

Option Areas

In the final two years of the program, students must select one of three specializations called Option Areas.

Environment, Communication and Society

This option focuses on how communication and social systems influence environmental affairs and shape our perceptions of the non-human world. It addresses the subjects of rhetoric and discourse; news media; public participation; advocacy campaigns; collaboration; conflict resolution; risk communication; social processes; and representations of nature in literature and popular culture.

Environmental Policy, Planning and Law

This option is concerned with how environmental policies, plans, and laws from the local to the global are created, implemented and contested. It emphasizes legislative, regulatory, and collaborative approaches to addressing environmental issues.

Natural Systems Applications

This option is designed for students interested in the interface between biology and socio-economic issues. It provides an emphasis on natural systems and their interactions with societal issues ranging from education to systems management.

Lower Division Environmental Studies Core Courses

APM 103

OR

APM 104

OR

APM 105

APM 210

EFB 100

OR

EFB 101

AND

EFB 102

EFB 103

AND

EFB 104

OR

EST 231

EFB 120

ESF 200

EST 132

EST 133

EST 221

EST 245

EST 255

EWP 190

EWP 220

EWP 290

FCH 110

AND

FCH 111

OR

FCH 150

AND

FCH 151

FOR 207

Lower Division Electives

Course	Codes*	Credits
--------	--------	---------

General Education Course in one of the following categories: US History & Civic Engagement, The Arts, World History and Global Awareness, World Languages	G	3
General Education Course in Diversity, Equity, Inclusion and Social Justice	G	3
Directed Electives		30
Open Electives		18

Upper Division Environmental Studies Core Courses

EFB 320

OR

FOR 232

OR

EST 220

OR

FOR 442

OR

LSA 321

EST 321

EST 361

EST 494

EWP 407

Senior Synthesis

3

Upper Division Electives

Course	Codes*	Credits
Upper Division Computing OR Natural Science Course		

Environment, Communication and Society Option

EST 390

EST 395

EST 493

CHOOSE TWO OF THE
FOLLOWING FIVE COURSES:

EWP 495
OR
EWP 420
OR
ESF 300
OR
EST 370
OR
EST 471

6

Option electives (15 credits)

For all ESC students, regardless of whether they are pursuing the EWR Minor

- EST 312 Sociology of Natural Resources
- EST 353 Behavior Change and the Environment
- EST 366 Environmental Ethics
- EST 370 Introduction to Personal Environmental Interpretation Methods
- EST 415 Environmental Justice
- EST 418 Political Ecologies of Food & Agriculture
- EST 450 Sustainable Enterprise
- EST 471 Non-Personal Environmental Interpretive Methods
- EST 550 Environmental Impact Analysis
- FOR 372 Fundamentals of Outdoor Recreation
- EWP 394 The Art of Storytelling
- EWP 420 Advanced Public Presentation Skills
- EWP 450 Digital Storytelling
- EWP 495 Environmental Journalism

For all ECS students NOT pursuing the EWR Minor

- EWP 300 Survey of Environmental Writing
- EWP 390 Literature of Nature
- EWP 494 Creative Non-Fiction

Additional courses may be approved by consultation with advisor.

Environmental Policy, Planning and Law Option
EST 550

CHOOSE TWO OF THE Methods courses
FOLLOWING FIVE COURSES:

EST 370
OR
EST 427
OR
EST 471
OR

6

ESF 300
OR
ERE 365
OR
LSA 451

CHOOSE ONE OF THE
FOLLOWING:

Law Courses

3

EST 460
OR
FOR 487
OR
FOR 489

CHOOSE ONE OF THE
FOLLOWING:

Planning Courses

3

EST 426
OR
EST 471
OR
FOR 372
OR
FOR 442
OR
LSA 451

Option electives (15 credits)

Choose 5 of the following courses:

- EST 220 Urban Ecology
- EST 312 Sociology of Natural Resources
- EST 353 Behavior Change and the Environment
- EST 366 Environmental Ethics
- EST 370 Introduction to Personal Environmental Interpretation Methods
- EST 390 Social Processes and the Environment
- EST 395 Public Communication of Science & Technology
- EST 411 Water, Climate, and Society 3
- EST 415 Environmental Justice
- EST 418 Political Ecologies of Food & Agriculture
- EST 426 Community Planning and Sustainability
- EST 427 Environmental and Energy Auditing
- EST 450 Sustainable Enterprise
- EST 471 Non-personal Environmental Interpretive Methods
- EST 493 Environmental Communication Workshop
- EFB 400 Toxic Health Hazards
- ESF 300 Introduction to Geospatial Information Technology
- EWP 394 The Art of Storytelling
- EWP 450 Digital Storytelling
- FOR 333 Natural Resources Managerial Economics

- FOR 372 Fundamentals of Outdoor Recreation
- FOR 442 Watershed Ecology and Management
- FOR 465 Natural Resources Policy
- LSA 451 Comprehensive Land Planning

Natural Systems Applications Option

ESF 300

FIELD METHODS SCIENTIFIC
BREADTH COURSE (SEE LIST) 3

NATURAL SYSTEMS
AND
MANAGEMENT COURSE (SEE
LIST) 3

ENVIRONMENTAL QUALITY
COURSE (SEE LIST) 3

POLICY
AND
LAW COURSES (SEE LIST) 9

COMMUNICATION
AND
INTERPRETATION COURSES (SEE
LIST) 6

CRITICAL ISSUES IN THE
ENVIRONMENT COURSE (SEE
LIST) 3

Field Methods

Choose one of the following:

- EFB 303 Introduction to Environmental Microbiology 3
- EFB 326 Diversity of Plants 3
- EFB 336 Dendrology 3
- EFB 340 Forest Shade Tree Pathology 3
- EFB 352 Entomology 3
- EFB 355 Invertebrate Zoology 3
- EFB 440 Mycology 3
- EFB 443 Plant Virology 3
- EFB 445 Plant Ecology & Global Change 3
- EFB 483 Mammal Diversity 3
- EFB 486 Ichthyology 3
- EFB 505 Microbial Ecology 3

Natural Systems and Management

Choose one of the following:

- EFB 390 Wildlife Ecology & Management 3

- EFB 413 Conservation Biology 3
- EFB 415 Ecological Biogeochemistry 3
- EFB 424 Limnology 3
- EFB 444 Biodiversity and Geography of Nature 3
- EFB 445 Plant Ecology and Global Change 3
- EFB 487 Fisheries Science & Management 3
- EFB 491 Applied Wildlife Science 3
- EFB 493 Wildlife Habitats and Population 3
- EFB 516 Ecosystems 3
- EFB 518 Systems Ecology 3
- EFB 519 Geographic Modeling 3
- EFB 523 Tropical Ecology 3
- EFB 542 Freshwater Wetland Ecosystems 3

Environmental Quality

Choose one of the following:

- EFB 351 Forest Entomology 3
- EFB 400 Toxic Health Hazards 3
- EFB 439 Forest Health Monitoring 3
- EST 550 Environmental Impact Analysis 3
- FOR 334 Silviculture 3

Policy and Law

Choose three of the following:

- EST 411 Water, Climate, and Society 3
- EST 426 Community Planning & Sustainability 3
- EST 427 Environmental & Energy Auditing 3
- EST 450 Sustainable Enterprise 3
- EST 460 Land Use Law 3
- EST 550 Environmental Impact Analysis 3
- FOR 451 Comprehensive Land Planning 3
- FOR 465 Natural Resources Policy 3
- FOR 487 Environmental Law & Policy 3
- FOR 489 Natural Resources Law 3

Communication and Interpretation

Choose two of the following courses:

- EST 370 Introduction to Personal Environmental Interpretation Methods 3
- EST 395 Public Comm. Of Science and Technology 3
- EST 471 Non-Personal Environmental Interpretation Methods 3
- EST 493 Environmental Comm. Workshop 3
- EWP 394 The Art of Storytelling 3
- EWP 450 Digital Storytelling 3
- FOR 372 Fundamentals of Outdoor Recreation 3

Critical Issues in the Environment

Choose one of the following:

- EST 312 Sociology of Natural Resources 3
- EST 353 Behavior Change and the Environment 3

- EST 366 Environmental Ethics 3
- EST 390 Social Processes and the Environment 3
- EST 415 Environmental Justice 3
- EST 418 Political Ecologies of Food & Agriculture

Total Minimum Credits For Degree: 122-125 (total credits must include a minimum of 51 credit hours at the 300 level or above)

