



# Natural Resources Management

The ENST concentration in **Natural Resources Management** is designed to teach students concepts of the environmentally sound use and management of natural resources. Ecosystems and human societies are linked in complex cycles and relationships between vegetation and wildlife, forests and cities, conservation and development. By learning to participate effectively within these cycles, we will help sustain a harmonious relationship between the environment and human activities.

		<i>Semester Projected</i>	<i>Semester Taken</i>	<i>Final Grade</i>
	<b>ENST Core (44 credits)</b>			
▲	<b>BSCI 170&amp;171</b> Principles of Molecular & Cellular Biology (F, Sp, Su; 4)			
▲	<b>MATH 120</b> Elementary Calculus I (F, Sp, Su; 3)			
▲	<b>BSCI 160&amp;161</b> Principles of Ecology & Evolution (F, Sp, Su; 4)			
▲	<b>CHEM 131&amp;132</b> Fundamentals of General Chemistry & Lab (F, Sp, Su; 4)			
▲	<b>ENST 200</b> Fundamentals of Soil Science (F, Sp; 4)			
▲	<b>ENST 233</b> Introduction to Environmental Health (F, Sp; 4)			
▲	<b>CHEM 231&amp;232</b> Organic Chemistry I & Lab (F, Sp, Su; 4)			
▲	<b>PHYS 121</b> Fundamentals of Physics I (F, Sp, Su; 4)			
▲	<b>GEOG 306</b> Introduction to Quantitative Methods for the Geographic Environmental Sciences (F, W, Sp, Su; 3) <b>-or-</b>			
▲	<b>BIOM 301</b> Introduction to Biometrics (F, W, Sp; 3)			
▲	<b>ENST 360</b> Ecosystem Ecology (F; 4)			
◆	<b>ENST 389</b> Professional Internship (F, Sp, Su; 3)			
	<b>Senior Integrative Experience (F, Sp; 3) - Choose One</b>			
◆	<b>ENST 388</b> Honors Thesis Research (F, Sp; 3) <b>-or-</b>			
	<b>ENST 470</b> Ideas into Impact (Sp; 3) <b>-or-</b>			
	<b>ENST 472</b> Capstone II (F, Sp; 3) <b>-or-</b>			
	<b>ENST 486</b> Senior Professional Internship (F, Sp; 3) <b>-or-</b>			
	Research Experience (Group or individual project) (F, Sp; 3)			
	<b>Concentration Core (9 credits)</b>			
	<b>BSCI 222</b> Principles of Genetics (F, Sp, Su; 4)			
	<b>ENST 214</b> Introduction to Natural Resources Management (Sp; 3)			
	<b>ENST 487</b> Environmental Conflicts and Decision Making (Sp; 2)			
	<b>Concentration Depth (12 credits - Choose 4 courses, continued on back)</b>			
◆	<b>ENST 456</b> Spatial Analysis and Ecological Sampling (F; 3) <b>-or-</b>			
◆	<b>GEOG 272</b> Intro to Earth Observation Science (F, W, Sp, Su; 3) <b>-or-</b>			
◆	<b>GEOG 373</b> Geographic Information Systems (F, W, Sp, Su; 3)			

▲ Benchmark to be completed by 30 credits  
 ▲ Benchmark to be completed by 60 credits  
 ▲ Benchmark to be completed by 90 credits  
 ◆ Requires prior approval

*Students must maintain an overall GPA of 2.0 and a grade of C- or better for all ENST required classes.*

*Courses not selected here may count as technical electives on the back, but cannot be counted as both an elective and as a concentration CORE/DEPTH course.*



## Concentration Depth (Cont.)

(12 credits - Choose 4 courses)

*Semester  
Projected*

*Semester  
Taken*

*Final  
Grade*

- ENST 450** Wetland Ecology (F; 3) -or-
- ENST 453** Watershed Science: Water Balance, Open Channel Flow, and Near Surface Hydrology (Sp; 3)
- AREC 240** Intro. to Economics and Environment (Sp; 4) -or-
- AREC 241** Environment, Economics, and Policy Studies (F; 3) -or-
- ENST 410** Ecosystem Services: An Integrated Analysis (Sp–Even years; 3)
- ENST 430** Wetland Soils (Sp; 3) -or-
- ENST 441** Issues in Sustainable Agriculture (F; 3) -or-
- ENST 462** Field Techniques in Wildlife Management ( Sp; 3) -or-
- GEOG 418** Field and Laboratory Techniques in Environmental Science ( F; 3)

Any combination of electives can be taken. Courses appear in blocks of related topics to assist students in tailoring their program to particular interests with Natural Resources Management. Under some circumstances, other 300 or 400 level electives can be substituted with advisor's approval.

## Technical Electives (12 credits)

*Semester  
Projected*

*Semester  
Taken*

*Final  
Grade*

### Wildlife

- ◆ **ENST 460** Principles of Wildlife Management (F; 3)
- ◆ **ENST 461** Urban Wildlife Management (TBA; 3)
- ◆ **BSCI 334&335** Mammalogy (Sp; 4)
- ◆ **ENSP 102** Introduction to Environmental Policy (Sp; 3)
- ◆ **PLSC 254** Woody Plants for Mid-Atlantic Landscape II (Sp; 4)
- ◆ **ENSP 330** Introduction to Environmental Law (F, Sp; 3) -or-
- ◆ **GVPT 273** Introduction to Environmental Politics (F, Sp; 3)

### Fisheries

- ◆ **COMM 250** Introduction to Communication Inquiry (F, Sp; 3)
- ◆ **COMM 382** Essential of Intercultural Communication (F, Sp; 3)
- ◆ **GEOG 331** Intro to Human Dimensions of Global Change (Sp; 3)
- ◆ **GEOG 416** Conceptualizing and Modeling Human-Environmental Interactions (Sp; 3)
- ◆ **ENSP 102** Introduction to Environmental Policy (Sp; 3)
- ◆ **ENSP 330** Introduction to Environmental Law (F, Sp; 3)
- ◆ **GVPT 273** Introduction to Environmental Politics (F, Sp; 3)

### Wetlands

- ◆ **ENST 452** Wetland Creation and Restoration (Sp; 3)
- ◆ **GEOL 452** Watershed and Wetland Hydrology (F; 3)
- ◆ **PLSC 254** Woody Plants for Mid-Atlantic Landscape II (Sp; 4)

### Forestry

- PLSC 253** Woody Plants for Mid-Atlantic Landscapes I (F; 3)
- PLSC 254** Woody Plants for Mid-Atlantic Landscapes II (Sp; 3)
- PLSC 400** Plant Physiology (Sp; 4)

- ◆ Required for Professional Certification as an Associate Wildlife Biologist by The Wildlife Society.
- ◆ Required for Professional Certification as an Associate Fisheries Professional by American Fisheries Society.
- ◆ Required for Professional Certification as an Wetland Professional in Training (WPIT) by The Society of Wetland Scientists Professional Certification Program (SWSPCP).