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.

Science and Math Fundamentals Required (56-58 credits):

- **ENST 200** Fundamentals of Soil Science (4)
- **ENST 233** Introduction to Environmental Health (3)
- **ENST 360** Ecosystem Ecology (4)
- **ENST 389** Internship (3)
- **ENST 471** Capstone I (2)
- **ENST 472** Capstone II (3)
- **BSCI 105** Principles of Biology I (4)
- **BSCI 106** Principles of Biology II (4)
- **BSCI 223** General Microbiology (4)
- **CHEM 131/132** Fundamentals of General Chemistry & Lab (4)
- **CHEM 231/232** Organic Chemistry I & Lab (4)
- **MATH 140** Calculus I (4) -or- **MATH 220** Elementary Calculus I (3)
- **PHYS 121** Fundamentals of Physics I (4)
- **BIOM 301** Introduction to Biometrics (3)

Resource Economics (7 credits):

- **AREC 240** Introduction to Economics and the Environment (4)
- **AREC 332** Introduction to Natural Resources Policy (3) -or-
- **ENST 410** Ecosystem Services: An Integrated Analysis (3)

Government and Politics (3 credits):

- **GVPT 273** Introduction to Environmental Politics (3)

Sociology (3 credits):

- **SOCY 305** Scarcity and Modern Society (3)

Resource Management and Science Electives (12 credits)

Example courses listed on reverse side. Courses applied to elective requirements may not be applied to other curriculum requirements.

Benchmark to be completed by 30 credits
Benchmark to be completed by 60 credits
Benchmark to be completed by 90 credits

Highlighted Courses are ENST CORE
Requires prior approval
Students will take approximately 6 credits each of Resource Management and Resource Science electives to tailor their program to their specific interests (total = 12 credits). Resource Management electives cannot be double-counted as Resource Science Electives, and vice-versa. This is not an exhaustive list of electives; other science and management courses can be substituted with advisor approval.

**Resource Management Electives (6 credits):**
- AREC 365 World Hunger, Population, and Food Supplies (3)
- AREC 445 Ag. Development, Population Growth and the Environment (3)
- ANTH 450 Theory and Practice of Environmental Anthropology (3)
- ANSC 453 Animal Welfare and Bioethics (3)
- BSCI 363 The Biology of Conservation and Extinction (3)
- BSCI 366 Biodiversity Issues in Conservation Management (3)
- ECON 315 Economic Development of Underdeveloped Areas (3)
- ENST 305 Alternative Energy (3)
- ENST 314 Fisheries Sustainability and Management (3)
- ENST 334 Environmental Toxicology (3)
- ENST 405 Energy and Environment (3)
- ENST 423 Soil-Water Pollution (3)
- ENST 436 Emerging Environmental Threats (3)
- ENST 440 Crops, Soils and Civilization (3)
- ENST 441 Sustainable Agriculture (3)
- ENST 460 Principles of Wildlife Management (3)
- ENST 461 Urban Wildlife Management (3)
- ENST 462 Field Techniques in Wildlife Management (2)
- ENST 463 Wildlife Habitat and Population Modeling (3)
- ENST 479 Tropical Ecology and Resource Management (1-6)
- GEOG 372 Remote Sensing (3)
- GEOG 373 Geographic Information Systems (3)
- GEOG 472 Remote Sensing: Digital Processing and Analysis (3)
- GEOG 473 Geographic Information Systems and Spatial Analysis (3)
- GEOL 437 Global Climate Change: Past and Present (3)
- LARC 450 Environmental Resources (3)
- LARC 451*** Sustainable Communities (1-6)

**Resource Science Electives (6 credits):**
- ANSC 252 Introduction to the Diseases of Wildlife (3)
- ANSC 452 Avian Physiology (3)
- BSCI 360 Principles of Animal Behavior (3)
- BSCI 362 Ecology of Marsh and Dune Vegetation (2)
- BSCI 373 Natural History of the Chesapeake Bay (3)
- BSCI 375 Biological Oceanography (3)
- BSCI 440 Mammalian Physiology (4)
- BSCI 441 Mammalian Physiology Laboratory (2)
- BSCI 442 Soil Biochemistry and Microbial Ecology(3)
- BSCI 462 Population Ecology (3)
- BSCI 463 Laboratory and Field Ecology (2)
- BSCI 464 Microbial Ecology (3)
- BSCI 467 Freshwater Biology (4)
- BSCI 473 Marine Ecology (3)
- BSCI 481 Insect Diversity and Classification (4)
- BSCI 493 Medicinal and Poisonous Plants (3)
- ENST 301-3 Field Soil Morphology (1)each
- ENST 414 Soil Morphology, Genesis and Classification (4)
- ENST 421 Soil Chemistry (4)
- ENST 422 Soil Biochemistry and Microbial Ecology (3)
- ENST 430 Wetland Soils (3)
- ENST 450 Wetland Ecology (3)
- ENST 451 Water Quality: Field and Lab Analysis Methods (3)
- GEOG 345 Introduction to Climatology (3)
- GEOG 440 Advanced Geomorphology (3)
- GEOL 444 Low Temperature Geochemistry (4)
- GEOL 451 Groundwater (3)
- GEOL 452 Watershed and Wetland Hydrology (3)
- PLSC 453 Weed Science (3)

*** Must take at least one additional course, 6 credits of one course does not fulfill requirement.