The Bachelor of Science in Renewable Natural Resources degree is an interdepartmental degree in the College of Agriculture and Life Sciences. It is offered in the Department of Ecosystem Science and Management (http://catalog.tamu.edu/undergraduate/agriculture-life-sciences/ecosystem-science-management), the Department of Recreation, Parks and Tourism Sciences, (http://catalog.tamu.edu/undergraduate/agriculture-life-sciences/recreation-park-tourism-sciences) and the Department of Wildlife and Fisheries Sciences (http://catalog.tamu.edu/undergraduate/agriculture-life-sciences/wildlife-fisheries-sciences).

**Majors**

- Bachelor of Science in Renewable Natural Resources (http://catalog.tamu.edu/undergraduate/agriculture-life-sciences/interdepartmental-degree-programs/renewable-natural-resources-bs)

**Courses**

**RENR 205 Fundamentals of Ecology**

Credits 3. 3 Lecture Hours.

Principles of ecology using a holistic approach treating plants, animals and humans as one integrated whole; composition, structure, nutrient cycles and energetics of biotic communities; adaptations to environmental factors; biotic relationships; and problems of environmental quality and resource use.

**RENR 215 Fundamentals of Ecology--Laboratory**

Credit 1. 3 Lab Hours.

Sampling and estimating plant-animal populations, measuring environmental factors and recognizing and studying morphological, physiological and behavioral adaptations of plants and animals to biotic or abiotic influences.

**RENR 345 Park Ecology and Management**

Credits 3. 1 Lecture Hour. 4 Lab Hours.

Classroom and hands-on exposure to outdoor recreation resources management in a major national park facing complex challenges; interactive problem-solving to understand natural resources, management strategies and issues related to a park’s broader region; includes one intensive week in Smoky Mountains National Park. May be taken two times for credit.

**RENR 375 Conservation of Natural Resources**

Credits 3. 3 Lecture Hours.

Principles and philosophies associated with the development, management and use of natural resources; ecological and social implications inherent in management alternatives involving the natural environment and use of renewable natural resources.

**RENR 400 Study Abroad in Natural Resources**

Credits 2 to 12. 2 to 12 Lecture Hours.

Provides students with an opportunity to gain first-hand experience in natural resource management in foreign countries; focus on the interaction of public, communal and private land tenure systems with the ecological and human dimensions of rangeland management, wildlife conservation and nature-based tourism. May be taken two times for credit.

**Prerequisite:** Junior or senior classification.

**RENR 405/ESSM 351 Geographic Information Systems for Resource Management**

Credits 3. 2 Lecture Hours. 2 Lab Hours.

Geographic Information Systems (GIS) approach to solving spatial problems and managing natural resources, including the acquisition, management, manipulation, analysis, and mapping of spatial and non-spatial databases; identification of natural and relevant features from various data sources; integration of relevant technologies and data; extensive use of GIS software to solve real-world problems. Only one of the following will satisfy the requirements for a degree: ESSM 351/RENR 405, RENR 405/ESSM 351, ESSM 651, BAEN 651/ESSM 651 and RENR 651.

**Prerequisite:** Junior or senior classification or approval of instructor.

**Cross Listing:** ESSM 351/RENR 405.

**RENR 410 Ecosystem Management**

Credits 4. 3 Lecture Hours. 3 Lab Hours.

Concepts and practices relevant to the development of landscape/regional level ecosystem management plans; an ecosystem management plan will be developed utilizing a strategic management/coordinated resources approach to establish resource goals, ecosystem resource analysis and impact evaluation, and implementation compatible with societal and individual concerns.

**Prerequisites:** RENR 205, senior classification or approval of instructor.

**RENR 460/RPTS 460 Nature, Values, and Protected Areas**

Credits 3. 3 Lecture Hours.

Writing-intensive discussion of the ways in which protected areas reflect human values about nature; identify stakeholders in and around protected areas, exploring how interests either conflict or coincide; evaluate social, economic, cultural, and ecological trade-offs of different approaches to conservation.

**Prerequisite:** RPTS 307 or RPTS 316; or 9 hours of credit in natural resource courses.

**Cross Listing:** RPTS 460/RENR 460.

**RENR 470 Environmental Impact Assessment**

Credits 3. 3 Lecture Hours.

The evolution of natural resources regulatory policies and how this influences current procedures for environmental/natural resources assessment and management; demonstration of the environmental impact assessment procedures and policy issues associated with environmental impacts.

**Prerequisite:** Senior classification or approval of instructor.

**RENR 489 Special Topics in...**

Credits 1 to 4. 1 to 4 Lecture Hours.

Selected topics in an identified field of renewable natural resources. May be repeated for credit.

**Prerequisite:** Approval of instructor.