



NATURAL RESOURCES AND  
ENVIRONMENTAL SCIENCE

NRES

## Natural Resources and Environmental Science (NRES)

Purdue's Natural Resources and Environmental Science program is one of the oldest environmental science programs in the United States. This interdisciplinary program utilizes courses from across the University to construct a student's plan of study. NRES students choose from one of six concentration areas. These areas are: Climate and Energy Solutions, Environmental Quality and Restoration, Environmental Policy and Analysis, Sustainability Science, Watershed Management, and Emerging Environmental Challenges.

The NRES core draws courses from soil science, data science, environmental field skills, biology, chemistry, ecology, and environmental policy. Students regularly take courses in conservation, environmental engineering, and liberal arts to broaden their background. In addition to the university core requirements and the environmental science core courses, students select a concentration.

Students in the **Climate and Energy Solutions** Concentration choose 21 credit hours of course work to support evaluation of climate impacts, adaptation and mitigation, and alternative energy solutions.

Students in the **Environmental Policy and Analysis** Concentration choose 21 credit hours of course work in policy, management and economics in order to address environmental challenges.

Students in the **Environmental Quality and Restoration** Concentration choose 21 credit hours of course work in soil physics, plant biology, and hazardous waste handling to allow for evaluation, remediation, restoration and preservation of air, water and soil resources.

Students in the **Sustainability Science** Concentration choose 21 credit hours of course work in sustainability, economics and life cycle analysis to minimize the depletion of natural resources in agriculture, industry and other sectors in order to balance environmental, social and economic considerations.

Students in the **Watershed Management** Concentration choose 21 credit hours of course work in community involvement, hydrology, and soil conservation in order to engage and educate stakeholders to implement land use and water management practices to protect and improve water quality and natural resources.

Students selecting **Emerging Environmental Challenges** work with the faculty directors to build a meaningful plan of study in an environmental focus area of their choosing.

## **Employment Opportunities**

As concern for the environment grows, opportunities for NRES graduates increase in state and federal agencies and other firms involved in control technology, environmental compliance, waste minimization, environmental health and safety, remediation of contaminated sites, environmental law, and reclamation and remediation of disturbed lands.

NRES graduates work for business and industry, non-profits, and governmental agencies. Some of these jobs are Environmental Consultant, Wetland Scientist, Field Chemist, Hydrologist, Surveyor, Ecological Risk Assessor, Industrial Compliance Specialist, Urban Project Coordinator, Species Conservation Specialist, Wildlife Biologist, NRES Economist, Environmental Planner, Radiation Safety Manager, and Soil Conservationist. Other NRES graduates continue their education in environmental law, teaching, or working with research at universities and industry.

## **Summer Employment and Internships**

Students majoring in Natural Resources and Environmental Science are encouraged to spend their summers working or interning with a business or industry for on-the-job experiences or conducting research, and one internship or research experience is required for graduation.

## **Contact Information**

NRES Program  
Phone: 765-496-0376  
E-mail: [nres@purdue.edu](mailto:nres@purdue.edu)



**MAJOR: NATURAL RESOURCES AND ENVIRONMENTAL SCIENCE**  
**General 8 Semester Plan**  
**Credits required for graduation: 120**

**Freshmen Year**

**First Semester**

- (0.5) **AGR 10100** (Introduction to the College of Agriculture Purdue University)
- (0.5) **AGR 12200** (Introduction to Natural Resources and Science Academic Programs)
- (3) **CHM 11100** (General Chemistry)
- (3) **COM 11400** (Fundamentals of Speech Comm.)
- (3) **MA 16010** (Applied Calculus I)
- (3) **NRES 12500** (Environmental Science & Conservation)
- (3) Elective
- (16)

**Second Semester**

- (3) **CHM 11200** (General Chemistry)
- (4) **ENGL 10600** (First-Year Composition)
- (3) Math or Statistic Selective
- (3) Social sciences selective
- (3) Elective
- (16)

**Sophomore Year**

**Third Semester**

- (4) **BIOL 11000** (Fundamentals of Biology I)
- (3) **NRES 25500** (Soil Science)
- (3) **STAT 30100** (Elementary Statistical Methods)
- (3) Broadening science selective
- (3) **POL 22300** (Intro. To Environmental Policy)
- (16)

**Fourth Semester**

- (4) **BIOL 11100** (Fundamentals of Biology II)
- (3) Concentration Selective\*
- (1) **NRES 20000** (Introduction to Environmental Careers)
- (1) **AGRY 33800** (Environmental Hydrology Lab)
- (2) **BIOL 28600** (Intro. To Ecology and Evolution)
- (3) Elective
- (14)

**Junior Year**

**Fifth Semester**

- (4) **CHM 25700** (Organic Chemistry)
- (3) Concentration Core Requirement\*
- (3) Data Science Selective
- (3) Microeconomics Selective
- (3) UCC Humanities Selective
- (1) **NRES 42000** (Internship Reporting)
- (17)

**Sixth Semester**

- (3) **FNR 21000** (Natural Resources Information Management)
- (3) **FNR 37500** (Human Dimensions of Nat Resources Management)
- (3) Concentration selective\*
- (3) Concentration Core Requirement\*
- (3) Written or Oral Communication Selective
- (15)

**Senior Year**

**Seventh Semester**

- (3) **AGEC 40600** (Natural Resource and Environmental Economics)
- (3) Concentration Core Requirement\*
- (3) Science Communication Selective
- (3) Social science or humanities selective
- (2) **NRES 49700** (Current Topics in Env Science)
- (14)

**Eighth Semester**

- (6) Concentration selectives\*
- (3) Social science or humanities selective (30000+ level)
- (3) Elective
- (12)

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\* Concentration core requirements and selectives are determined by the Concentration selected to pursue