

CAREERS IN PLANT SCIENCE

IT'S NOT JUST GARDENING

UF IFAS DEPARTMENTS

- Agricultural and Biological Engineering
- Agricultural Operations Management
- Agricultural Education and Communication
- Agronomy
- Botany
- Entomology and Nematology
- Environmental Horticulture
- Food and Resource Economics
- Food Science and Human Nutrition

- Horticultural Sciences
- Microbiology and Cell Science
- Natural Resources and Conservation
- Plant Pathology
- Plant Science
- Forest Resources and Conservation
- Soil and Water Sciences
- Wildlife Ecology and Conservation

BIOLOGICAL ENGINEERING

Biological engineers apply principles of the life sciences to produce biofuels, food, feed, fiber, and other agricultural products from renewable bio-resources. They also protect the environment through conserving and replenishing our natural resources. Students study:

- hydrodynamics
- soil mechanics
- thermodynamics,
- chemistry
- biology
- calculus



BIOLOGICAL ENGINEERING CAREERS

- Manufacturing Engineer
- Packaging Engineer
- Process Design Engineer
- Process Safety Engineer
- Project Engineer
- Quality Control Engineer
- Research and Development Engineer
- Technical Manager
- Technical Services Engineer



ENTOMOLOGY AND NEMATOLOGY

This biological science includes the study of insects, mites, ticks, spiders, and nematodes. These creatures can have both helpful and harmful effects on our food, environment, and health. Students study:

- ecology
- medically significant arthropods
- social insects
- insect management
- physiology
- behavior
- evolution
- natural ecosystem cycles
- systematics



ENTOMOLOGY CAREERS

- Apiculturist
- Biosecurity Program Manager
- Customs and Border Protection Agriculture Specialist
- Doctor, Veterinarian, Pharmacist, or Dentist
- Ecotourism Manager
- Extension Agent
- Pest Control Specialist
- Public Health Specialist
- Research Entomologist



AGRICULTURAL EDUCATION AND COMMUNICATION

With a focus on disseminating scientific knowledge, agricultural education and communication professionals empower communities to gain a balanced understanding of food systems, natural resources, and related sciences. Students supplement core technical agriculture courses with teaching, leadership, or media experiences.



AGRICULTURAL EDUCATION AND COMMUNICATION CAREERS

- Agriscience Teacher
- Communications Strategist
- Extension Agent
- Lawyer
- Lobbyist
- Marketer
- Sales Representative
- Science Writer
- Video Producer



AGRICULTURAL OPERATIONS MANAGEMENT

Agricultural Operations Management combines hands-on applied coursework and core business principles with emerging technologies and sustainable methods. Students gain experience in

- systems management
- environmental quality
- energy efficiency
- agricultural machinery
- GIS/GPS technology
- remote sensing
- irrigation
- power systems
- water control
- precision agriculture



AGRICULTURAL OPERATIONS MANAGEMENT CAREERS

- Commercial Construction Manager
- Farm or Ranch Manager
- Heavy Equipment Sales and Management
- Irrigation Specialist
- Landscape Manager
- Production Manager
- Precision Ag Specialist
- Sales Representative



NATURAL RESOURCE CONSERVATION

Conservationists protect and sustain our world's natural resources for future generations. Well-versed in economics and communications, Natural Resource Conservation students are equipped with strong analytical, critical thinking, and interpersonal skills. Students study:

- chemistry
- biology
- ecology
- and forest
- wildlife
- fisheries
- aquatic resources



NATURAL RESOURCE CONSERVATION CAREERS

- Conservation Biologist
- Ecologist
- Environmental Consultant
- Environmental Educator
- Natural Areas Guide
- Natural Resource Policy Adviser
- Natural Resource Specialist
- Protected Areas Manager
- Stewardship Manager



PLANT SCIENCE

Plant scientists sustain and improve our current and future world as they work with foods, fibers, fuel, flowers, pharmaceuticals, urban forests, soil health, plant pests, and our natural environs. Students study:

- biology
- plant morphology and physiology
- chemistry
- entomology
- physics
- soil and water sciences
- plant identification
- plant pathology
- plant propagation
- environmental horticulture



PLANT SCIENCE CAREERS

- Agronomist
- Crop Geneticist
- Extension Agent
- Landscaper
- Nursery Manager
- Plant Breeder
- Plant Pathologist
- Sports Turf Manager

