Agriculture, Food & Natural Resources

CAREER PATHWAY

PLANT SYSTEMS

Dual or Tech/Career Seal

People with careers in the Plant Systems pathway study plants and their growth, helping producers of food, feed, ornamental and fiber crops continue to feed a growing population while conserving natural resources and maintaining and enhancing the environment. Individuals in this pathway also develop ways to improve the nutritional and ornamental value of crops and the quality of seeds. They use genetic engineering to develop crops which are resistant to pests and drought.

Major Courses

Students must take THREE pathway concentration courses and ONE additional pathway elective course.

Pathway Concentration Courses (3):

- Agriscience Principles & Technology I
- Basic Agricultural Science & Technology
- Floral Design & Management
- Floriculture Production & Management
- General Horticulture & Plant Science
- Landscape Design & Management
- Nursery & Landscape

Pathway Elective Courses (1):

- Advanced Landscape Design
- Agriscience Principles & Technology II*
- Agriscience Principles & Technology III*
- Apprenticeship/Internship
- Nursery Production & Management
- Turf Production & Management
- Other Pathway Concentration Course

Other Recommended Courses

- Biology
- Entrepreneurship: Building a Business
- Environmental Science
- Modern Language

Post-Secondary Degrees, Diplomas, & Certificates

Technical Colleges

- Environmental Horticulture
- Environmental Technology
- Floral Design
- Landscape Design
- Turf & Golf Course Management

Colleges/Universities

- Crop & Soil Sciences
- Horticulture
- Landscape Architecture
- Plant Biology
- Plant Science
- Plant Pathology
- Entomology

CAREERS

Bioinformatics Specialist
Extension Specialist
Crop Farm Manager
Plant Pathologist
Agricultural Journalist
Landscape Groundskeeper
Plant Breeder and Geneticist
Forest Geneticist
Golf Course Superintendent
Aquaculturalist
Custom Hay/Silage Operator
Landscape Contractor
Biotechnology Lab Technician
Soil & Water Specialist
Agricultural Educator
Sales Representative
Greenhouse Manager
Landscape Designer/Architect
Grain Operator
Rancher
Tree Surgeon
Botanist
Grower
Florist

EMPLOYMENT OUTLOOK

Demand for food, fiber and ornamental crops will increase because of the growth in world population and the demand for U.S. agricultural exports, as developing nations improve their economies and personal incomes. Plant scientists are using new avenues of research in biotechnology to develop plants and food crops that require less fertilizer, fewer pesticides and herbicides, and even less water for growth. These new advances will continue to provide a demand for careers in plant science.

* Pre-requisites noted in course descriptions.