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.

**Focusing Education on the Future!**

**CAREER PATHWAY**

**PLANT SYSTEMS**

**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.

**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**

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<tr>
<td>Environmental Technology</td>
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<td>Turf &amp; Golf Course Management</td>
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<td>Plant Pathology</td>
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**Career Opportunities**

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

* Pre-requisites noted in course descriptions.