Agriculture Plant Science–AST

**REQUIRED**

- **HORT 110** Introduction to Horticulture and Plant Science
- **MATH 142** Elementary Statistics with Probability
- **MATH 144** Statway II
- **BUS 240** Business Statistics
- **ECON 221** Principles of Microeconomics
- **HORT 120** Soil Science and Management
- **CHEM 108** Introductory Chemistry
- **CHEM 120** General College Chemistry I

**Take at least 3 units**

- **HORT 111** Plant Propagation and Production: Winter and Spring*
- **HORT 112** Plant Propagation and Production: Summer and Fall*
- **HORT 113** Plant Materials and Their Uses: Winter and Spring
- **HORT 114** Plant Materials and Their Uses: Summer and Fall*
- **CHEM 121** General College Chemistry II
- **CHEM 226** Organic Chemistry I
- **CHEM 226** Organic Chemistry I

**Careers in**

- Landscape installation
- Maintenance of plants
- Plant propagation
- Nurseries
- Preparation for transfer for BA in horticulture, plant science, or agriculture

**PROGRAM LEARNING OUTCOMES**

Students completing this program will be able to:

1. Recognize and remediate soil properties in terms of chemistry, plant growth requirements, erosion, organic content, pore space and carbon sequestration.
2. Produce plants using sexual and asexual methods of propagation, identifying water, nutrient, light, pH and temperature requirements per crop to produce crop production cost estimates.
3. Evaluate, formulate, and apply needed nutrients for specific crops grown on given soils on a seasonal basis.
4. Demonstrate pest problem solving skills through data analysis of biological and environmental factors.
5. Describe how markets function as applied to plant science.