# **Agriculture Plant Science**

## **Agriculture Plant Science AS-T Degree**

The Associate in Science in Agriculture Plant Science for Transfer Degree is designed to provide students a seamless transfer to the California State University system. The degree is designed to prepare students for a baccalaureate degree in Plant Science or similar major.

This program provides knowledge of the general principles of agricultural production including soil fertility and irrigation management, tractor operation, pest control and planting, growing, harvesting and marketing of crops.

This program includes coursework required for entry-level positions and foundational knowledge required for careers as pest control advisors, certified crop advisors, farm managers, irrigation consultants, fertilizer sales, and agricultural research technician. A baccalaureate degree in Plant Science will prepare students for various careers in viticulture, horticulture and agronomy.

#### Program student learning outcomes:

- 1. Students will identify the major plant vegetative and reproductive structures and explain plant growth and reproduction processes including respiration, photosynthesis, transpiration, growth, fertilization and fruit formation.
- 2. Students will integrate and apply basic plant and soil science principles to achieve sustainable plant growth and yield under diverse environmental conditions.
- 3. Students will explain historical, present and future challenges associated with local and global food production systems.
- 4. Students will apply scientific and mathematical reasoning and critical thinking skills to address practical challenges in agricultural production systems.

### Students must meet the following requirements to qualify for an Associates for Transfer Degree (ADT):

- Complete 60 semester units or 90 quarter units that are eligible for transfer to the California State University (CSU), including both of the following:
- The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education (CSU GE) Breadth Requirements
- A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.
- Obtain a minimum grade point average of 2.0
- Minimum grade of "C" (or "P") for each course in the major, and
- Completion of the IGETC and/or CSU GE-Breadth

#### Career and employment information may be obtained through:

- O\*Net, www.onetonline.org
- Labor Market, California Employment Development Department, www.labormarketinfo.edd.ca.gov

Course #	Title	Units
Required Core Courses (15 Units)		
SLSCI 021	Introduction to Soil Science	4
CHEM 002A	Introductory Chemistry	4
MATH 025	Introduction to Statistics	4
AG 014	Tractor Operations	3
Plus 3 units from the courses listed below:		
CRPSCI 001.	Introduction to Plant Science	3
CRPSCI 002.	Plant Science Theory	3
Plus 3 units from the courses listed below:		
AGBUS 040.	Introductory Agricultural Economics	3
ECON 001B.	Microeconomics	3
	Total Major Units	21
	Units to Be Double-Counted as General Education	11
	CSU GE Breadth or IGETC Units	37-39
	Transferrable Elective Units	19-21
	Total	60