Agriculture Science Technology

Agriculture Science Technology AS Degree

The Agriculture Science Technology Degree prepares students to work with global positioning satellite (GPS) systems, geographic information system (GIS) software, automatic tractor guidance systems, variable rate chemical input applicators, surveying equipment, and related computer software. Students will learn in hands-on, real-world applications. Completing the certificate qualifies the student to enter the professional job market in the public sector as well as the agriculture industry. Units for the Precision Agriculture Certificate apply to the Associates Science Degree in Agriculture.

Upon completion of the program the student will be able to meet the following objectives:

- Students will demonstrate their ability to use agricultural technology.
- Students will understand agronomic fundamentals (soil, plant, water relationships)
- Students will demonstrate their ability to physically map using GPS and digitize field boundaries to create maps in GIS
- Students will demonstrate job readiness skills needed to obtain employment upon graduation

Students must fulfill the following requirements to qualify for an associate degree:

- Complete the Associate Degree requirements
- Complete major course requirements as specified in the catalog with a C or better
- Complete electives to reach a total of 60 degree applicable units
- Maintain a grade point average of 2.00 overall
- Complete the English and math competency requirements with a C or better

Course #	Title	Units
Required Core Courses		
AG 015X . . .	Occupational Work Experience	1 - 8
AGBUS 015 .	Computer Application to Agriculture	3
SLSCI 021 . .	Introduction to Soil Science	4
CRPSCI 001 .	Introduction to Plant Science	3
or CRPSCI 002	Plant Science Theory	3
Plus at least 15 units from the courses listed below		
AG 011	Agriculture Sales and Communication	3
AG 014	Tractor Operations	3
AGBUS 040 .	Introductory Agricultural Economics	3
AET 010	Surveying	3
AET 015	CAD for Agriculture	2
AET 021	AG-Irrigation Management	3
AET 022	Irrigation Evaluation/Design Principles	4
AET 023	Advanced Irrigation Design	3
AET 024	Drip & Micro Irrigation Design & Management	3
CRPSCI 006 .	Introduction to Precision Agriculture	3
CRPSCI 008 .	Applications of Geospatial Technology	3
CRPSCI 017 .	Control and Sensor Systems in AG	3
CRPSCI 018 .	Precision AG Software	3
CRPSCI 019 .	California Water	3
CRPSCI 021 .	Orchard Production	3
CRPSCI 023 .	Row Crop Production	3
CRPSCI 032 .	Weeds and Poisonous Plants	3
CRPSCI 036 .	Fertilizers and Soil Amendments	3
CRPSCI 044 .	Economic Entomology	3
CRPSCI 045 .	California Pest Control Laws and Regulations	2
IMT 060	Industrial Core	3
IMT 061	Industrial Maintenance Mechanic Level I	3
IMT 062	Industrial Maint. Mechanic Level II	4
WT 070	Introduction to Certified Welding	2.5
	Total	**26**

Precision Agriculture Certificate of Achievement

Completion of the 26 units listed above fulfills the requirements for the Precision Agriculture Certificate of Achievement.

For Gainful Employment information please visit:
https://www.westhillscollege.com/coalinga/degrees-and-certificates/gainful-employment/precision-agriculture.php

Agriculture Science Technology Local Certificate

Program student learning outcomes:

- Students will demonstrate their ability to use agricultural technology.
- Students will understand agronomic fundamentals (soil, plant, water relationships).
- Students will demonstrate their ability to physically map using GPS and digitize field boundaries to create maps in GIS.

Course #	*Title*	*Units*
Required Core Courses		
AGBUS 015 .	Computer Application to Agriculture	3
CRPSCI 001 .	Introduction to Plant Science	3
CRPSCI 006 .	Introduction to Precision Agriculture	3
CRPSCI 007 .	Advanced Precision Agriculture	3
CRPSCI 019 .	California Water	3
	Total	**15**