

DRONE AND PRECISION AGRICULTURE TECHNICIAN CERTIFICATE

Division: Technology and Engineering

PROGRAM CODE: 2C46122

The Drone and Precision Agriculture Technician Certificate prepares students for a dynamic career in precision agriculture by integrating drone technology and advanced agricultural practices. This program provides the knowledge and hands-on skills necessary to operate and maintain drones for agricultural applications, collect and analyze aerial data, and apply insights to improve crop management and yield. Students will also be trained to meet federal and state certification requirements, including FAA Part 107 and Part 137 certifications and well as California agricultural pest control drone certification. This certificate requires 19-21 units. A grade of C or better is required in each course taken.

Code	Title	Units
Required Courses (15 Units):		
DRON 105 F	Applied Drone Piloting	3
DRON 130 F	Aerial Mapping and Photogrammetry	3
DRON 260 F	Multispectral and Hyperspectral Sensing with Drones	3
DRON 265 F	Drone Spraying Operations and Certification Training	3
HORT 045 F	Pest Control Certification and Safety	3
Restricted Electives (4-6 Units):		4-6
DRON 120 F	Infrared Thermal Imaging Level 1	2
DRON 140 F	Basic Drone Maintenance and Repair	3
DRON 210 F	Extended Drone Operations and Part 108	3
HORT 153 F	Landscape Irrigation	3
HORT 155 F	Soils	3
HORT 156 F	Plant Nutrition	2
HORT 157 F	Irrigation Principles	3
Total Units		19-21

Program Level Student Learning Outcomes

Outcome 1: Apply drone technology and precision agriculture practices to enhance crop management and sustainability.

Outcome 2: Demonstrate proficiency in operating and maintaining drones, interpreting aerial data, and meeting federal and state certification requirements for agricultural drone operations.

https://www.curricunet.com/fullerton/reports/program_report.cfm?programs_id=1562