AUTONOMOUS SYSTEMS TECHNICIAN CERTIFICATE

Division: Technology and Engineering

PROGRAM CODE: 2C41372A

The Autonomous Systems Technician Certificate is designed to develop the skills necessary to provide a comprehensive understanding of autonomous systems and how they work. Students seeking a certificate in Autonomous Systems may pursue careers in industries such as manufacturing, defense, agriculture, surveying, medical, automotive, power, communications and many more. In order to be well prepared for this technical field, students should complete as many courses as possible that relate to future job and career prospects. This certificate requires a total of 22-23 units. A grade of C or better is required in each course taken.

Code	Title	Units
Required Courses (22-23 units):		
CIS 201 F	Introduction to Python Programming	3
DRON 101 F	Basic Drone Piloting	2-3
or DRON 105 F	Applied Drone Piloting	
DRON 140 F	Basic Drone Maintenance and Repair	3
DRON 240 F	Advanced Drone Maintenance	3
DRON 255 F	Applied Drone Lab	2
TECH 081 F	Technical Mathematics I	3
TECH 127 F	Industrial Safety	2
TECH 131 F	Basic Electricity and Basic Electronics	2
TECH 132 F	Basics of Electric Motor Controls	2
Total Units		**22-23**

Program Level Student Learning Outcomes

Outcome 1: Design and conduct experiments, as well as analyze and interpret data related to Unmanned Aircraft System (UAS) air-frame assembly; external pilot controls; motor and power systems; autopilot and sensors; ground control station software; loop simulation; tune autopilot; video payload installation; and autopilot telemetry modem.

Outcome 2: Analyze and interpret data and compare results with theoretical calculations.