

AUTONOMOUS SYSTEMS DEVELOPMENT ASSOCIATE IN SCIENCE DEGREE

Division: Technology and Engineering

Requirements

PROGRAM CODE: 2S38300

The **Autonomous Systems Development Associate in Science Degree** is designed to develop the skills necessary to facilitate transfer to a university and provide a comprehensive understanding of autonomous systems. Students seeking a degree in engineering or areas related to Autonomous Systems Technology 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 upper division curriculum at a university in technical fields, students should complete as many courses as possible that relate to future job and career prospects. This degree requires a total of 26-30 units.

Code	Title	Units
Required Courses (20-21 units):		
CIS 212 F	Robotic Programming	3
ENGR 110 F	Introduction to Engineering	3
ENGR 203 F	Electric Circuits	4
ENGR 203LF	Electric Circuits Lab	1
MACH 101 F	Introduction to Machine Tools (formerly MACH 091 F)	5
TECH 150 F	Basic Drone Piloting	2-3
or TECH 151 F	Applied Drone Piloting	
TECH 155 F	Applied Drone Lab	2
Restricted Electives (6-9 units):		6-9
CIS 201 F	Introduction to Python Programming	3
DRAF 944 F	Solidworks	3
ENGR 105 F	Engineering CAD	4
MACH 102 F	Intermediate Machine Tools (formerly MACH 092 F)	5
MACH 150 F	CNC Programming Using Mastercam (formerly MACH 050 F)	3
MATH 151 F	Calculus I (formerly MATH 150AF)	4
or MATH 151HF	Honors Calculus I (formerly MATH 150HF)	
MATH 152 F	Calculus II (formerly MATH 150BF)	4
or MATH 152HF	Honors Calculus II	
PHYS 221 F	General Physics I	4
Total Units		26-30

Program Level Student Learning Outcomes

Outcome 1: Design and conduct experiments, as well as to analyze and interpret data.

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