

Robotics/Mechatronics, A.A.S.

Program Code

AAS-ADMA-AUTM

CIP

15.0613

Type

A.A.S.

The Associate of Applied Science degree in Advanced Manufacturing with a concentration in Automation/Mechatronics will prepare graduates for entry-level employment in industrial automation. Concepts covered in this concentration will include a Mechatronic approach to training; programmable logic controllers (Allen Bradley and Siemens); digital fundamentals; interfacing microcomputers to electro-mechanical devices; and flexible manufacturing cells.

GENERAL EDUCATION CORE REQUIREMENTS

Item #	Title	Credits
ENG 101	English Composition I	3
MTH 103	Introduction to Technical Mathematics	3
	Humanities/Fine Arts Elective (Excluding Speech and Foreign Language)	3
	Social & Behavioral Science Electives	3
	Natural Science or MTH Elective	3-4

ADVANCED MANUFACTURING CORE COURSE REQUIREMENTS

Item #	Title	Credits
ADM 101	Precision Measurement	3
ADM 104	Introduction to Thermal/Electrical Principles	3
ADM 105	Fluid Systems	3
ADM 106	Quality Control Concepts	3
ADM 111	Manufacturing Safety Practices	3
	ADM 107 OR ADM 108	3

BASIC ELECTRICITY COURSE REQUIREMENTS

Item #	Title	Credits
ELT 108	DC Fundamentals	3
ELT 109	AC Fundamentals	3
ELT 117	AC/DC Machines	3
ELT 110	Wiring Methods	3

AUTOMATION FUNDAMENTALS COURSE REQUIREMENTS

Item #	Title	Credits
ELT 209	Motor Controls I	3
ELT 231	Introduction to Programmable Controllers	3
ELT 232	Advanced Programmable Controllers	3
	ILT 240 or ILT 114	3

AUTOMATION/ROBOTICS COURSE REQUIREMENTS

Item #	Title	Credits
ILT 139	Introduction to Robotic Programming	3
ADM 250	Introduction to Flexible Manufacturing Cells	4
	Total Credits	64-65