Mechatronics

Program
Advanced Manufacturing
Degree Type
Associate in Applied Science (AAS)

The Associate in Applied Science in Advanced Manufacturing with a concentration in Mechatronics is designed to develop multi-craft technicians trained to diagnose and repair a variety of problems that can occur with electrical and mechanical systems found in today's high tech manufacturing and industrial environments. Students will be trained to perform preventative and predictive maintenance on a variety of systems to include, but not limited to, electric, hydraulic, pneumatic, and mechanical power transmission. Students completing the Manufacturing Technology program will be required to participate in third party credentialing from NOCTI and OSHA. This concentration area has a series of stackable short term certificates focused on specific skill sets an individual can earn as they progress toward an Associate degree or take in order to develop their skills in a particular area of demand.

Industrial Safety Term

Item #	Title	Credits
ADM 291	MSSC SAFETY	3
INT 101	DC FUNDAMENTALS	3
INT 117	PRINCIPLES OF INDUSTRIAL MECHANICS	3
INT 129	INDUSTRIAL SAFETY AND MAINTENANCE TECHNIQUES	3
	MTH 100 or MTH 110	3

Basic Electricity Term

Item #	Title	Credits
ADM 292	MSSC QUALITY PRACTICES AND MEASUREMENT	3
INT 103	AC FUNDAMENTALS	3
INT 119	PRINCIPLES OF MECHANICAL MEASUREMENT AND TECHNICAL DRAWING	
INT 158	INDUSTRIAL WIRING I	3
ENG 101	ENGLISH COMPOSITION I	3

Industrial Motors Term

Item #	Title	Credits
ADM 293	MSSC MANUFACTURING PROCESSES AND PRODUCTION	3
INT 118	FUNDAMENTALS OF INDUSTRIAL HYDRAULICS AND PNEUMATICS	3
INT 153	PRECISION MACHINING FUNDAMENTALS I	3
INT 206	INDUSTRIAL MOTORS I	3
	Natural Science or Mathematics Elective	3

Industrial Motor Controls Term

Item #	Title	Credits
ADM 294	MSSC MAINTENANCE AWARENESS	3
INT 113	INDUSTRIAL MOTOR CONTROLS I	3
INT 184	INTRODUCTION TO PROGRAMMABLE LOGIC CONTROLLERS	3
INT 215	TROUBLESHOOTING TECHNIQUES	3
	Humanities and Fine Arts Elective	3

Industrial Systems Term

Item #	Title	Credits
INT 132	PREVENTIVE AND PREDICTIVE MAINTENANCE	3
INT 139	INTRODUCTION TO ROBOTIC PROGRAMMING	3
INT 284	ADVANCED PROGRAMMABLE LOGIC CONTROLLERS	3
	Social and Behavioral Sciences Elective	3
	Total Credits	**69**