

Associate in Applied Science Degree**MECHATRONICS TECHNOLOGY - INDUSTRIAL MAINTENANCE**

The Mechatronics/Industrial Maintenance Technology Program prepares students as entry level technicians in diversified manufacturing industries. Students will gain knowledge and skills in reading industrial schematics and drawings, understanding direct current (DC) and alternating current (AC) circuits, analog and digital electronics, programmable logic controllers (PLCs), motor controls and drives, robotics, and fluid power systems including mechanics, pneumatics, hydraulics, and instrumentation needed for computerized integrated manufacturing. Emphasis is placed on predictive maintenance, troubleshooting and quality assurance.

CURRICULUM SEQUENCE**First Semester - Fall**

	Course Title	Semester Credit Hours
EEM 117	AC/DC Circuits I	4
EEM 140	National Electrical Code	3
EEM 231	Digital Circuits I	3
IET 223	Industrial Safety	3
MAT 170	Algebra, Geometry & Trigonometry	3
	TOTAL	16

Second Semester - Spring

EEM 118	AC/DC Circuits II	4
EEM 170	Electrical Installation	3
ENG 155	Communications I*	3
IMT 161	Mechanical Power Applications	4
	TOTAL	14

Third Semester - Summer

EEM 151	Motor Controls	4
EEM 215	DC/AC Machines	3
EEM 221	DC/AC Drives	3
EEM 251	Programmable Controllers	3
	TOTAL	13

Fourth Semester - Fall

AMT 105	Robotics & Automated Controls I	3
EEM 252	Programmable Controller Applications	3
IMT 131	Hydraulics & Pneumatics	4
PSY 103	Human Relations*	3
PHI 110	Ethics	3
	TOTAL	16

Fifth Semester - Spring

AMT 102	Computer Controlled Machinery	4
AMT 205	Robotics and Automated Control II	3
EEM 235	Power Systems	3
EEM 274	Technical/System Troubleshooting	4
ENG 160	Technical Communications*	3
	TOTAL	17
	TOTAL CREDIT HOURS	76

*Students interested in transferring to a senior institution should select ENG 101, ENG 102 and SPC 205 in place of ENG 155 and ENG 160; PSY 201 in place of PSY 103.