

## Associate in Applied Science Degree MECHATRONICS TECHNOLOGY

The Mechatronics Technology degree program will provide students with the fundamental skills and understanding in electronics, mechanical and fluid power and automated controls commonly found within the manufacturing industry. Furthermore, graduates of the program will be able to perform a systemic analysis and troubleshoot equipment and machinery utilized in the industry.

### PROPOSED CURRICULUM SEQUENCE

#### First Semester - Fall

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
	<b>TOTAL</b>	<b>16</b>

#### 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
	<b>TOTAL</b>	<b>14</b>

#### 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
	<b>TOTAL</b>	<b>13</b>

#### 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 103	Workplace Ethics*	3
	<b>TOTAL</b>	<b>16</b>

#### Fifth Semester - Spring

AMT 205	Robotics and Automated Control II	3
EEM 235	Power Systems	3
EEM 274	Technical/System Troubleshooting	4
ENG 160	Technical Communications*	3
	<b>TOTAL</b>	<b>13</b>
	<b>TOTAL CREDIT HOURS</b>	<b>72</b>

\*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; and PHI 110 in place of PHI 103.