

# Mechatronics



HEARTLAND  
COMMUNITY COLLEGE

## Associate in Applied Science 61-62 Semester Hours

### General Education Requirements

	hrs
COMM 101 Introduction to Oral Communication	3
ENGL 101 Composition I	3
MATH 109 College Algebra for Math & Science	4
Or	
TMAT 103 Technical Mathematics I	4
MATH 128 Trigonometry	3
Or	
TMAT 105 Technical Mathematics II	4
Physical Science Elective	<u>4</u>
<b>TOTAL</b>	<b>17-18</b>

### Electrical Maintenance Option

	hrs
ELTC 102 DC Electronics	3
ELTC 103 AC Electronics	3
ELTC 206 Digital Electronics & Microprocessors	3
ELTC 207 Solid State Electronics	
Troubleshooting & Measurements	3
ELTC 212 Automation & Control Electronics	3
MAIN 201 Electrical Wiring & Maintenance	3
MAIN 222 Industrial Controllers	3
Technical Electives*	<u>6</u>
<b>TOTAL</b>	<b>27</b>

### Technical Requirements

	hrs
BUSN 145 Employment Success Strategies	1
CAD 101 Introduction to AutoCAD	3
CSCI 101 Introduction to Computer	
Information Science	4
MAIN 101 Industrial Electricity and Systems	3
MFTG 115 Manufacturing & Production Processes	3
TECH 114 Introduction to Technical Graphics	<u>3</u>
<b>TOTAL</b>	<b>17</b>

### Industrial Maintenance Option

	hrs
MAIN 102 Mechanical Systems	3
MAIN 202 Fluid Power Systems	3
MAIN 220 Mechatronics	3
MAIN 222 Industrial Controllers	3
MTT 101 Machining Skills I	3
MTT 201 Machining Skills II	3
WELD 110 Introduction to Welding Processes	3
Technical Electives*	<u>6</u>
<b>TOTAL</b>	<b>27</b>

### Program Description

By enrolling in the Mechatronics Technology program, you learn about industrial electricity and wiring, mechanical applications, and industrial controllers. Depending on your choice to focus on the Industrial Maintenance or Electrical Maintenance option, you may also learn about hydraulic and pneumatic equipment, machining skills, and welding or electronics, microprocessors, and automation controls. When you complete this program, you can seek employment in industrial and facility maintenance or management.

\* Technical electives may be taken as approved by advisor or STEM & Business Division; consider choosing these electives in order to earn additional Skills Certificates.