

## ELECTROMECHANICAL TECHNOLOGY

The electromechanical technology program will allow students to learn the skills and knowledge to install, maintain, and repair complex industrial equipment. The students will focus on electrical principles, circuitry, electrical controls, robotics, print reading, programming, computer-aided drafting, mechanical systems, and other components related to electromechanical repair. Students will acquire the knowledge and skills through concentrated classroom and hands-on learning. Successful graduates are placed in industrial plants, hospitals, schools, apartment complexes, office buildings, and other building maintenance positions.

*(Enrollment into this program is limited and is based on the date of application.)*

Before admission to this program, students will need to attain the following minimum placement test scores or equivalent. MAP: Math 216+, Reading 216+, Language 216+; ACT: Math 17+, Reading 14+, English 14+.

### Required Program of Study for Associate of Applied Science Degree (2 years)

#### FIRST YEAR

Fall Semester	
Course	Credits
ELMC 1010 Fundamentals of Electricity .....	3
ELMC 1020 Fundamentals of Electricity Lab .....	2
ELMC 1030 Orientation and Safety .....	2
INDT 1090 Introduction to Machining .....	0.5
INDT 1095 Introduction to Machining Lab .....	1
WELD 1010 Related Welding .....	0.5
WELD 1020 Related Welding Lab .....	1
ELMC 1070 Automation Fundamentals .....	3
ELMC 1090 Mechanical Matter and Energy .....	3
MATH 1020 Technical Mathematics I* .....	3
	<u>19</u>

Spring Semester	
Course	Credits
ELMC 1110 Motor Control .....	2
ELMC 1120 Motor Control Lab .....	2
ELMC 1150 Introduction to Mechanics .....	3
ELMC 1160 Introduction to Mechanics Lab .....	3
ELMC 1170 Total Quality Management .....	2
CAPL 1290 Introduction to Job Search and Employment .....	1
ECON 1010 Personal and Business Finance* .....	2
MATH 1060 Technical Mathematics II* .....	3
	<u>18</u>

Summer	
ELMC 1300 Cooperative Internship I .....	6
	<u>6</u>

#### SECOND YEAR

Fall Semester	
Course	Credits
ELMC 2010 Introduction to Automated Controls .....	2
ELMC 2020 Introduction to Automated Controls Lab ...	2
ELMC 2030 Motor Repair .....	2
ELMC 2040 Motor Repair Lab .....	1
ELMC 2052 Fluid Fundamentals .....	3
ELMC 2062 Fluid Fundamentals Lab .....	1
ELMC 2070 Machine Repair .....	2
ELMC 2080 Machine Repair Lab .....	2.5
ENGL 1050 Workplace Communication* .....	3
	<u>18.5</u>

Spring Semester	
Course	Credits
ELMC 2110 Control Systems .....	3
ELMC 2120 Control Systems Lab .....	2.5
ELMC 2150 Solid State Fundamentals .....	4
ELMC 2170 Electromechanical Systems .....	1
ELMC 2190 Electromechanical Systems Lab .....	2
PSYC 1000 Human Relations* .....	2
	<u>14.5</u>

Total Credit Hours 76

\*See general education requirements.