

ELECTROMECHANICAL TECHNOLOGY

Program Number: 10-620-1

Associate of Applied Science Degree

Campus: Fond du Lac

This program is eligible for financial aid (<http://www.morainepark.edu/financial-aid/>)

Turn your passion for problem-solving and working with your hands into an exciting career with an Electromechanical Technology associate degree from Moraine Park Technical College.

About the Program

Moraine Park's Electromechanical Technology program combines theories and applications in mechanical, electrical, and automated systems through motor control, fluid power, mechanical drives, robotics, and programmable logic controllers. A comprehensive understanding of how these technical skill areas are linked together to create a smart factory is developed through a hands-on project course that allows the learner to put together the various technologies into an automated work cell.

What You'll Learn

Electromechanical Technology students learn how to think critically, use technology to solve problems, program, and use/maintain electromechanical and automated equipment.

Continue your education through Moraine Park's Industrial Mechanical Technician (<https://catalog.morainepark.edu/program-information/programs/industrial-mechanical-technician/>) program and advance your career opportunities by extending courses into a third year to obtain two credentials.

Transfer Opportunities

Your academic journey can continue at a four-year college or university. Earn your associate degree at Moraine Park and then apply those credits toward a bachelor's degree. Starting at MPTC makes completing a bachelor's degree **affordable, accessible and convenient**. You can go anywhere as MPTC has transfer agreements with colleges and universities both in Wisconsin and throughout the country.

Visit the Transfer to a Four-Year College (<https://www.morainepark.edu/transfer-to-a-four-year-college/>) page for more information on credit transfer agreements between Moraine Park and four-year colleges, both public and private.

Admission Process

Standard Admissions (<http://www.morainepark.edu/admissions/new-student/how-to-apply-for-admissions/>) steps details

Credit for Prior Learning

Transform the skills and abilities developed through previous experience into college credit through MPTC's Credit for Prior Learning process.

- Transfer credit from other colleges/universities
- Earn college credit for your military training and experience

- Earn college credit via Advance Placement, CLEP, DANTES/DSST or MPTC Challenge Exams
- Earn college credit from previous/current work and life experiences

Visit MPTC's Credit for Prior Learning (<https://www.morainepark.edu/academics/credit-for-prior-learning/>) page for more information.

Approximate Costs

Tuition

Occupational

- \$157.45 per credit (resident)
- \$236.18 per credit (out-of-state resident)

Associate of Arts/Associate of Science

- \$196.05 per credit (resident)
- \$294.08 per credit (out-of-state resident)

Online students are not charged out-of-state fees.

Student Fees

- \$6.00 minimum per course Material Fee
- \$13.76 per-credit Supplemental Fee for Undergraduate courses
- \$4.50 per term mandatory Student Accident Insurance Fee

Please refer to Tuition & Fee Information (<https://catalog.morainepark.edu/billing/cost/>) for additional enrollment fee information.

Financial Aid

Financial Aid is available for associate degree and technical diploma programs (those that are 2 semesters in length and typically with 28 credits or more). Processing can take 4-5 weeks after a student's completed Free Application for Federal Student Aid (FAFSA (<https://studentaid.gov/h/apply-for-aid/fafsa/>)) is received.

Several factors influence the total cost of your degree, including enrollment fees, the number of credits required, textbooks and equipment. **Financial aid** (<https://www.morainepark.edu/pay-for-college/financial-aid/>) can assist with those costs.

Course Requirements

Course	Title	Credits
Semester 1		
103-159	Computer Literacy - Microsoft Office	1
620-101	DC Circuits	2
620-102	AC Circuits	2
620-113	Industrial Wiring	2
801-136	English Composition 1	3
804-195	College Algebra with Applications	3
890-101	College 101	2
		Credits
		15
Semester 2		
462-109	Industrial Motor Controls and Troubleshooting	2
620-103	Semi-Conductor Devices	2
620-104	Digital Electronics	2
620-115	AC-DC Machinery and Motor Controls	4
804-196	Trigonometry with Applications	3

Behavioral Science Course (https://catalog.morainepark.edu/program-information/general-education/behavioral-social-science/)	3
Credits	16
Semester 3	
620-105 Industrial Hydraulics and Pneumatics 1	2
620-110 Integrated Manufacturing Planning - Electromechanical Technology	2
620-133 Siemens PLC Programming	3
620-135 Allen-Bradley PLCs and Ladder Logic	3
620-141 Mechanical Drives 1	3
620-144 Robotic Maintenance	2
664-105 Introduction to Fanuc Robotics	2
Credits	17
Semester 4	
620-111 Integrated Manufacturing Production - Electromechanical Technology	2
620-136 Advanced Allen-Bradley PLCs and PanelVIEW	3
620-146 Instrumentation and Process Control or 620-142 or Mechanical Drives 2	3
664-115 Robotics and Vision Systems or 620-148 or ABB Robotics	2
801-197 Technical Reporting	3
Social Science Course (https://catalog.morainepark.edu/program-information/general-education/behavioral-social-science/)	3
Credits	16
Total Credits	64

Program Outcomes

- Perform work safely
- Troubleshoot electrical and mechanical systems and devices
- Repair electrical and mechanical systems
- Communicate Technical Information
- Integrate electrical and mechanical systems and devices

Career Opportunities

- Controls Engineer
- Electrical/Electronics Technician
- Field Engineer
- Mechatronics Technician
- Research and Development Technician
- Industrial Maintenance Technician

Statewide Median Salary for Recent Graduates

\$68,800