

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/programs/industrial-mechanical-technician/>) program and advance your career opportunities by extending courses into a third year to obtain two credentials.

Transfer Opportunities

Earn credits at MPTC and transfer to a four-year college to earn your bachelor's degree.

Visit the Transfer to a Four-Year College (<https://www.morainepark.edu/academics/transfer-information/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

Earn college credit outside the classroom through Moraine Park's Credit for Prior Learning (CPL) opportunities. Credit opportunities are available for:

- Previous college coursework from prior institutions
- Military training and experience
- Passing of MPTC or national exams
- Skills or knowledge developed on the job or through other life experiences

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

Approximate Costs

Tuition

Occupational

- \$146.20 per credit (resident)
- \$219.30 per credit (out-of-state resident)

Associate of Arts/Associate of Science

- \$188.90 per credit (resident)
- \$283.35 per credit (out-of-state resident)

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

Student Fees

- \$4.50 minimum per course Material Fee
- \$12.50 per-credit Supplemental Fee for Undergraduate courses
- \$10 minimum per credit Online Course Fee (Fee suspended for 2023-2024)
- \$4.50 per term mandatory Student Accident Insurance Fee

Please refer to Tuition & Fee Information (<https://catalog.morainepark.edu/admissions-registration/tuition-fee-information/>) 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. Visit the Financial Aid (<https://www.morainepark.edu/pay-for-college/financial-aid/>) page to learn more.

While attending Moraine Park during the 2023-24 school year, your estimated cost of attendance for one full year includes tuition of \$4,375 (15 credits for fall and spring semester), fees of \$338, food and housing of \$4,052 (if living with parents, \$9,614 if living on your own), books and supplies of \$2,061, personal expenses of \$2,245, and transportation of \$2,007 for a total of \$15,161. Your direct costs (those costs paid directly to the college) include tuition & fees. The indirect costs (costs not paid to the college) can vary from individual to individual and your own personal needs.

Course Requirements

Course	Title	Credits
Semester 1		
103-159	Computer Literacy - Microsoft Office	1
620-101	DC Circuits	3
620-102	AC Circuits	3
801-136	English Composition 1	3
804-195	College Algebra with Applications	3
890-101	College 101	2
Credits		15
Semester 2		
620-103	Semi-Conductor Devices	3

620-104	Digital Electronics	3
620-115	AC-DC Machinery and Motor Controls	4
804-196	Trigonometry with Applications	3
Behavioral Science Course (https://catalog.morainepark.edu/academic-programming/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	Data Acquisition and Control	3
620-135	Allen-Bradley PLCs and Ladder Logic	3
620-141	Mechanical Drives 1	3
620-150	Data Communication and Protocols	3
Credits		16
Semester 4		
620-111	Integrated Manufacturing Production - Electromechanical Technology	2
620-136	Advanced Allen-Bradley PLCs and PanelVIEW	3
620-146 or 620-142	Instrumentation and Process Control or Mechanical Drives 2	3
620-151	Fanuc Robotics and Vision Systems	3
801-197	Technical Reporting	3
Social Science Course (https://catalog.morainepark.edu/academic-programming/general-education/behavioral-social-science/)		3
Credits		17
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

\$62,497