

MECHATRONICS TECHNICIAN APPRENTICESHIP

Program Number: 50-620-1

Apprenticeship

Campus: Fond du Lac

This program is **not** eligible for financial aid

About the Program

This occupation requires combined knowledge of electrical, electronic and mechanical systems used in industrial plants. Workers frequently support automation and robotic technologies. Work processes include installing, repairing, and maintaining equipment/devices. Troubleshooting systems involved in manufacturing and process control are critical requirements for workers in these occupations. Workers typically operate and debug, industrial computer and communication systems including PLC's, PCs, and HMI technologies. Workers machine metal and other materials; fabricate parts and weld/join components. Documenting work performed, maintaining accurate records, and working in a collaborative environment are critical interpersonal skills. Employees in some, but not all plants, support facilities, utilities and grounds.

What You'll Learn

Mechatronics technician apprentices learn hands-on classroom instruction that complements on-the-job apprenticeship training critical for success in the workplace.

Additional Information

Contact Kim Spartz at (920) 924-3217 or kspartz@morainepark.edu to discuss transfer opportunities. Journeyworkers can earn a degree customized to their interests with the Technical Studies - Journeyworker Associate of Applied Science degree at Moraine Park Technical College (<https://catalog.morainepark.edu/programs/technical-studies-journeyworker/>)

To learn more about apprenticeships in Wisconsin, visit <https://dwd.wisconsin.gov/apprenticeship/>

Application/Admission Information

Students interested in an apprenticeship do not complete standard admissions with Moraine Park.

Interested students/employers should contact the training representative listed below to start the apprentice/employer apprenticeship contract application:

Lavelle Gill, Apprenticeship Training Representative

Phone: (262) 340-1143

Email: almonl.gill@dwd.wisconsin.gov

Learn more at www.wisconsinapprenticeship.org (<https://dwd.wisconsin.gov/apprenticeship/>)

Application Requirements

Applicants should be 18 years of age and submit an apprentice/employer application to the Bureau of Apprenticeship Standards. Applicants must have a high school diploma or equivalent and be physically able to perform required work practices safely.

Students are required to complete Transition to Trainer coursework.

Approximate Costs

Tuition

Occupational

- \$149.50 per credit (resident)
- \$224.25 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

- \$5.00 minimum per course Material Fee
- \$13.45 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/admissions-registration/tuition-fee-information/>) for additional enrollment fee information.

Training Period

APPRENTICESHIP TRAINING STANDARDS PENDING APPROVAL

- 5-year apprenticeship under the hybrid model of both time-based and competency based
- 10,000 hours
- 864 hours of related instruction completed in 3 years
- Complete Transition to Trainer course in the final year

Working Conditions

Students in this program generally work in an industrial setting.

Course Requirements

Course	Title	Credits
Year 1		
Semester 1		
804-360	Occupational Mathematics 1	2
664-110	Introduction to Mechatronics	2
413-750	DC Electricity for Industrial Electricians	2
		Credits
		6
Semester 2		
413-751	AC Electricity for Industrial Electricians	2
413-761	Industrial Electrician Motors and Generators	1
413-762	Industrial Electrician Motor Controls 1	1
413-763	Industrial Electrician Motor Controls 2	1
413-764	Industrial Electrician Motor Controls 3	1
		Credits
		6
Year 2		
Semester 3		
464-718	Fluid Power Systems	2
413-752	Codes for Industrial Electricians 1	0.5
413-753	Codes for Industrial Electricians 2	0.5

413-765	Power Systems and Variable Speed Drives	2
	Credits	5
Semester 4		
462-109	Industrial Motor Controls and Troubleshooting	3
620-135	Allen-Bradley PLCs and Ladder Logic	3
	Credits	6
Year 3		
Semester 5		
620-136	Advanced Allen-Bradley PLCs and PanelVIEW	3
664-105	Introduction to Industrial Robotics	2
	Credits	5
Semester 6		
620-151	Fanuc Robotics and Vision Systems	3
623-162	Manufacturing Processes	3
	Credits	6
	Total Credits	34

- Note: This program consists of 34 credits over 3 academic years. Waiver of prerequisites will be on a case-by-case basis.
- Students must take course 47-455-455 Transition to Trainer, Your Role as a Journeyworker (complete in the final year).

Program Outcomes

- Perform work safely
- Install mechanical equipment
- Install electrical equipment
- Maintain mechanical equipment
- Troubleshoot mechatronic systems
- Operate machine shop tools and machines
- Weld and fabricate parts
- Maintain automation systems
- Modify devices and systems
- Maintain documents and records
- Local options and work processes

Career Opportunities

- Mechatronics Technician
- Robotics Technician
- Mechanical Engineering Technician
- Manufacturing Production Technician
- Electrical and Electronics Repairers
- Industrial Machinery Mechanics
- Automation Technician
- Machine Wireman
- Control Panel Assembler
- Field Service Technician
- Maintenance Mechanic
- Industrial Electrician
- Maintenance Technician
- Industrial Mechanic
- Manufacturing Technician
- Industrial Technician
- Mechanical Assembly Technician
- Machine Checkout Technician