

AUTOMATED MANUFACTURING TECHNICIAN

Program Number: 30-623-9

Technical Diploma

Campus: Fond du Lac

Develop the skills required to work in an automated manufacturing environment with the Automated Manufacturing Technician technical diploma at Moraine Park.

About the Program

Moraine Park's Automated Manufacturing Technician program prepares individuals to apply basic engineering principles and technical skills to the identification and resolution of production problems in the manufacture of products. The curriculum includes instruction in machine operations, production line operations, engineering analysis, systems analysis, instrumentation, physical controls, automation, computer-aided manufacturing (CAM), and manufacturing planning.

What You'll Learn

Students in the Automated Manufacturing Technician Technical Diploma learn the principles of advanced manufacturing and quality. Students are trained in print reading, design, measurement, and statistical process control. Students also learn basic automation concepts, including electronics, pneumatics and hydraulics, robotic programming, and applications for programmable logic controllers. All courses in this diploma can be applied to an Associate of Applied Science Degree in Quality and Advanced Manufacturing Technology. (<https://catalog.morainepark.edu/programs/quality-advanced-manufacturing-technology/>)

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.

Course Requirements

Course	Title	Credits
Semester 1		
103-159	Computer Literacy - Microsoft Office	1
623-110	Technical Print Reading	2
623-162	Manufacturing Processes	3
664-110	Introduction to Mechatronics	2
804-107 or 804-195	College Mathematics or College Algebra with Applications	3
890-101	College 101	2
Credits		13
Semester 2		
617-114	CAD 3-D SolidWorks	3
623-191	Basic Metrology	2
628-136	Statistical Process Control	3
664-100	Introduction to Industrial Control Systems	2
Credits		10
Total Credits		23

Program Outcomes

- Develop manufacturing processes for a product or part
- Solve manufacturing problems
- Apply lean manufacturing principles

Pathways

- Quality and Advanced Manufacturing Technology Associate Degree (<https://catalog.morainepark.edu/programs/quality-advanced-manufacturing-technology/>)
 - Automated Manufacturing Technician Technical Diploma (p. 1)

- Computer Numerical Control Certificate (<https://catalog.morainepark.edu/programs/computer-numerical-control-certificate/>)
- Manufacturing Fundamentals Certificate (<https://catalog.morainepark.edu/programs/manufacturing-fundamentals-certificate/>)
- Quality/Supervision Certificate (<https://catalog.morainepark.edu/programs/quality-supervision-certificate/>)

Earn certificates, a technical diploma and an associate degree along this pathway. Start with some courses for entry-level employment, and continue with additional courses for higher wages and job advancement.

Career Opportunities

Automation technicians perform routine diagnostic checks on automated systems, monitor automated systems, isolate problems and perform repairs. They are prepared for a wide variety of entry-level positions in the manufacturing environment.