

# METAL FABRICATION

**Program Number:** 31-457-2

Technical Diploma (1 year)

**Campus:** Fond du Lac; most courses at Jackson Regional Center

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

Take your passion for developing a plan, solving problems and working with your hands into a career in metal fabrication with a technical diploma from Moraine Park Technical College.

## About the Program

Moraine Park's three-semester Metal Fabrication technical diploma gives students hands-on experience in fabricating metal products from start to finish. Students work on individual and team projects, as well as service-learning projects for the community.

## What You'll Learn

In Moraine Park's hands-on metal fabrication courses, students learn how to build metal products from start to finish, read prints and use lean practices in automated cutting, forming and welding. Students also learn gas metal arc welding (GMAW), gas tungsten arc welding (GTAW), flux core arc welding (FCAW), shielded metal arc welding (SMAW), and laser, plasma and oxy-fuel cutting.

Upon completion, students are prepared to take the FMA Fundamentals of Metal Fabrication Certificate exam.

## Earn Two Diplomas at Once

Upon successful completion of Semester 1 and Semester 2, students earn the Welding technical diploma. Successfully completing the additional 10 credits in Semester 3 (summer), earns students both the Welding technical diploma and the Metal Fabrication technical diploma.

## 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.

## Additional Information

Student projects may incur additional fees.

Students must purchase Personal Protective Equipment (PPE) and tools for this program. The supply list is available from the Academic Advisor.

## 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

- \$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.

## 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 2024-25 school year, your estimated cost of attendance for one full year includes tuition of \$4,462 (15 credits for fall and spring semester), fees of \$338, food and housing of \$3,008 (if living with parents, \$9,147 if living on your own), books and supplies of \$1,465, personal expenses of \$3,608, and transportation of \$4,017 for a total of \$17,002. 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

442-331	Welding Print Reading	2
442-338	Cutting Processes	1
442-356	Shielded Metal Arc Welding (SMAW)	2
442-357	Gas Metal Arc Welding 1 (GMAW)	2
442-358	Gas Metal Arc Welding 2 (GMAW)	2
457-347	Metallurgy for Welding	1
804-360	Occupational Mathematics 1	2
890-101	College 101	2
<b>Credits</b>		<b>15</b>
<b>Semester 2</b>		
442-359	Flux Core Arc Welding (FCAW)	2
442-370	Introduction to Robotic Welding	2
442-386	Gas Tungsten Arc Welding 1 (GTAW)	2
442-387	Gas Tungsten Arc Welding 2 (GTAW)	2
442-392	Advanced Welding and Metals	2
457-345	Metal Fabrication	4
<b>Credits</b>		<b>14</b>
<b>Summer</b>		
457-346	Advanced Fabrication Techniques	4
457-348	Metal Cutting and Forming Processes	3
623-162	Manufacturing Processes	3
<b>Credits</b>		<b>10</b>
<b>Total Credits</b>		<b>39</b>

## Statewide Median Salary for Recent Graduates

\$55,344

## Program Outcomes

- Demonstrate industry recognized safety practices
- Form materials to detailed drawings
- Cut materials to detailed drawings
- Join materials to detailed drawings
- Layout components/assemblies
- Inspect product

## Pathways

- Metal Fabrication Technical Diploma (p. 1)
  - Welding Technical Diploma (<https://catalog.morainepark.edu/programs/welding/>)
    - Gas Metal Arc Welding Certificate (<https://catalog.morainepark.edu/programs/gas-metal-arc-welding-certificate/>)
    - Gas Tungsten Arc Welding Certificate (<https://catalog.morainepark.edu/programs/gas-tungsten-arc-welding-certificate/>)
    - Shielded Metal Arc Welding Certificate (<https://catalog.morainepark.edu/programs/shielded-metal-arc-welding-certificate/>)

Earn certificates and two technical diplomas along this pathway. Start with some courses for entry-level employment, and continue with additional courses for higher wages and job advancement.

## Career Opportunities

- Fabricator
- Press Brake Operator
- Laser Operator
- Robotic Welding Operator