

INTEGRATED METALS: GAS METAL AND FLUX CORED ARC WELDER - CERTIFICATE

Career Pathway Certificate of Completion | mhcc.edu/IntegratedMetals

Faculty Adviser

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This certificate is specific for Gas Metal and Flux Cored Arc Welding. It is a semi-automatic or automatic arc welding process.

Note: This Career Pathway Certificate program is designed for winter term entry. Students are required to maintain a minimum grade of "C" in all IMTL courses.

Program Outcomes

At the completion of this program, students should be able to:

- Demonstrate safety procedures and safety inspections for welding processes and related equipment
- Identify welding equipment and accessories and explain power source principles of operation
- Read, interpret and apply blueprint specifications for the production and inspection of manufactured work pieces
- List and perform set-up, adjustments and operations of welding and oxy-fuel cutting equipment in the preparation and completion of welding practice plates
- Describe and perform welding processes
- Describe and apply the variables and techniques used to weld carbon steel and aluminum to blueprint specifications with regard to joint types, weld types and positions of welding
- Visually examine welds for discontinuities, defects, correct weld size and placement, providing solutions for welding procedure errors
- Produce acceptable test plate weldments according to American Welding Society (AWS) code specifications

What are the employment opportunities?

This program will assist the student preparing for welder qualification testing and provide testing opportunities for welder certification to American Welding Society code standards in one or more positions and processes, providing the skill credential for entry into a position in industry as a certified welder or a position upgrade with their present employer.

Course	Title	Credits
First Quarter		
Winter		
IMTL140	GMAW/FCAW (Gas Metal and Flux Cored Arc Welding/Wire Feed) Theory	2
IMTL141	GMAW/FCAW (Gas Metal and Flux Cored Arc Welding/Wire Feed) Lab	3
IMTL172	Welding Certificate Program Lab II	1
Credits		6

Second Quarter

Spring

IMTL152	Welding Processes and Procedures	2
IMTL163	Welding Certification Preparation Lab	3
IMTL173	Welding Certificate Program Lab III	1
Credits		6
Total Credits		12