INTEGRATED METALS: CERTIFIED WELDER - CERTIFICATE

Overview

See Department website and program contacts here (https://www.mhcc.edu/education-options/degrees-certificates/integrated-metals/certified-welder/index/)

This program is not eligible for financial aid.

The **Integrated Metals: Certified Welder certificate** is designed for students seeking foundational welding skills and entry-level employment opportunities in welding and fabrication industries. The curriculum provides hands-on technical training in welding processes and shop practices used in industrial settings.

Coursework includes topics such as **welding techniques, fabrication fundamentals, shop safety, and metalworking processes**. Students develop practical technical skills used in welding and manufacturing environments.

The Integrated Metals: Certified Welder certificate is workforce-focused and supports employment, job advancement, and wage growth opportunities in welding and related skilled trades. All coursework applies toward the Welding Technology certificate and the Integrated Metals (AAS) degree.

This evening program may be started during the fall or winter term.

Students are encouraged to work with an advisor (https://www.mhcc.edu/student-resources/academic-advising/) to ensure appropriate course selection and program planning based on their educational background and career goals.

Refer to the tabs above for additional information about:

- **Education Plan** – provides a sample term-by-term sequence of courses
- **Career Info** – includes information on potential occupations, employment trends, and earnings

Program Learning Objectives

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 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 as they relate to the welding of ferrous and non-ferrous metals
- Identify various electrodes, filler wires, shielding gasses and current types and their relationship to base-metal varieties
- 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

Education Plan

This sample Education Plan illustrates one possible course sequence. Students should consult an advisor (https://www.mhcc.edu/student-resources/academic-advising/) to create a personalized plan.

Note: Students are required to maintain a minimum grade of "C" in all IMTL courses. The Certified Welder program is not financial aid eligible. However, the related degree program, Integrated Metals AAS and the Welding Technology Certificate are aid eligible.

Code	Title	Credits
IMTL120	SMAW (Shielded Metal Arc Welding/Stick) Theory	2
IMTL121	SMAW (Shielded Metal Arc Welding/Stick) Lab	3
IMTL124	Blueprint Reading for Welding Applications	3
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
IMTL163	Welding Certification Preparation Lab	3-4
or IMTL143	CNC Cutting	
IMTL171	Welding Certificate Program Lab I	1
IMTL172	Welding Certificate Program Lab II	1
IMTL173	Welding Certificate Program Lab III	1
Total Credits		**19-20**

Awarding Requirements

The following requirement(s) must be fulfilled to be awarded the Integrated Metals: Certified Welder certificate:

- All core program courses (IMTL) must be completed with a grade of "C" or higher.
- All core program courses (IMTL) must be completed within five (5) years of starting the program.

Career Information

Explore potential careers related to this program, including typical job roles, employment trends, and projected growth. This information can help you better understand how your education may align with future career opportunities.