

WELDING, SHIELDED METAL ARC WELDING (SMAW) & GAS METAL ARC WELDING (GMAW), SC

Program Description

This Skills Certificate will prepare students to take the American Welding Society (AWS) certified welding (CW) exams. Students will learn fillet and groove welds using SMAW and GMAW processes, air carbon arc cutting, and develop manual skills using SMAW and GMAW that comply with AWS standards, including critical safety procedures. Students will learn to fabricate simple parts from basic drawings, sketches, and technical plans. Students must pass all coursework with a score of 75% or higher.

This program is not eligible for financial aid. However, it may be eligible for scholarship funding if the student is awarded scholarships.

Welding Technology Career Map (<https://sites.tmcc.edu/flipbook/career-maps/>)

Recommended Course Schedule

1st semester		Units
WELD 211	Welding I	3
WELD 212	Welding I Practice	2
WELD 221	Welding II	3
WELD 222	Welding II Practice	2
Semester Total		10
Total Units		10

Program Requirements

Skills Certificates can consist of a single course or a short set of courses that provide training for entry-level positions or career advancement. These short-term certificates may also prepare students to take state, national and/or industry-recognized certifications or licensing exams.

Skills certificates are awarded upon completion of coursework and marked on a student's transcripts at the end of the semester. Students cannot declare a skills certificate as one's major. Skills Certificates are not eligible for Financial Aid.

To earn a skills certificate, students must:

1. Maintain a minimum cumulative GPA of 2.0.
2. Have no financial or library obligation to the college.

Code	Title	Units
Certificate Requirements		
WELD 211	Welding I	3
WELD 212	Welding I Practice	2
WELD 221	Welding II	3
WELD 222	Welding II Practice	2
Total Units		10

Program Outcomes

Students completing the certificate will:

PLS01: Use the SMAW and GMAW processes to produce a variety of welds.

PLS02: Fabricate simple parts from basic drawings, sketches, and technical plans.

PSLO3: Demonstrate appropriate workplace skills and tools, including the application of personal and mechanical safety measures for using welding equipment and techniques.