

WELDING FUNDAMENTALS, SC

Program Description

The Welding Fundamentals Skills Certificate gives students with zero prior welding experience a stepping stone for developing the fundamental skills necessary to gain entry level employment in the industry and prepare them for more advanced Skills Certifications while progressing towards the Certificate of Achievement and AAS in welding.

This Skills Certificate also provides a direct pathway for High School students enrolled in Dual Credit welding courses to carry on with more advanced welding courses and Skills Certificates.

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.tmc.edu/flipbook/career-maps/>)

Recommended Course Schedule

| 1st semester | | Units |
|-----------------------|-------------------------|-----------|
| WELD 101 | Basic Metals | 3 |
| WELD 211 | Welding I | 3 |
| WELD 212 | Welding I Practice | 2 |
| MTT 120 | Technical Print Reading | 3 |
| Semester Total | | 11 |
| Total Units | | 11 |

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 101 | Basic Metals | 3 |
| WELD 211 | Welding I | 3 |
| WELD 212 | Welding I Practice | 2 |
| MTT 120 | Technical Print Reading | 3 |
| Total Units | | 11 |

Program Outcomes

Students completing the Certificate will:

PSLO1: Students will use basic machining skills to produce predetermined projects using a milling machine, lathe, and a drill press.

PSLO2: Students will interpret industry standard terminology and symbols found on technical drawings, including welding symbols.

PSLO3: Students will safely set-up and operate the required equipment and select the appropriate material and consumables to produce fillet and groove welds using the solid metal arc welding process in compliance with AWS standards.