# STRUCTURAL WELDING, SC

## Program Description

The Structural Welding Skills Certificate provides students the necessary skills to gain employment in the structural steel and ironworking industries. These skills include solid metal arc welding and flux-cored arc welding in the horizontal, vertical and overhead positions. Students will achieve Welder Performance Qualification Certification for SMAW 3G and/or FCAW-G 3G in accordance with American Welding Society D1.1 Structural Welding Code. These industry standard qualifications confirm that students can immediately contribute upon employment.

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 221 | Welding II | 3 |
| WELD 222 | Welding II Practice | 2 |
| WELD 231 | Welding III | 3 |
| WELD 232 | Welding III Practice | 2 |
| WELD 250 | Welding Certification Preparation | 3 |
| | **Semester Total** | **13** |
| | **Total Units** | **13** |

## 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 221 | Welding II | 3 |
| WELD 222 | Welding II Practice | 2 |
| WELD 231 | Welding III | 3 |
| WELD 232 | Welding III Practice | 2 |
| WELD 250 | Welding Certification Preparation | 3 |
| **Total Units** | | **13** |

## Program Outcomes

Students completing the will:

PSLO1: Students will be certified in SMAW 3G or FCAW 3G in accordance with the American Welding Society D1.1. Structural Welding Code.

PSLO2: Students will be able to safely set up and use SMAW equipment and accessories to produce high quality welds on low carbon steel in the vertical and overhead positions in compliance with AWS standards.

PSLO3: Students will be able to safely set up and use FCAW equipment and accessories to produce high quality welds on low carbon steel in the vertical and overhead positions in compliance with AWS standards.