

# WELDING TECHNICIAN, CAREER PATHWAY CERTIFICATE OF COMPLETION

The Career Pathway Certificate of Completion: Welding Technician prepares students for entry-level jobs in welding fields employing shielded metal, fluxed core, and gas metal arc welding techniques. Required courses are applicable toward the Associate of Applied Science (AAS) Welding degree.

Click here (<https://www.socc.edu/pathways/roadmapsaz/148-welding-and-fabrication-roadmap>) to learn how this Career Pathway Certificate of Completion can lead to an AAS Welding and Fabrication.

## Entry Requirements

Students are required to complete the College's placement process to determine skill level and readiness in math, reading and writing. As part of their training program, students must begin with the courses within their skill level as determined by the placement process.

Because a variety of working conditions exist in the welding field, a person generally should be in good physical condition and able to stand, stoop, kneel and bend without difficulty and be able to lift and carry at least 50 pounds. Good eyesight, especially depth perception, is necessary for a welder.

By the second week of the term, students will need to purchase the proper PPE (personal protective equipment) required for the term. Required PPE includes: Welding hood, leathers or welding jacket, gauntlet gloves, safety glasses (clear and shade 5), and leather boots (steel toe is preferred).

## Graduation Requirements

Students must complete a minimum of 24 credit hours with a minimum Grade Point Average (GPA) of 2.0 or better. All courses in this program must be completed with a 'C' or better. One course must be completed at Southwestern before the Career Pathway Certificate of Completion: Welding Technician is awarded.

Complete the graduation application process one term prior to the term of completion (e.g., spring term graduates must apply during winter term).

## Pre-Program Courses

Students are required to take the following courses *prior* to the program courses, depending on students' college placement information. See advisor for details:

Code	Title	Credits
WR90	Paragraph Fundamentals (or placement in a higher 3-4 writing course)	
or WR90R	Academic Literacy	

## Program Guide

Course	Title	Credits
<b>First Year</b>		
<b>Fall</b>		
DRFT105	Blueprint Reading	3
WLD100	Welding Process I	3
WLD101	Shielded Metal Arc Welding	6
Credits		12
<b>Winter</b>		
WLD102	Welding Lab A	3
WLD103	Gas Metal Arc Welding	3
WLD104	Flux Forded Arc Welding	3
WLD110	Welding Cert for 1st Year	3
Credits		12
Total Credits		24

## Program Student Learning Outcomes

Upon successful completion of this program the student will be able to:

- Set-up and operate of manual and semi-automatic welding and cutting equipment used in the welding industry.
- Perform rudimentary layout and fabrication skills to help produce welded metal parts.
- Read and interpret simple blueprints and some American Welding Society standard welding symbols.
- Perform as a team member and practice skills that reflect professional and ethical behavior in the workplace.