

WELDING, CERTIFICATE OF COMPLETION

The Certificate of Completion Welding prepares students for entry-level jobs in metal working fields. Required courses are applicable toward the 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.

The Certificate of Completion Welding is an American Welding Society (<https://www.aws.org>) (AWS) entry-level welding certified program. Successfully completing the AWS portion of each welding course also qualifies the student for a Certificate of Completion from the AWS as an entry-level welder – a nationally recognized certificate.

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).

Gainful Employment Disclosure

Southwestern is required by federal regulations to disclose information related to the College's educational programs that lead to gainful employment in a recognized occupation. This information is intended to provide students the opportunity to measure employment outcomes associated with certificate programs.

Gainful employment information for the Certificate of Completion Welding (<https://www.socc.edu/images/ge/welding.html>) can be found online.

Graduation Requirements

Students must complete a minimum of 47 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 Certificate of Completion Welding 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
CIS90	Computer Basics (or demonstrate proficiency)	2
WR90 or WR90R	Paragraph Fundamentals (or placement in higher level writing course) Academic Literacy	3-4

Program Guide

Course	Title	Credits
First Year		
Fall		
DRFT105	Blueprint Reading	3
WLD100	Welding Process I	3
WLD101	Shielded Metal Arc Welding	6
WR115	Introduction to Expository Writing ¹	3
Credits		15
Winter		
MTH20	Basic Mathematics ((or higher))	4
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		16
Spring		
BA110	Group Dynamics for Teams ²	3
WLD105	Pipe Fitting and Welding I	3
WLD106	Welding Lab B	3
WLD107	Gas Tungsten Arc Welding	3
WLD202	Forklift Operator Training and Cert	1
WLD4050	Welding and Joining Processes	3
Credits		16
Total Credits		47

¹ WR121 English Composition or WR121H English Composition w/ Honors may be substituted for WR115 Introduction to Expository Writing.

² BA120 Leadership Development, BA285 Human Relations in Organizations; PSY100 Introduction to Psychology, PSY201 General Psychology, PSY201H General Psychology w/Honors, PSY203 General Psychology, or PSY203H General Psychology w/ Honors course may be substituted for BA110 Group Dynamics for Teams.

Program Student Learning Outcomes

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

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