

# 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.

## 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 (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).

## GRADUATION REQUIREMENTS

Students must complete a minimum of 48 credit hours with a cumulative Grade Point Average (GPA) of 2.0 or better. All courses must be completed with a grade of 'C' or better. Twelve (12) credits must be completed at Southwestern before the Certificate of Completion 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).

## 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.

Math and writing placement are unique to each student and are determined during the admissions and intake advising process.

Additional math or writing courses may be required prior to taking the math or writing program requirements in this degree.

## 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
WR115	Fundamentals of Report Writing <sup>1</sup>	4
<b>Credits</b>		<b>16</b>
<b>Winter</b>		
WLD102	Welding Lab A	3
WLD103	Gas Metal Arc Welding	3
WLD104	Flux Cored Arc Welding	3
WLD110	Welding Cert for 1st Year	3
MTH80	Technical Mathematics I <sup>3</sup>	4
<b>Credits</b>		<b>16</b>
<b>Spring</b>		
BA285	Human Relations in Organizations <sup>2</sup>	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
WLD150	Welding & Joining Processes	3
<b>Credits</b>		<b>16</b>
<b>Total Credits</b>		<b>48</b>

<sup>1</sup> A higher writing may be substituted, excluding WR241, WR242, WR243, and WR250.

<sup>2</sup> BA120, BA285, PSY100, PSY201Z, PSY202Z, PSY203 will satisfy this requirement.

<sup>3</sup> MTH65, 95, or higher, excluding MTH211, may be substituted.