

# WELDING TECHNOLOGY (AAS)

(96 credits)

## Program Description

Start a career in a growing industry that employs nearly 10,000 people in Washington State alone. Our Welding Technology program pairs you with some of the best training equipment on the market used by the best fabrication shops in the industry. You'll earn real, hands-on experience when it comes to using high-tech equipment to solve problems in a dynamic industrial environment.

The Welding Technology Program is designed to prepare students for entry-level employment in welding and related occupations. The competency-based curriculum combines classroom instruction with extensive hands-on training and practical exercises to develop knowledge and skill in the most common welding and metal cutting processes used in industry.

## Career Opportunities

Graduates may work in manufacturing, the construction trades, or in maintenance and repair positions. Some welders may work as "fitters" or "fabricators" who interpret drawings, plan projects, and use a variety of tools and machines to complete work. With experience and a strong technical background, welders may advance into leadership positions or within quality control.

- Welding, Soldering, and Brazing Machine Setter, Operator, and Tender
- Plumber, Pipefitter, and Steamfitter
- Sheet Metal Worker

## Program Information

### Length of Program

Full-time students can complete the degree program in seven quarters, if basic skills are complete. The Basic Welding Skills Certificate can be completed in one quarter. The Shielded Metal Arc Welding Certificate can be completed in two quarters. The Gas Metal Arc Welding, Flux Cored Arc Welding, and Gas Tungsten Arc Welding Certificates can be completed in three quarters, provided that all program prerequisites are met.

### Additional Costs

Include textbooks plus approximately \$900.00 upon entry into the program for personal protective equipment, tools, and supplies.

## Outcomes

South Puget Sound Community College believes that all students need to develop a broad range of abilities that will not only make them more effective in their professional pursuits but will enhance their capacity to relate well to others in their daily lives.

At the completion for the Welding Technology Program, the successful student will be able to:

- Demonstrate the ability to identify, analyze, and synthesize relevant data to problem solve in a welding environment
- Demonstrate effective oral, written, and graphical communication skills appropriate to the welding industry
- Demonstrate measuring methods and apply mathematical concepts to solve problems related to welding
- Apply the appropriate ethical standards and practices of the welding industry
- Demonstrate the ability to identify the values, beliefs, and practices of a multicultural workforce and collaborate with diverse groups across a variety of knowledge and skill levels and perspectives

The SPSCC college-wide abilities are embedded into each program:

- Effective Communication
- Information Literacy
- Analytical Reasoning
- Multicultural Awareness
- Social Responsibility

## Courses by Quarter

Code	Title	Credits
<b>Quarter 1</b>		
Transition Studies		
<b>Quarter 2</b>		
MATH 101	Technical Mathematics I	5
ENGL 090	Integrated Reading and Writing I	5
or ENGL 095	Integrated Reading and Writing II	
CCS 101	Pathways to Success	3
<b>Quarter 3</b>		
ENGL 098	Transitional English Composition	5
or ENGL& 101	English Composition I	
Select one of the following:		5
PSYC 116	Psychology of Human Relations: Diversity	5
CMST& 210	Interpersonal Communication: Diversity	5
CMST& 240	Intercultural Communication: Diversity	5
<b>Quarter 4</b>		
WELD 102	Welding Theory I	5
WELD 103	Thermal Cutting and Gouging	1
WELD 104	Oxyacetylene Welding	3
WELD 106	Shielded Metal Arc Welding I	5
<b>Quarter 5</b>		
WELD 125	Welding Theory II	5
or WELD 134	Print Reading for Welders	
WELD 127	Shielded Metal Arc Welding II	9
<b>Quarter 6</b>		
WELD 125	Welding Theory II	5
or WELD 134	Print Reading for Welders	
WELD 135	Gas Metal Arc Welding	9
<b>Quarter 7</b>		
WELD 210	Flux Cored Arc Welding	12
<b>Quarter 8</b>		
WELD 220	Gas Tungsten Arc Welding	12

**Quarter 9**

WELD 230 Welding Fabrication and Certification 12

<sup>1</sup> Concurrent enrollment required for WELD 102 Welding Theory I, WELD 103 Thermal Cutting and Gouging, WELD 104 Oxyacetylene Welding, and WELD 106 Shielded Metal Arc Welding I. Prerequisite required: Eligible for MATH 101 Technical Mathematics I and ENGL 090 Integrated Reading and Writing I.

## Pathway Maps

South Puget Sound Community College has provided pathways and associated recommended courses for ease of student selection based upon a student's career interest. Please review the pathway maps for required and recommended courses.

**Welding Technology Pathway Map**  
Associate in Applied Science  
96 Credits

Qtr. 1	Qtr. 2	Qtr. 3	Qtr. 4	Qtr. 5	Qtr. 6	Qtr. 7	Qtr. 8	Qtr. 9
Transition Studies	MATH 101 (3cr) Technical Mathematics I	ENGL 096 (3cr) Technical English Composition ENGLA 101 (3cr) English Composition I	WELD 102* (3cr) Welding Theory I	Choose One (3cr): WELD 125 Welding Theory II WELD 134 Print Reading for Welders	Choose One (3cr): WELD 125 Welding Theory II WELD 134 Print Reading for Welders	WELD 210 (12cr) Pulsed Cored Arc Welding	WELD 220 (12cr) Gas Tungsten Arc Welding	WELD 230 (12cr) Welding Fabrication and Certification
	ENGL 090 (3cr) Integrated Reading and Writing I ENGL 095 (3cr) Integrated Reading and Writing II	Choose One (3cr): (recommended) PSYC 118 (3cr) Psychology of Human Relations: Diversity CMSTB 210 (3cr) Interpersonal Communication: Diversity	WELD 103* (3cr) Thermal Cutting and Gouging	WELD 127 (3cr) Shielded Metal Arc Welding II	WELD 135 (3cr) Gas Metal Arc Welding			
	CCS 101 (3cr) Pathways to Success	Diversity CMST 240 (3cr) Intercultural Communication: Diversity	WELD 104* (3cr) Oxyacetylene Welding					
			WELD 106* (3cr) Shielded Metal Arc Welding I					

\*Concurrent enrollment required for WELD 102, 103, 104, & 106. Pre-requisites required: Eligible for MATH 101 and ENGL 090.