BASIC WELDING SKILLS (CERTIFICATE OF ACHIEVEMENT)

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.

This certificate prepares students for entry-level positions in welding as an apprentice or shop helper. The competency-based curriculum combines classroom instruction with hands-on training to develop foundational knowledge and skill in select welding and cutting processes.

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 end of this program students will:

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

- Demonstrate measuring methods and apply mathematical concepts to solve problems related to welding
- 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
- Gather and evaluate information to develop Welding Procedure Specifications
- 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
- Apply the appropriate ethical standards and practices of the welding industry

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

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

Courses by Quarter
Courses by Quarter (Pathway Map)

Check with your advisor to determine where you will start. Advisors must approve changes to academic plan.

Pre-College Level

Code	Title	Credits
Trasition Studies Courses		
Select one of the following courses:		1 - 7.5
ABE 062	Applied Math I	
ABE 063	Applied Math II	
ABE 064	Contextualized Math I	
Select one of the following courses:		1 -10
ESOL 061	ESOL Level I (Beginning Literacy)	
ESOL 062	ESOL Level II (Low Beginning)	
ESOL 063	ESOL Level III (High Beginning)	
ESOL 064	ESOL Level IV (Low Intermediate)	
ESOL 065	ESOL Level V (High Intermediate)	
ESOL 066	ESOL Level VI (Advanced)	
ABE 053	ABE Language Arts III (Low Intermediate Language Arts)	
ABE 054	ABE Language Arts IV (High Intermediate Language Arts)	

ABE 055	ABE Language Arts V (Adult Secondary Level Language Arts)

College Level

This certificate is a total of 17 credits.

CCS 101 Pathways to Success is a required course for all students. Skip if already taken in Pre-College.

Code	Title	Credits
Required Courses		
CCS 101	Pathways to Success	3
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