

# WELDING TECHNOLOGY C.A.S.

## Zach Reddig, Director

The mission of the Welding Technology Program is to provide the regional workforce with credentialed, skilled, and competent welders and to be responsive to emerging workforce needs. The Welding Technology Program prepares students to operate and troubleshoot a variety of welding power sources and related equipment. The program prepares students to solve problems found within the welding industry using computational skills and other problem-solving techniques essential to welding and steel fabrication. It also encourages the development of teamwork and interpersonal skills required on the job.

Welding students develop skills in six different welding processes—oxyacetylene (OAW), shielded metal arc (SMAW), gas metal arc (GMAW), flux core arc, (FCAW), submerged arc (SAW), and gas tungsten arc welding (GTAW). Beyond the development of welding skills and understanding of the process, they also study other skills, such as blueprint reading and layout, metallurgy, and gain an understanding of how heating and cooling cycles affect the properties of metals. Students also study the design of jigs and fixtures and how to incorporate these into an automated welding system.

The Welding Technology Program also has courses that provide for a solid background in the metals industry. Such courses are Computer Aided Design and Drafting (CADD), OSHA Rules and Compliance, and Related Metals Processes. Fabrication basics and Metal Design and Construction utilize all of the gained knowledge with an instructor approved/student designed project.

Welding technology students have the opportunity to become certified to American Welding Society Standards and receive documentation stating qualifications.

Students are awarded the Certificate of Applied Science upon successful completion of the first year of the Welding Technology program. Students are awarded the Associate of Applied Science degree upon successfully completing the two-year program.

The program often has a waiting list. For more detailed information, visit our web site, or contact Zach Reddig, Program Director, at 406-243-7644 or by email.

## Certificate of Applied Science - Welding Technology

### Missoula College

Degree Specific Credits: 37

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

### Summary

Required Courses	37
Total Hours	37

## Required Courses

Rule: All courses required.

CAPP 120	Introduction to Computers	3
COMX 115S	Introduction to Interpersonal Communications	3
M 111	Technical Mathematics	3
MCH 114	Related Metals Processes II	3
WLDG 117	Blueprint Rdnng & Weldng Symbls	3
WLDG 145	Fabrication Basics	4
WLDG 150	Welding Layout Techniques	2
WLDG 180	Shielded Metal Arc Welding	4
WLDG 184	OSHA Rules & Regulations Wldng	1
WLDG 187	Flux Core Arc Welding	4
WLDG 205	Applied Metallurgy	4
WRIT 121	Intro to Technical Writing	3
Total Hours		37

Minimum Required Grade: C-