

# WELDING TECHNOLOGY C.A.S.

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.

## Certificate of Applied Science - Welding Technology

### Summary

Code	Title	Hours
Required Courses		33
<b>Total Hours</b>		<b>33</b>

**Degree Specific Credits:** 32-33

**Required Cumulative GPA:** 2.0

### Required Courses

Code	Title	Hours
<b>Complete all of the following courses:</b>		
BGEN 215	Career Readiness	3
COMX 102	Interpersonal Skills in the Workplace	1

M 105	Contemporary Mathematics	3-4
DDSN 113A	Technical Drafting	3
MCH 114	Related Metals Processes II	3
OSH 110	OSHA 10 Hour Safety Training	1
WLDG 117	Blueprint Reading & Welding Symbols	3
WLDG 145	Fabrication Basics	4
WLDG 180	Shielded Metal Arc Welding	4
WLDG 187	Flux Core Arc Welding	4
WRIT 101	College Writing I	3
<b>Total Hours</b>		<b>32-33</b>

Minimum Required Grade: C-