



## WELDING TECHNOLOGY

**Technical Certificate: 26 Credits**

**Certificates of Proficiency: 11-12 Credits Each**

GRADE	DEVELOPMENTAL COURSES (if needed)	HOURS
	GSTD0103 College Reading	3

GRADE	TECHNICAL CERTIFICATE	HOURS
	WELD1344 Intro to Layout & Fabrication	4
	WELD2344 Welding I – SMAW	4
	WELD2354 Welding II – SMAW	4
	WELD2367 Welding III – MIG (GMAW)	7
	WELD2377 Welding IV – TIG (GTAW)	7

GRADE	CERTIFICATES OF PROFICIENCY	HOURS
<b>SMAW Welding – 12 Credits</b>		
	WELD1344 Intro to Layout & Fabrication	4
	WELD2344 Welding I – SMAW	4
	WELD2354 Welding II – SMAW	4
<b>MIG (GMAW) Welding – 11 Credits</b>		
	WELD1344 Intro to Layout & Fabrication	4
	WELD2367 Welding III – MIG (GMAW)	7
<b>TIG (GTAW) Welding – 11 Credits</b>		
	WELD1344 Intro to Layout & Fabrication	4
	WELD2377 Welding IV – TIG (GTAW)	7

**PROGRAM INFORMATION:** National Center for Construction Education and Research (NCCER) curriculum will be used for instruction toward both NCCER accreditation and American Welding certification; additional work experience may be necessary depending on the level of proficiency in various forms of welding developed during the course of instruction.

SMAW courses will teach students basic welding techniques in shielded metal arc welding, including cutting with oxyfuel equipment, electrode classification, and testing welds using destructive and non-destructive methods. Lab class provides opportunities for students to apply knowledge from theory-based classes to practical exercises. These courses cover the NCCER curriculum for Welding Level One.

The MIG (GMAW) course includes an in-depth study of the gas metal arc welding process. Students will learn the principles of a constant voltage power source and the mechanics and maintenance of the wire feeding system. Lab classes provide opportunities for students to practice short circuiting transfer on stainless and mild steel and globular transfer with flux cored wire feeding systems. The curriculum for this course is based on the NCCER guidelines

In the TIG (GTAW) course, students will use gas tungsten arc welding equipment to perform various welds in all positions. Lab class provides opportunities for students to practice GTAW. Upon completion of this course students will be eligible to test the NCCER Welding Level Two certification.

**CAREER OPTIONS:** The Technical Certificate and Certificates of Proficiency focus on welding processes designed to develop the skills necessary for entry into industrial and commercial welding employment.

**TRANSFER OPTIONS:**

- Arkansas Tech University (ATU) to complete a Bachelor of Professional Studies.
- If planning to transfer to an institution other than the ones listed above, students may visit <https://acts.adhe.edu/studenttransfer.aspx> to inquire about transferability of courses to any Arkansas college or university.