



# UA Cossatot

## PIPE WELDING TECHNOLOGY

**Technical Certificate: 32 Credits**

**Certificates of Proficiency: 8 Credits Each**

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

GRADE	TECHNICAL CERTIFICATE	HOURS
	PIPE2108 SMAW	8
	PIPE2104 GMAW	4
	PIPE2304 GTAW-Carbon Steel	4
	PIPE2404 GTAW-Low Alloy and Stainless Steel	4
	PIPE2204 FCAW	4
	PIPE2208 SMAW-Stainless Steel	8

GRADE	CERTIFICATES OF PROFICIENCY	HOURS
<b>GTAW – 8 Credits</b>		
	PIPE2304 GTAW-Carbon Steel	4
	PIPE2404 GTAW-Low Alloy and Stainless Steel	4
<b>SMAW – 8 Credits</b>		
	PIPE2108 SMAW	8
<b>SMAW-Stainless Steel – 8 Credits</b>		
	PIPE2208 SMAW-Stainless Steel	8
<b>GMAW/FCAW – 8 Credits</b>		
	PIPE2104 GMAW	4
	PIPE2204 FCAW	4

Score Requirements for Welding Programs			
Subject	ACT	Next Gen	Accuplacer
Reading	19	263	88

**INFORMATION:** National Center for Construction Education and Research (NCCER) curriculum, adopted curriculum for all Arkansas state supported programs, has been prepared in cooperation with American Welding Society (AWS) standards and supports learning objectives from the AWS Advanced and Expert Welder Programs.

GTAW pipe welding is by far the most complicated and time consuming of all welding techniques. One of the lesser-known techniques of the GTAW method, called cup walking, offers consistent quality welds while creating minimum operator fatigue. Considerations and techniques necessary to develop the skill of cup walking, including details regarding filler metals, cup changing, and power sources, will be taught in this program.

SMAW pipe welding is the most common method used in pipeline welding and is the basis used for developing the skills required in the other pipe welding processes. Certification in this technique will qualify welders for high placement and high levels of pay.

SMAW-stainless steel pipe welding is a more advanced method of welding than SMAW-carbon steel and requires special training specific to stainless steel metals which can lead to even higher pay. Not as many jobs are available for this special needs technique but working conditions are often in a controlled environment.

GMAW and FCAW pipe welding technicians are becoming more sought after by business and industry in manufacturing processes. These methods lend themselves to faster production for assembly type production. Demand is high for this process of welding.

**CAREER OPTIONS:** This is an advanced welding program designed to prepare graduates for employment in pipe welding related jobs and/or higher paying jobs in general welding positions. Students are strongly encouraged to complete the Associate of Applied Science in Skilled and Technical Sciences.