

Area of Interest: Industrial Technology & Skilled Trades
Certificate: Advanced Structural Welding and Fabrication
College Catalog: [2024-2025](#)



Program Location: Signal Peak Campus

Program Description: The Advanced Structural Welding and Fabrication Certificate prepares students for employment as an entry level welder/fabricator with an array of career opportunities within the industry. Topics include: quality control; reading detail drawings and CAD; thermal cutting processes; Flux Cored Arc Welding with gas (FCAW-G); Flux Cored Arc Welding without gas (FCAW-S); using engine driven welding machines with portable semiautomatic wire feeders. Students will learn structural fabrication, thermal cutting processes, and Shielded Metal Arc Welding. A typical graduate seeks employment in mining, steel fabrication, and steel erection industries. After completion of this certificate, students may continue to the Structural Welding Technology AAS.

Advising: itst.advisor@centralaz.edu

Area of Interest Website: [Industrial Technology and Skilled Trades - Central Arizona College \(centralaz.edu\)](#)

Legend

Bold Course=Required Course Recommended Course (R) Stackable Certificate (SC)

AGEC Course list (Arizona General Education Curriculum) and other degree requirements.

Written Communication (WC)	Oral Communication (OC)	Arts/Humanities (AH)	Social/Behavioral Science (SB)
Lab Science (LS)	Mathematics (M)	Core Course (CC)	Elective (E)

Special Awareness Requirements for transfer degrees met through courses on the [AGEC Course list](#).

- Cultural Awareness (**CU**) Global/Historical Awareness (**GI/HI**) Intensive Writing (**IW**)

Semester 1 New Students-Find your suggested starting point for [English/Reading & Math courses](#).

		COURSE	CREDITS	SEMESTER/GRADE	NOTES
SC	CC	WLD128 Intro to Structural Drawings & CAD	4		
SC	CC	WLD129 Intro to Shielded Metal Arc Welding & Thermal Cutting Processes	6		
SC	CC	WLD229 Advanced Shielded Metal Arc Welding	6		
Total Certificate Credits:			16	Apply for graduation and attend career events!	

Arizona Resident Tuition for 2024-2025 is \$75 per credit hour; see [Paying for College](#). Financial aid may be available.

Career Information

CAC Career Center: centralaz.edu/career FREE CAC career resources and assistance.

O*NET OnLine: Visit onetonline.org and search for:

Occupations in Advanced Structural Welding and Fabrication including:

- Education needed for specific occupations
- Occupation tasks, knowledge, skills and abilities
- Salary/wages for specific occupations (\$)

Transfer Information

CAC University Transfer Center: centralaz.edu/transfer FREE CAC transfer resources and assistance.

Note: Use this Program MAP as a guide to choose courses with your advisor and track progress towards milestones and completion of program. Work with an advisor to customize your plan to align with your specific career and/or transfer goals.

Part-Time Students: Plans can be modified to fit the need of part-time students by adding more semesters.

Student Name:	Advisor Name:
Student ID Number: 880	Date: