

**Area of Interest:** Industrial Technology & Skilled Trades

**Certificate:** Fundamentals of Structural Welding

**College Catalog:** [2024-2025](#)



**Program Location:** Signal Peak Campus

**Program Description:** The Fundamentals of Structural Welding Certificate prepares students for employment as an entry level welder and welder helper. Topics include such welding skills as Flux Cored Arc Welding, Shielded Metal Arc Welding, Gas Metal Arc Welding, industrial safety, thermal cutting processes, interpretation of structural drawings, and introduction to fabrication. A typical graduate seeks employment in mining, steel fabrication, steel erection, and manufacturing industries. After completion of this certificate, students may continue to an Advanced Structural Welding and Fabrication Certificate, or an AAS in Structural Welding Technology.

**Advising:** [itst.advisor@centralaz.edu](mailto: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	M	<b>MAT106 Technical Math I or higher</b>	3		
SC	CC	<b>WLD118 Physical Characteristics &amp; Mechanical Properties of Metals</b>	1		
SC	CC	<b>WLD130 Intro to Flux Cored Arc Welding &amp; Fabrication</b>	6		
SC	CC	<b>WLD230 Advanced Flux Cored Arc Welding</b>	6		
<b>Certificate:</b>			<b>16</b>	<b>Apply for graduation and attend career events!</b>	

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](http://centralaz.edu/career) FREE CAC career resources and assistance.

**O\*NET OnLine:** Visit [onetonline.org](http://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](http://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:**