

Area of Interest: Industrial Technology & Skilled Trades
Degree: Structural Welding Technology, Associate of Applied Science (AAS)



Stackable Certificate 1: Fundamentals of Structural Welding
Stackable Certificate 2: Advanced Structural Welding and Fabrication
College Catalog: [2024-2025](#)

Program Location: Signal Peak Campus

Program Description: The Structural Welding Degree prepares students for employment as a welder/fabricator with an array of career opportunities within the industry. Topics include Shielded Metal Arc Welding, Flux Cored Arc Welding, Gas Tungsten Arc Welding, Gas Metal Arc Welding, welding design and fabrication, detail drawing and CAD skills. A typical graduate finds employment in mining, steel fabrication, steel erection, aerospace, manufacturing and other industries.

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.			
<input type="checkbox"/> Cultural Awareness (CU)	<input type="checkbox"/> Global/Historical Awareness (GI/HI)	<input type="checkbox"/> Intensive Writing (IW)	

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

		COURSE	CREDITS	SEMESTER/GRADE	NOTES
SC1	M	MAT106 Technical Math I or higher	3		
SC1	CC	WLD118 Physical Characteristics & Mechanical Properties of Metals	1		
SC1	CC	WLD130 Intro to Flux Cored Arc Welding & Fabrication	6		
SC1	CC	WLD230 Advanced Flux Cored Arc Welding	6		
Semester Credits:			16	Meet with your CAC advisor each semester!	

Semester 2

		COURSE	CREDITS	SEMESTER/GRADE	NOTES
SC2	CC	WLD128 Intro to Structural Drawings & CAD	4		Students must complete Stackable Certificate 1 (SC1) courses before Stackable Certificate 2 (SC2) courses.
SC2	CC	WLD129 Intro to Shielded Metal Arc Welding & Thermal Cutting Processes	6		
SC2	CC	WLD229 Advanced Shielded Metal Arc Welding	6		
Semester Credits			16	Research career resources and opportunities!	

Semester 3

		COURSE	CREDITS	SEMESTER/GRADE	NOTES
R	WC	ENG101 College Composition I	3		
R	SB	PEH101 Personal Health	3		
	CC	WLD110 Survey of Welding Processes	3		
	CC	WLD222 Gas Metal Arc Welding	3		

	CC	WLD228 Welding Inspection Technology	3		
		Semester Credits:	15	Apply for graduation and attend career events!	

Semester 4

		COURSE	CREDITS	SEMESTER/GRADE	NOTES
R	OC	COM259 Professional Communication	3		
R	AH	ART103 Beginning Jewelry & Metalwork	3		
R	LS	AGS221 Soil Science	4		Fall Only
	CC	WLD221 Gas Tungsten Arc Welding	3		
	CC	IRW130 Structural Steel Erection I	3		
		Semester Credits:	16	Finish strong-don't get distracted before finals!	
		Total Degree Credits:	63		
		Fundamentals of Structural Welding Certificate:	16		
		Advanced Structural Welding & Fabrication Certificate:	16		

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: