



Welding Technology A.S. Degree

FULL TIME

This program roadmap represents one possible pathway to complete the program. **Please see a counselor** to create an education plan that is customized to meet your needs. This roadmap is not a guarantee of course availability or financial aid applicability.

Catalog: 2025-26

GE Pattern: local AA/AS

Total Units: 60

Start Term: Fall

First Year

Semester 1 (Fall)

15 Units

CAT.	COURSE	UNIT	PREREQUISITES	GE AREA
Req	WELD 140 Mathematics for Welding Technicians	3		L2
RE	WELD 300 Introduction to Welding	3		
Req	WELD 302 Introduction to Welding Metallurgy	3		
GE	ENGL C1000 Academic Reading and Writing or ENGL C1000H ^H Academic Reading and Writing - Honors	3 3		L1A
GE	any Area L7A (Physical Education) course	1		L7A
GE	any Area L7B (Life Development Skills) course	2		L7B

Semester 2 (Spring)

14 Units

CAT.	COURSE	UNIT	PREREQUISITES	GE AREA
Req	WELD 316 Welding Inspection	2	(see below)	
Req	WELD 330 Gas Tungsten Arc Welding (Plate)	3	(see below)	
Req	WELD 332 Gas Tungsten Arc Welding (Pipe)	3	(see below)	
GE	any Area L1B (Oral Communication & Critical Thinking) course	3		L1B
GE	any Area L3 (Arts & Humanities) course	3		L3

WELD 316/330 prerequisite: WELD 300, or at least one year of welding experience.

WELD 332 prerequisite: WELD 330, or at least two years of welding experience.

CAREER PATH

Career Options:

This degree prepares students to work as a welder in:

- oil refineries
- nuclear power plants
- aerospace industry
- structural buildings
- bridge construction
- auto industry
- small commercial fabrication shops

It also prepares students to work as welding shop supervisors and welding sales persons.

Advising Notes:

- This degree can be completed using either the local AA/AS general education (GE) pattern or the Cal-G ETC transfer GE pattern. See a counselor to determine which pattern is best for you based on your academic goals.
- Students can substitute ESLW 340 for ENGL C1000/C1000H (formerly known as ENGWR 300/480).
- **Elective Courses:** any elective courses numbered 100-499, or having a 4-digit number starting with C.

Scheduling Notes:

- WELD 302, 333, and 334 are offered in the fall.

Second Year

Semester 3 (Fall)

16 Units

CAT.	COURSE	UNIT	PREREQUISITES	GE AREA
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CAT.	COURSE	UNIT	PREREQUISITES	GE AREA
Req	WELD 333 Gas Metal Arc Welding, Steel	3	(see below)	
Req	WELD 334 Gas Metal Arc Welding: Ferrous and Non-Ferrous Metals	2	WELD 333	
Req	WELD 342 Symbol Reading, Layout and Fabrication	3		
RE	WELD 115 Code Welding	2		
GE	any Area L4 (Social & Behavioral Sciences) course	3		L4
GE	any Area L5 (Natural Sciences) course	3		L5

WELD 333 prerequisite: WELD 300, or at least one year of welding experience.

Semester 4 (Spring)

15 Units

CAT.	COURSE	UNIT	PREREQUISITES	GE AREA
Req	WELD 320 Shielded Metal Arc Welding Structural	3	(see below)	
Req	WELD 322 Shielded Metal Arc Welding (Pipe)	3	(see below)	
Req	WELD 335 Flux Core Arc Welding	3	(see below)	
GE	any Area L6 (Ethnic Studies) course	3		L6
Elec	any elective course	3		

WELD 320/335 prerequisite: WELD 300, or at least one year of welding experience.

WELD 322 prerequisite: WELD 320, or at least two years of welding experience.

^H honors courses

- WELD 316 and 332 are offered in the spring.
- WELD 333 and 334 are offered as 5-week courses that can be taken in the same semester.
- WELD 320 and 322 are offered as 5-week courses that can be taken in the same semester.
- WELD 330 and 332 are offered as 5-week courses that can be taken in the same semester.

Other Notes:

- At the end of the second semester, students qualify for the **Gas Tungsten Arc Plate and Pipe Welding certificate**.
- An internship (WELD 298) is highly recommended as it opens up potential employment opportunities. Students can earn between 0.5 – 4.0 units for related paid or unpaid work experience including volunteer and internship positions through WELD 298. This course also works toward satisfying GE Area L7B. See the [Work Experience website](#) for more information.

EXPLANATION OF CATEGORIES

Req	Required Core	A course that is required for this program
RE	Restricted Elective	A course selected from a list of elective courses specified for this program in the course list in the catalog, which can be replaced with another course from the same list
GE	General Education	A course that fulfills a specific general education requirement for a degree, which can be replaced with another course that meets the same requirement
Elec	Degree Elective	A degree-applicable course that is part of a degree roadmap to ensure that there is a total of at least 60 units, which is a requirement for an associate degree