



# Welding Technology Certificate

**PART 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: 2024-25

Total Units: 35

Start Term: Fall

## First Year

### Semester 1 (Fall) 9 Units

CAT.	COURSE	TITLE	UNIT
Req	WELD 140	Mathematics for Welding Technicians	3
Req	WELD 300	Introduction to Welding	3
Req	WELD 302	Introduction to Welding Metallurgy	3

### Semester 2 (Spring) 8 Units

CAT.	COURSE	TITLE	UNIT
Req	WELD 316	Welding Inspection	2
Req	WELD 330	Gas Tungsten Arc Welding (Plate)	3
Req	WELD 332	Gas Tungsten Arc Welding (Pipe)	3

## Second Year

### Semester 3 (Fall) 9 Units

CAT.	COURSE	TITLE	UNIT
Req	WELD 333	Gas Metal Arc Welding, Steel	3
Req	WELD 334	Gas Metal Arc Welding: Ferrous and Non-Ferrous Metals	2
Req	WELD 342	Symbol Reading, Layout and Fabrication	3
RE	WELD 298	Work Experience in Welding	1

### Semester 4 (Spring) 9 Units

CAT.	COURSE	TITLE	UNIT
Req	WELD 320	Shielded Metal Arc Welding Structural	3
Req	WELD 322	Shielded Metal Arc Welding (Pipe)	3
Req	WELD 335	Flux Core Arc Welding	3

### 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

## CAREER PATH

### Career Options:

This certificate 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.

### Scheduling Notes:

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

- An internship (WELD 298) is highly recommended as it opens up potential employment opportunities. Students can earn at least 1 unit for related paid or

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unpaid work experience including volunteer and internship positions through WELD 298. See the [Work Experience website](#) for more information.

- At the end of the second semester, students qualify for the **Gas Tungsten Arc Plate and Pipe Welding certificate**.