Welding Technology Certificate

The welding program is designed for students seeking or advancing employment in welding fabrication and industrial repairs. Welding encompasses study in electrical, metallurgy, chemistry, physics, design, and mechanical engineering.

Total Units: 14-16

First Year

Semester 1

8.5-9.5 Units

COURSE	UNITS	PRE-REQS^	SEMESTERS OFFERED*
WELD 100 Z Introduction to Welding & Safety	1.5		F(1st 8 wks), S(1st 8 wks), Su
WELD 151 Z Welding Industry Training	4		Check Class Schedule
Course from List A[1]	3-4	See List A	See List A

Z At least one section of this course is offered with free textbooks and is labeled as zero textbook costs (ZTC). If it is a GE area class or elective, there may be several ZTC offerings to fulfill the GE requirement. Use the Free Textbook filter to find these courses. Learn more on the ZTC page of the college website.

[1] A total of 9.5 units must be taken from List A

Semester 2

5.5-6.5 Units

COURSE	UNITS	PRE-REQS^	SEMESTERS OFFERED*
WELD 153 Z Introduction to Welding Codes	2.5	Advisory WELD 100	Check Class Schedule
Course from List A[1]	3-4	See List A	See List A

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[1] A total of 9.5 units must be taken from List A

^You must have passed the prerequisite course(s) with a “C” or better; Corequisite must be taken during the same semester; Advisory means it is recommended but not required to enroll in the course.

Career Options/Outlook:

Welders use hand-welding or flame-cutting equipment to weld or join metal components or to fill holes, indentations, or seams of fabricated metal products. Typical tasks include operating safety equipment, using safe work habits, and recognizing, setting up, and operating hand and power tools common to the welding trade, such as shielded metal arc and gas metal arc welding equipment.

A sample of reported job titles:

Aluminum Welder, Fabrication Welder, Fabricator, Fitter/Welder, Maintenance Welder, Mig Welder, Sub Arc Operator, Welder, Welder-Fitter, Welder/Fabricator

Projected job openings in California (2020-2030):

3,890

Projected growth in California (2020-2030):

*(O) = online available (P) = partially online

List A-a minimum of 9.5 units from the following:

COURSE	UNITS	PRE-REQS^	SEMESTERS OFFERED*
WELD 110 Z Shielded Metal Arc Welding Procedures	4	WELD 100 or 160	F(2nd 8 wks)
WELD 111 Z Pipe Welding Procedures	4	WELD 100 or 160	Check Class Schedule for offering
WELD 113 Z Flux Core Arc Welding Process	4	WELD 100 or 160	Check Class Schedule for offering
WELD 126 Z Gas Metal Arc Welding of Plate & Pipe	3		Check Class Schedule for offering
WELD 127 Z Gas Metal Arc Welding Process of Sheet Metal	3		Check Class Schedule for offering
WELD 128 Z Gas Tungsten Arc Welding of Aluminum Alloys	3	WELD 100 or 160	Check Class Schedule for offering
WELD 129 Z Gas Tungsten Arc Welding of Stainless Steel	3	WELD 100 or 160	Check Class Schedule for offering
WELD 145 Z Design, Layout & Fabrication	3		Check Class Schedule for offering
WELD 151 Z Welding Industry Training	4	WELD 110, 111, 113, 126, 127, 128, or 129	S(2nd 8 wks)
WELD 295 Z Independent Studies in Welding	1-3		Check Class Schedule for offering
WELD 298 Z Work Experience in Welding	0.5-4		F(O,P), S(O), Su(O)

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11% growth

Median Salary in California (2021):

$48,590/yr

Source:

https://www.onetonline.org/link/summary/51-4121.06

About this program map:

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

Zero Textbook Costs (ZTC):

The Zero Textbook Costs designation and logo are added to any course that provides free access to all required instructional materials. These are typically shared with students through Canvas. Courses that are designated as ZTC may still require students to purchase supplemental materials such as lab coats, a calculator, art supplies, etc. See full definitions and searching tips on the Zero Textbook Costs page of the college website.

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