



Welding Technology A.S. Degree

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

Total Units: 58.5-63

First Year

Semester 1

16-17 Units

COURSE	UNITS	PRE-REQS [^]	SEMESTERS OFFERED*	GE AREA
WELD 100 ^Z Introduction to Welding & Safety	1.5		F (1st 8 wks), S (1st 8 wks), Su	
WELD 110 ^Z Shielded Metal Arc Welding Procedures	4		F(2nd 8 wks)	
WELD 129 ^Z Gas Tungsten Arc Welding of Stainless Steel	3		Check Class Schedule for offering	
CRC Area II(a)-Writing Competency ^Z	3	Recommend meeting with a counselor	F, S, Su	CRC Area II(a)
CRC Area II(b)-Math Competency ^Z	3-4	Recommend meeting with a counselor	F, S, Su	CRC Area II(b)
WELD 125 ¹ ^Z Introduction to the Gas Metal Arc Welding & Gas Tungsten Arc Welding Processes	1.5		F(2nd 8 wks)	

^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 Suggested course. Not required for degree but meets the requirement for Certificate in Welding Technology.

Semester 2

16 Units

COURSE	UNITS	PRE-REQS [^]	SEMESTERS OFFERED*	GE AREA
WELD 127 ^Z Gas Metal Arc Welding Process of Sheet Metal	3		Check Class Schedule for offering	
WELD 111 ¹ ^Z Pipe Welding Procedures	4	WELD 100 or 160	Check Class Schedule for offering	

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, 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):

11% growth

Median Salary in California (2021):

\$48,590/yr

COURSE	UNITS	PRE-REQS [^]	SEMESTERS OFFERED*	GE AREA
CRC Area III(b)-Life Development Skills² Z	3		F, S, Su	CRC Area III(b)
CRC Area I-Humanities Z	3		F, S, Su	CRC Area I
CRC Area IV-Natural Sciences Z	3		F, S, Su	CRC Area IV

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¹ Suggested course; also meets the requirement for Certificate in Welding Technology.

² Suggestion-WELD 298 Work Experience in Welding (2-3 units); F(O,P), S(O), Su(O).

Source:

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

Transfer notes:

Please meet with a counselor for specific transfer course evaluation or transferring to a specific 4-year institution.

General Education (GE):

Non-specified GE courses identified by CRC Area, CSU Area or IGETC Area without pre- or co-requisite can be taken at any semester.

This program also meets the requirements for:

The Certificate of Achievement in Welding Technology,

The Certificate of Achievement in Welding Code, and

The Certificate in Welding Fabrication.

Honors option:

The CRC Honors Program is designed specifically for academically accomplished students and for students with the potential for high achievement. Students who complete 15 units or more in honors-designated courses will earn special recognition as an Honors Scholar, a distinction that may entitle the student to guaranteed transfer and scholarship opportunities at select transfer colleges and universities.

About this program map:

This program map represents one possible pathway to complete the program. Please see a counselor to create an education

Year 2

Semester 3

15 Units

COURSE	UNITS	PRE-REQS [^]	SEMESTERS OFFERED*	GE AREA
WELD 128 Gas Tungsten Arc Welding of Aluminum Alloys Z	3	WELD 100 or 160	Check Class Schedule for offering	
WELD 145 Design, Layout & Fabrication Z	3		Check Class Schedule for offering	
CRC Area V(a)-American Institutions Z	3		F, S, Su	CRC Area V(a)
AMT 306 Small Engine Repair Z	3		F, S, Su	CRC Area VI
CRC Area V(b)-Social & Behavioral Sciences Z	3		F, S, Su	CRC Area V(b)

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Semester 4

11.5-15 Units

COURSE	UNITS	PRE-REQS [^]	SEMESTERS OFFERED*	GE AREA
WELD 151 Welding Industry Training Z	4	WELD 110, 111, 113, 126, 127, 128, 129	S(2nd 8 wks)	

COURSE	UNITS	PRE-REQS [^]	SEMESTERS OFFERED*	GE AREA
WELD 113 ¹ Z Flux Core Arc Welding Process	4	WELD 100 or 160	Check Class Schedule	
WELD 126 ¹ Z Gas Metal Arc Welding of Plate & Pipe	3		Check Class Schedule for offering	
AGB 498 Z Work Experience in Agriculture Business	0.5-4		F, S, Su	CRC Area III(a)

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[^]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.

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

¹ Suggested elective courses.

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.