

WELDING TECHNOLOGY, ASSOCIATE IN SCIENCE

The WEL program offers numerous training options. Students can enroll into process-specific courses such as shielded metal arc-welding, flux-core arc-welding, gas metal arc-welding, or gas tungsten arc-welding to acquire skill sets on ferrous and non-ferrous metals. Students can complete a one-year vocational Certificate of Achievement degree, or a two-year Associate of Science degree which commonly leads to supervisor and shop management opportunities. Ventura College WEL students are prepared for a wide range of manufacturing metal fabrication-related positions such as certified welder, quality-control inspection, project designers, and various levels of supervision and business ownership.

Course ID	Title	Units/ Hours
Required Courses		
WEL V01	Introduction to Welding	2
WEL V02/DRFT V02A	Blueprint Reading: Manufacturing	3
Required Additional Courses		
Select six units from the following:		6
DRFT/MT V04	Measurements and Computations	
MT V15	Manufacturing Processes	
WEL V20	Advanced Welding Applications	
WEL/ART V27	Metal Art Sculpture	
WEL V30	Applied Metal Fabrication	
WEL/CT V65	Structural Steel and Welding Construction	
WEL V66		
WEL V95	Welding Internship I	
WEL V96	Work Experience Education in Welding	
Select one of the following groups:		8
Group A:		
WEL V03	ARC and MIG Welding	
Group B:		
WEL V13A	ARC and MIG Welding I	
WEL V13B	ARC and MIG Welding II	
Select one of the following groups:		8
Group A:		
WEL V04	TIG and Flux Core Welding	
Group B:		
WEL V14A	TIG and Flux Core Welding I	
WEL V14B	TIG and Flux Core Welding II	
Total Units		27

Recommended Courses

In addition to the required courses listed above, it is recommended that students who seek to obtain additional insight into this field of study consider taking one or more of the following courses: ARCH V11 Blueprint Reading: Architectural/Construction (Units: 3); CT V20 Blueprint Reading: Architectural/Construction (Units: 3); DRFT V02B Blueprint Reading: Architectural/Construction (Units: 3); ENGL V01A Academic Reading and Writing (Units: 4); PHYS V01 Elementary Physics (Units: 5). Although

these supplemental courses may be of value to the student, please note that they do **not** satisfy the requirements for this degree.

Upon successful completion of this program, students will be able to:

- Set up equipment and perform basic welding processes.
- Read and interpret blueprint drawings commonly used in welding fabrication.
- Understand basic metallurgy and material selection used in welding.