

**GAS.  
METAL.  
FABRICATION.**

Program outcomes include the ability to perform various welding processes, comprehend industry quality standards and apply safety requirements. You will also learn how to interpret blueprint drawings and utilize industry-related nomenclature. Project design and fabrication methodologies are emphasized in relation to material selection as well as metallurgy.



**CONTACT:**

**Michael Clark, Instructor**

**805.289.1342**

**[mclark@vcccd.edu](mailto:mclark@vcccd.edu)**



**VENTURA COLLEGE**

**4667 Telegraph Road**

**Ventura, CA 93003**

**805.289.6000**

**[www.venturacollege.edu](http://www.venturacollege.edu)**



# VENTURA COLLEGE

## WELDING



**SET YOUR COURSE**



### WELDING PROGRAM AT VENTURA COLLEGE

Welding is the main focus of steel fabrication. As a Ventura College Student in the Welding Technology (WEL) program, you will develop the knowledge and manual skills necessary to be employable in an ever growing welding and metal fabrication industry.

*Persistence is to the character of  
Men /Women as carbon is to steel.  
~Napoleon Hill*



WHAT CAN I LEARN?

The Welding Program offers numerous training options. Ventura College 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 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.

CAREER OPPORTUNITIES

A welding career can be lucrative. Jobs in construction, fabrication, automotive and industrial settings are available. Welders work from the small shop down the street to the largest factories in major cities.

- Maintenance
- Carpentry
- Construction
- Ironwork/manufacturing/sheet metal
- Equipment repair
- Product sales
- Welding inspector
- Marine construction
- Sculpture



ASSOCIATES IN SCIENCE DEGREE

Required Courses

• WEL V01: Introduction to Welding	2 Units
• WEL V02/DRFT V02A	
Blueprint Reading: Manufacturing	3 Units
• DRFT V04/MT V04	
Measurements and Computations	3 Units
• MT V15	
Manufacturing Processes	3 Units
• WEL V20	
Advanced Welding Applications	4 Units
• WEL V27/ART V27	
Metal Art Sculpture	3 Units
• WEL V30	
Applied Metal Fabrication(approval pending)	2 Units
• WEL V65/CT V65	
Structural Steel and Welding Construction	3 Units
• WEL V66	
Structural Steel Blueprint Reading	3 Units
• WEL V95-V96	
Welding Internship I & II	1-4/1-4 Units

COURSE DESCRIPTIONS

- WEL V01 – INTRODUCTION TO WELDING  
This course is intended for major and non-major students interested in an introduction to welding fabrication.
- WEL V02-BLUEPRINT: MANUFACTURING  
This course covers the interpretation of mechanical drawings typical of the metal working field; theory of common types of projections, dimensioning principles, machine standards, application of creative sketching and interpretation of blueprints.
- WEL V03 – ARC AND MIG WELDING  
This course offers theory and intermediate vocational skills in Arc/ Shielded Metal Arc Welding (SMAW) and Metal Iner t Gas/Gas Metal Arc Welding (MIG/GMAW) processes.
- WEL V04-TIG AND FLUX CORE WELDING  
This course offers theory and intermediate vocational skills in Tungsten Inert Gas/Gas Tungsten Arc Welding (TIG/GTAW) and Flux Core Arc Welding (FCAW) processes.
- WEL V13a & V13B – ARC AND MIG WELDING I  
This is a 2-part part course in Arc and MIG welding. This course offers theory and intermediate vocational skills in Arc/Shielded Metal Arc Welding (SMAW) and Metal Iner t Gas/Gas Metal Arc Welding (MIG/GMAW) processes.
- WEL V14A & V14B – TIG AND FLUX CORE WELDING I  
This is par t I of a course in TIG and Flux Core welding. This course offers theory and intermediate vocational skills in Tungsten Iner t Gas/ Gas Tungsten Arc Welding (TIG/GTAW) and Flux Core Arc Welding (FCAW) processes.
- WEL V20 –ADVANCED WELDING APPLICATIONS  
This course offers theory and advanced vocational skill in industrial welding applications.
- WEL V27 - METAL ART SCULPTURE  
This course is an introduction to metal art sculpture utilizing practical theory and application of materials, welding techniques and processes.
- WEL V30 - APPLIED METAL FABRICATION  
This course is designed to introduce the student to applied metal fabrication techniques, including measuring, cutting, forming, shaping, fitting, shrinking, stretching, and finishing.
- WEL V65 - STRUCTURAL STEEL AND WELDING CONSTRUCTION  
This course is a study of structural steel and welding use in building construction.
- WEL V66 - STRUCTURAL STEEL BLUEPRINT READING  
This course will cover reading and interpretation of blueprints for steel fabrication and structural steel construction.

- WEL V88 - WELDING WORKSHOPS  
Designed to meet specific needs of the college and community as required and/or requested by persons whose needs in this area are not met by present course offerings.
- WEL V96 - WELDING INTERNSHIP II  
This course offers students who are employed in the field an opportunity to expand their work experience related to their field of study.
- WEL N94 - WELDING SPECIALTY  
This course is designed to provide practicing welders opportunities to develop skills in a specialized area of the welding art.

