



# Antelope Valley College Program Outline Report

## Program Basics

Program Title:	AEROSPACE WELDING
Program Status:	In development
Department:	Welding
Award Type:	Certificate 18-30 semester unit (Credit)
Program (Catalog) Description	The Aerospace Welding Certificate program is designed to prepare students for employment in the Aerospace Welding Industry and related areas. The curriculum provides training in manipulative skills, technical knowledge and related trade information in addition to preparing students for Aerospace Welding Certification.
Control Number:	No value
Credential ID:	No value
Transferability:	Not transferable
Program TOP Code (SP01) :	0956.50
Program TOP Code (SP01) :	Welding Technology
Program CIP Code:	(15.0614) Welding Engineering Technology/Technician.
Additional CIP Codes:	No value
Maximum Credits:	18
Minimum Credits:	18
Curriculum Committee Approval Date:	No value
Board of Trustees Approval Date:	No value
External Review Approval Date:	No value

## Proposal Details

Proposal Start:	Fall 2023
Program Justification:	This Certificate is being developed based on the high demand for qualified entry level welders in the local Aerospace Industry.

## Submission Rationale

- New Program

## Program Goals and Objectives

• **Program Goals and Objectives – must address a valid workforce preparation purpose and may address transfer preparation.**

1. Demonstrate proper techniques for repairing, fabricating, or cutting metal components or structures using gas welding processes
2. Demonstrate proper techniques for repairing, fabricating, welding components or structures using the Gas Tungsten Arc Welding process.
3. Inspect and evaluate welds to assure that they meet industry standards.
4. Analyze and evaluate the welding area to assure safe work practices, proper equipment usage, and proper use of personal protective equipment
5. Read and properly interpret industry standard blueprints and architectural drawings

## CTE

**CTE TOP Code?**

- Yes

## Checklist

**Associate Degree for Transfer Degrees: AA-T and AS-T Requirements**

- Current Chancellor's Transfer Model Curriculum (TMC)
- C-ID or ASSIST Articulation Information, as required by the TMC
- Updated CORS for all courses in major

**CTE Program Requirements:**

- Advisory Committee Recommendation
- Regional Consortium Recommendation
- Labor Market Information (LMI)
- Updated CORS for all courses in major

## Workflow Agreement- Programs

When a workflow is sent back you must: 1. Review comments in the various sections for information on corrections needed. 2. Make corrections. Seek support from AP&P rep as necessary. 3. Resubmit workflow.

I understand

Be aware that all proposal corrections will lengthen the approval timeline.

I understand

Due to the notification restrictions of eLumen, it is the responsibility of the faculty to monitor the progress of their program workflow.

I understand

## Program Requirements

### REQUIRED COURSES (Total 3)

Complete all of the following

#### AFAB COURSE (Total 3)

Complete all of the following

AFAB110 - Introduction to Aircraft Structures, Blueprints, and Manufacturing Documentation 3

### REQUIRED COURSES (Total 15)

Complete all of the following

#### WELD COURSES (Total 15)

Complete all of the following

WELD110 - Oxyacetylene Welding, Cutting and Brazing 2

WELD137 - Gas Tungsten Arc Welding Fundamentals (In Creation) 2

WELD140 - Aerospace Welding Processes (In Creation) 4

WELD200 - Advanced Aerospace Welding Processes (In Creation) 4

WELD230 - Welding Symbols and Print Reading 3

## Recommended Sequences

### Aerospace Welding

#### Term 1 (Total 5)

**AFAB COURSE** AFAB110 - Introduction to Aircraft Structures, Blueprints, and Manufacturing Documentation 3

**WELD COURSES** WELD110 - Oxyacetylene Welding, Cutting and Brazing 2

#### Term 2 (Total 2)

**WELD COURSES** WELD137 - Gas Tungsten Arc Welding Fundamentals 2

**Term 3 (Total 7)****WELD COURSES** WELD140 - Aerospace Welding Processes 4**WELD COURSES** WELD230 - Welding Symbols and Print Reading 3**Term 4 (Total 4)****WELD COURSES** WELD200 - Advanced Aerospace Welding Processes 4**Recommended Sequence****The Recommended Sequence must be reviewed with a counselor. Please contact an AP&P Counselor member.**

- I understand

**Program Outcomes****Outcomes**

PSLO	Performance
1. Demonstrate proper techniques for repairing, fabricating, or cutting metal components or structures using gas welding processes	70
2. Demonstrate proper techniques for repairing, fabricating, welding components or structures using the Gas Tungsten Arc Welding process.	70
3. Inspect and evaluate welds to assure that they meet industry standards.	70
4. Analyze and evaluate the welding area to assure safe work practices, proper equipment usage, and proper use of personal protective equipment	100
5. Read and properly interpret industry standard blueprints and architectural drawings	70

## Program Narrative

### **MASTER PLANNING – how it fits in the mission, curriculum, and master planning of the college and higher education in California.**

This Certificate will allow Antelope Valley College to educate and produce qualifying welders into the local aerospace industry. Doing so will fulfill our local community needs and increase completion rates.

### **ENROLLMENT & COMPLETER PROJECTIONS – projection of number of students to earn degree annually.**

Values Listed are from Program review data

Program Review | Tableau Public ([https://public.tableau.com/app/profile/svetlana6591/viz/ProgramReview\\_10/ProgramReviewData](https://public.tableau.com/app/profile/svetlana6591/viz/ProgramReview_10/ProgramReviewData))

The number of sections of core courses to be offered annually is . 43

The annual enrollment (student headcount) in the number of sections estimated is . 400

The number of anticipated program completers per year at the end of the second year of program operation is . 13

The number of anticipated program completers per year at the end of the fifth year of program operation is . 25

### **PLACE OF PROGRAM IN CURRICULUM/SIMILAR PROGRAMS – how it fits in college's existing program inventory.**

This certificate aligns with the current AS degree in Welding. This will aid industry demands by producing qualified welders into the local aerospace industry.

### **SIMILAR PROGRAMS AT OTHER COLLEGES IN SERVICE AREA – justification of need for program in the region.**

None exist

### **TRANSFER PREPARATION INFORMATION – if transfer preparation is a component of the program.**

N/A

### **CTE ONLY = ADVISORY COMMITTEE RECOMMENDATION – includes advisory committee membership, minutes and summary of recommendations. Documentation attached?**

Yes

### **CTE ONLY = CURRENT LABOR MARKET INFORMATION AND ANALYSIS – see Program & Approval Handbook for a discussion on LMI analysis and considerations. Documentation attached?**

Yes

### **CTE ONLY = REGIONAL CONSORTIA MEETING MINUTES – see CTE guide on AP&P Resources webpage. Documentation attached?**

No