

Palo Verde College

Program Outline Report

Program Basics

Program Title:	Welding Technology Associate of Science
Program Status:	Active from 2025-2026 Fall (2025FA)
Department:	Welding
Award Type:	A.S. Degree Major (Credit)
Program/Catalog Description	The program of studies in Welding Technology is designed to provide comprehensive occupational training in welding methods currently used in the welding fabrication industry. Students will be taught the manipulative skills and the technical knowledge required to operative oxyacetylene, shielded electric arc, MIG, TIG, and semiautomatic flame cutting. They will be prepared for certification as required by employment in the welding industry.
Control Number:	30514
Credential ID:	No value
Transferability:	No value
(SP01) Program TOP Code:	0956.50
(SP01) Program TOP Code:	Welding Technology
(SP02) Student Program Award:	Associate of Science (A.S.) degree
Maximum Credits:	68
Minimum Credits:	64
Curriculum Committee Approval Date:	04/10/2025
Board of Trustees Approval Date:	05/13/2025
External Review Approval Date:	05/13/2025

Proposal Details

Proposal Start:	2025-2026 Fall (2025FA)
What changes have been made to the program:	Updating units due to CalGETC
Program Justification:	No value

Submission Rationale

No value

Program Requirements

Welding Technology Associate of Science (Total 64-68)

Complete all of the following

Required Core Courses (24 units) (Total 24)**Complete the following number of credits: 24**

WEL100 - Oxyacetylene Gas Welding	3
WEL101 - Shielded Metal Arc Welding	3
WEL102 - Basic Gas Metal Arc Welding	3
WEL103 - Basic Gas Tungsten Arc Welding	3
WEL200 - Advanced Gas Metal Arc Welding	3
WEL201 - Advanced Gas Tungsten Arc Welding	3
WEL202 - Advanced Oxyacetylene Gas Welding	3
WEL203 - Consolidated Welding	3

Restricted Electives (Choose any two courses below - 6 units): (Total 6)**Complete the following number of credits: 6**

WEL120 - Introductory Welding Principles and Practices	3
WEL121 - Resistance Welding and Special Welding Applications	3
WEL122 - Principles and Practices of Metal Technology and Professional Welding	3
WEL250 - Ind. Shielded Metal Arc Welding (smaw) I	3
WEL251 - Ind. Flux Cored Arc Welding (fcaw) I	3
WEL252 - Industrial Shielded Metal Arc Welding (SMAW) II	3
WEL253 - Industrial Flux Cored Arc Welding (FCAW) II	3

In addition to the Core Courses required for the A.S. Degree Welding Technology, students will also be required to meet the Associate Degree Requirements and the General Education Requirements.

34-38

Recommended Sequences

No value

Program Outcomes**Welding Technology Associate of Science**

PSLO	Performance
1. Acquired fundamental grounding in communications, science, mathematics, humanities, the social sciences and self-development in preparation for an occupation, and possible transfer to a four-year institution.	70
2. Acquired knowledge and skills in WEL 201, demonstrating the proper procedure and techniques for welding mild steel plates and tubing.	70

Program Narrative

Narrative Item 1. Program Goals and Objectives

The Welding Technology program provides students with a basic background in welding, construction, and fabrication. Students will find employment in the broad spectrum of opportunities available in the welding industry. The program also provides continuing education for those already employed as welders and to other professions related to welding technology.

Narrative Item 2. Catalog Description

The program of studies in Welding Technology is designed to provide comprehensive occupational training in welding methods currently used in the welding fabrication industry. Students will be taught the manipulative skills and the technical knowledge required to operative oxyacetylene, shielded electric arc, MIG, TIG, and semiautomatic flame cutting. They will be prepared for certification as required by employment in the welding industry.

ASSOCIATE OF SCIENCE WELDING TECHNOLOGY

Course Sequence

COURSE	TITLE	UNITS	SEQUENCE
<i>Required Core Courses (24 units):</i>			
WEL 100	Oxyacetylene Gas Welding	3	<i>Year 1, Fall term</i>
WEL 101	Shielded Metal Arc Welding (ARC)	3	<i>Year 1, Fall term</i>
WEL 102	Basic Gas Metal Arc Welding (MIG)	3	<i>Year 1, Fall term</i>
WEL 103	Basic Gas Tungsten Arc Welding (TIG)	3	<i>Year 1, Spring term</i>
WEL 200	Advanced MIG Welding	3	<i>Year 2, Fall term</i>
WEL 201	Advanced TIG Welding	3	<i>Year 2, Fall term</i>
WEL 202	Advanced Oxyacetylene Gas Welding	3	<i>Year 2, Spring term</i>
WEL 203	Consolidated Welding	3	<i>Year 2, Spring term</i>
<i>Restricted Electives (Choose any two courses below - 6 units):</i>			
WEL 120	Intro to Welding Principles and Practices	3	
WEL 121	Resistance Welding and Special Welding Applications	3	<i>(Program electives can be taken in Spring/Fall/Summer of Year 1 or 2)</i>
WEL 122	Principles and Practices of Metal Technology	3	
WEL 250	Industrial Shielded Metal Arc Welding (SMAW) I	3	
WEL 251	Industrial Flux Cored Arc Welding (FCAW) I	3	
WEL 252	Industrial Shielded Metal Arc Welding (SMAW) II	3	
WEL 253	Industrial Flux Cored Arc Welding (FCAW) II	3	
	Total Major Required Units	30	
<i>GE Requirements</i>			
GE Course		3	<i>Year 1, Fall term</i>
GE Course		3	<i>Year 1, Spring term</i>
GE Course		3	<i>Year 1, Spring term</i>
GE Course		3-4	<i>Year 2, Fall term</i>
GE Course		3	<i>Year 1, Fall term</i>
GE Course		3	<i>Year 1, Spring term</i>
GE Course		3	<i>Year 2, Fall term</i>
GE Course		3	<i>Year 1, Spring term</i>
Electives		5-6	<i>Year 2, Fall/Spring terms</i>
	Total GE Required Units	34-38	
Total Major Required Units			30
College GE Requirements			34-38

Electives (as needed to reach 60 units 5-6 units)		5-6
TOTAL UNITS:		64-68

Narrative Item 4. Master Planning (Not needed for Certificates of Career Preparation)

This Associate Degree in Welding Technology fits in to the college mission by allowing students to complete 4 courses in 2 years. This degree has been designed so that students who are pursuing this AS degree in welding will have earned numerous certificates while working toward their AS degree.

Narrative Item 5. Enrollment and Completer Projections (Not needed for Certificates of Career Preparation)

(3) students are expected to complete this degree each year, based on current and past enrollment.

Narrative Item 6. Place of Program in Curriculum/Similar Programs (Not needed for Certificates of Career Preparation)

This degree fits into the existing welding program by allowing students the opportunity to complete certificates while pursuing their AS degree.

Narrative Item 7. Similar Programs at Other Colleges in Service Area (Not needed for Certificates of Career Preparation)

The following community colleges in our service area offer welding programs: Imperial Valley College and College of the Desert. Based on Palo Verde College's remote location and industry growth requiring welding in our community, Palo Verde College will bridge the gap by providing new courses and programs that will lead to High Skill - High Demand training and possible employment.

LMI and Analysis

Attached

Advisory Committee Recommendations (Not needed for Certificates of Career Preparation)

attached legacy

Regional Consortia Recommendations (Not needed for Certificates of Career Preparation)

attached legacy