

Palo Verde College

Program Outline Report

Program Basics

Program Title:	Automotive Engine Analysis and Electrical Systems Certificate of Career Preparation
Program Status:	Active from 2024-25 Fall (2024FA)
Department:	Automotive Technology
Award Type:	Certificate of Career Preparation (Credit)
Program/Catalog Description	The Automotive Engine Analysis and Electrical Systems certificate of career preparation will provide students the ability to apply technical knowledge related to service, diagnosis and repair of electrical and engine performance systems found on modern automobiles. Emphasis placed on starting/charging systems, lighting and accessory systems, fuel injection and ignition systems.
Control Number:	No value
Credential ID:	No value
Transferability:	No value
(SP01) Program TOP Code:	0948.00
(SP01) Program TOP Code:	Automotive Technology
(SP02) Student Program Award:	Certificate requiring 6 to fewer than 18 semester units (not approved by Chancellor’s Office)
Maximum Credits:	12
Minimum Credits:	12
Curriculum Committee Approval Date:	03/21/2024
Board of Trustees Approval Date:	04/09/2024
External Review Approval Date:	04/09/2024

Proposal Details

Proposal Start:	2024-25 Fall (2024FA)
What changes have been made to the program:	No value
Program Justification:	Stackable certificates allow students to learn a specific aspect of Automotive Technology rather than all areas. Making training more accessible to students with different needs and schedules. By focusing on electrical and engine analysis, students gain training in critical areas directly applicable to automotive repair and maintenance, aligning with industry needs and increasing their employability upon completion.

Submission Rationale

- New Program

Program Requirements

Required Courses (Total 12)

Complete all of the following

AUT102 - Engine Analysis/Tune-up	3
AUT111 - Automotive Electrical Systems	3
AUT200 - Engine Diagnosis/Overhaul	6

Recommended Sequences

New Sequence

Term 1 (Total 3)

Required Courses (Total 3)

Take one of the following

AUT102 - Engine Analysis/Tune-up	3
AUT111 - Automotive Electrical Systems	3

Term 2 (Total 6)

Required Courses AUT200 - Engine Diagnosis/Overhaul	6
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Program Outcomes

Automotive Engine Analysis and Electrical Systems Certificate of Career Preparation

PSLO	Performance
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Demonstrate personal and shop safety procedures needed to safely work in an automotive shop environment.	70
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Demonstrate the ability to diagnose, service and repair automotive electrical systems using industry approved equipment.	70
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Demonstrate the ability to diagnose, service and repair engine and engine performance systems using industry approved equipment.	70
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Program Narrative

Narrative Item 1. Program Goals and Objectives

PROGRAM GOAL

To prepare students for entry level employment in the automotive industry.

OBJECTIVES

- 1.Demonstrate personal and shop safety procedures needed to safely work in an automotive shop environment.
- 2.Demonstrate the ability to diagnose, service and repair automotive electrical systems using industry approved equipment.
- 3.Demonstrate the ability to diagnose, service and repair automotive engine and engine performance systems using industry approved equipment.

<https://labormarketinfo.edd.ca.gov/data/employment-projections.html#Long>
(<https://labormarketinfo.edd.ca.gov/data/employment-projections.html#Long>)

Narrative Item 2. Catalog Description

The Automotive Engine Analysis and Electrical Systems certificate of career preparation will provide students the ability to apply technical knowledge related to service, diagnosis and repair of electrical and engine performance systems found on modern automobiles. Emphasis placed on starting/charging systems, lighting and accessory systems, fuel injection and ignition systems.

Narrative Item 3. Program Requirements

<u>FALL</u>	<u>Units</u>
AUT 102 Engine Analysis/Tune up	3
AUT 111 Automotive Electrical Systems	3

<u>SPRING</u>	<u>Units</u>
AUT 200 Engine Diagnosis/Overhaul	6

Narrative Item 4. Master Planning

This Automotive Engine Analysis and Electrical Systems Certificate provides opportunities for personal and professional growth to a diverse community of students in an academic environment committed to student success. The award of an Automotive Engine Analysis and Electrical Systems Certificate is more than an accumulation of units. It symbolizes a successful attempt on the part of the college to lead students through patterns of learning experiences designed to develop certain capabilities and insights in the Automotive Industry and more.

Narrative Item 5. Enrollment and Completer Projections

30 -60 students annually

Narrative Item 6. Place of Program in Curriculum/Similar Programs

Currently all of the required curriculum for this Automotive Engine Analysis and Electrical Systems Certificate resides in the course catalog. After properly organizing and categorizing the material, students may now receive recognition through a certificate of achievement that will help them meet criteria for hiring, as well as promotional opportunities.

Narrative Item 7. Similar Programs at Other Colleges in Service Area

There are no other colleges or universities in Palo Verde College's service area on the main Blythe campus. The closest college to the Needles Center is Mojave Community College in Arizona, located one hundred miles north of Blythe and outside the Palo Verde's service area. This Automotive Engine Analysis and Electrical Systems Certificate is needed so that students can get jobs in the Automotive Industry