

# ROP Diesel Engine



## COURSE DESCRIPTION

The ROP Diesel Engine course is designed to mix classroom instruction with hands-on training in the operation and repair of modern diesel engines. Students will learn how to interpret technical manuals and electronic diagnostic reports.

### Earn College Credit

Students who pass the course with a final grade of "B" or higher may earn 4 college units from American River College.

## Areas of Instruction:

### Power Equipment Safety

- ✦ Mechanical Safety
- ✦ Shop Pollution Prevention
- ✦ Personal Protective Equipment
- ✦ Diesel Engine Maintenance
- ✦ Emission System Standards
- ✦ Air Filtration System
- ✦ Fuel, Lubricating and Cooling Systems

### Battery Service

- ✦ Battery Basics
- ✦ Testing
- ✦ Warranty
- ✦ Safety and Installation
- ✦ Inventory Management

### Diesel Engine Diagnosis

- ✦ Diagnose by System
- ✦ Case Studies

### ✦ Introduction to Kubota Engines

### Electrical System Diagnosis and Repair

- ✦ Basic Electrical Components
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- ✦ Alternator and Dynamo Diagnosis and Repair
- ✦ Starter Diagnosis and Repair
- ✦ Electrical System Diagnosis

### Engine Overhaul

- ✦ Preparation
- ✦ Inspection
- ✦ Post Overhaul Checks
- ✦ Disassembly/Reassembly

### Failure and Analysis

- ✦ Methods
- ✦ Bearings/Rods/Shafts
- ✦ Engine Accessories
- ✦ Rings/Pistons
- ✦ Cylinder Heads/Valves

This Course is offered at Ponderosa High School  
3661 Ponderosa Road, Shingle Springs, CA 95682

For more information, visit your High School Career Center or the  
Central Sierra Regional Occupational Program

