## DIESEL MECHANICS, ASSOCIATE IN SCIENCE

The Associate in Science in Diesel Mechanics Degree at Ventura College is designed to prepare students for employment in the diesel engine repair workforce. Students will be taught the advanced knowledge and high technology skills that will prepare them for a career as a diesel technician in the 21st century. The program curriculum incorporates lecture and laboratory activities.

Competencies include: maintenance and inspection of heavy-duty vehicles; repair of diesel engines; technical, operational, and diagnostic skills related to diesel electrical systems; operation of power train units; inspection and adjustment of steering suspension systems; brake systems service; diagnosis and repair of heating and air conditioning systems; and the diagnosis and repair of fuel systems.

The program prepares students for careers with job titles that include the following:

# Diesel truck technician # Transit mechanic

# Fleet technician # Service technician

# Truck mechanic # Mechanic

# Transportation mechanic # Bus repair technician

# Agricultural equipment repair technician

This is a high-unit program, requiring 68.5 units for the degree. Students will be able to complete the program in two years (four semesters) if they take between 13.5 and 17.5 units per semester and 3.0 units in the summer.

## **Course List**

Course ID	Title	Units/ Hours
Required Courses		
DM V10	Diesel Preventive Maintenance	2
DM V10L	Diesel Maintenance Lab	1.5
DM V12	Diesel Electrical/Electronic Systems	7
DM V26	Diesel Engines	2
DM V26L	Diesel Engines Laboratory	3
DM V28	Diesel Fuel Management Systems	2.5
DM V28L	Diesel Fuel Management Systems Laboratory	3
DM V30	Truck and Trailer Brake Systems	4
DM V34	Truck Suspension and Steering Systems	4
DM V40	Heating, Ventilation, and Air Conditioning (HVAC) and Preventive Maintenance	4
DM V42	Hydraulic Systems	2
DM V42L	Hydraulic Systems Laboratory	1
DM V44	Drivetrain - Medium and Heavy-Duty Vehicles	2

Total Units		39.5
	Duty Vehicles	
DM V44L	Drivetrain Laboratory - Medium and Heavy-	1.5

Upon successful completion of this program, students will be able to:

- Demonstrate an understanding of operation, service and repair of medium and heavy duty vehicles.
- Analyze, diagnose and repair operational faults with medium and heavy duty vehicles.
- Perform maintenance inspection and maintenance service required of medium and heavy duty vehicles.