



# DIESEL TECHNOLOGY

## Diesel Technology Certification

Inspect, maintain and repair the electrical systems, heavy duty breaks, lighting, and engine systems of diesel vehicles

The curriculum includes an off site internship. The diesel technology program will help students learn a variety of skills used in the industry, including the following:

- Heavy duty starting and charging of engines
- Heavy duty brake repair
- Lighting and instrumentation
- Body and electrical systems

### Suggested educational levels:

- English literacy (reading, writing, speaking, and listening)
- Understanding of basic algebra

### Suggested physical abilities:

- Capable of lifting 30 pounds
- Capable of sustained activity for 5 hours at a time

### Class Hours:

- Morning: 7:50am - 10:40am Mon.- Fri.
- Afternoon: 12:05pm - 2:55pm Mon.- Fri.
- Program is 2 semesters in length, with start dates in Fall.

## Tuition and Credit Hour Calculation

### Semester 1

\$1,560.00 (Tuition)
+ \$170.00 (Credit Hour Fee)
<b>\$1,730.00</b>

### Semester 2

\$1,950.00 (Tuition)
+ \$200.00 (Credit Hour Fee)
<b>\$2,150.00</b>

*Based on Colorado Resident In-State Tuition*

## Estimated Program Costs (to be paid at Picken's payment office)

### Tuition and Credit Hour Fees:

**Semester 1:** \$1,730.00  
**Semester 2:** \$2,150.00

### Required On Campus Costs:

**Program Charges:** \$500.00 (each semester)  
**Student ID:** \$10.00 (each year)  
**CTSO Charge:** \$20.00 (each year)  
**Safety Glasses:** \$5.00 (+ tax)

### Estimated Total:

**Diesel Technician Certificate:** \$4,915.00 (+tax)

## Additional Relevant Costs (estimated)

### Required Off Campus Costs:

**Books:** \$50.00 - \$175.00 (+ tax)  
**Shop Shirt:** \$30.00 (+ tax)

### Optional Costs:

**NAS3 Testing:** \$15.00

**Credits:**  
27

**Length:**  
1 years

**Cost:**  
\$4,915



Cost and information revised **January 2022**  
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# DIESEL TECHNOLOGY

## Courses required for this certificate:

### DPM 1000 Intro to Diesel Mechanics

Focuses on the student identifying and describing the many different types of diesel powered vehicles. Emphasis is placed on being able to research information in maintenance manuals and parts manuals along with demonstration of their abilities in properly identifying and select mechanical fasteners for a particular application. Specific coverage of precision fasteners, fuels, fluids as they relate to the diesel industry.

### DPM 1003 Diesel Engines I

Covers the theory and operation of diesel engines with emphasis on cylinder heads and valve trains diagnosis and repair. Also introduces the cooling system's importance with diagnosis and repair. Enables students to diagnose, test, and repair cylinder heads and cooling systems on diesel engines.

### DPM 1026 Heavy Duty Starting & Charging

Includes the operation, testing and servicing of heavy duty vehicle battery, starting and charging systems. Includes voltage, voltage drop testing of starting and charging systems, diagnosis, maintenance, load testing and repair of systems.

### DPM 2006 Heavy Duty Brakes I

Focuses on the various braking systems incorporated in heavy-duty trucks and heavy equipment. Includes a study of hydraulic brake systems and covers the diagnosis and service of the mechanical and electrical components.

### DPM 2007 Heavy Duty Brakes II

Teaches instruction in general service and maintenance procedures for the heavy-duty truck air brake system and its related pneumatic components. Operational checks, performance testing, and verifying system compliance with regulations (FMVSS No. 121) will be discussed.

### DPM 2022 H/D Lighting & Instrumentation

Provides students with diagnosis and repair of lighting systems found on Medium /Heavy duty trucks and equipment. Emphasis on inspecting and testing of electrical circuits, switches and interfacing through data bus with on board computers.

### DPM 2023 H/D Body Electrical Systems

Provides a comprehensive study of the theory, operation, diagnosis, and repair of the heavy duty vehicle body and safety electrical systems and accessories.

### DPM 2080 Internship

Provides students with the opportunity to supplement coursework with practical work experience related to their educational program. Students work under the immediate supervision of experienced personnel at the business location and with the direct guidance of the instructor.

## DIESEL TECHNOLOGY CERTIFICATE

**Certificate Total:** Clock Hours: 652.5 Credit Hours: 27

**Certificate Length:** 2 semesters