

# DHM - DIESEL MECHANICS

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## DHM 101 Introduction to Diesel Engines (3-3-4)

*Offered Spring Semester*

This course is an introduction to diesel engine design and operation principles.

## DHM 105 Diesel Engines I (2-4-3)

*Offered Fall Semester*

Prerequisites: DHM 101, DHM 125

This course covers the basic study of diesel engine design and operating principles.

## DHM 107 Diesel Equipment, Service & Diagnosis (2-4-3)

*Offered Fall Semester*

This course is a study of heavy vehicle systems with emphasis on preventive maintenance, problem diagnosis, and repair procedures.

## DHM 108 Diesel Engine Tune-Up (1-5-2)

*Offered Spring Semester*

Co-requisite: DHM 101

This course is a study of diesel engine tune-up principles and practices. Students will explore ways to minimize overall operational costs, as well as the use of aftermarket add-on equipment such as performance electronic computer chips, high output turbochargers, and custom exhaust installation.

## DHM 121 Introduction to Diagnostic Testing (1-5-2)

*Offered Spring Semester*

Co-requisite: DHM 173

This course is an introduction to basic theory and practical application of diagnostic testing equipment in trouble-shooting procedures. Content includes the study of diagnostic software and generic diagnostic readers for all major engine manufacturers.

## DHM 125 Diesel Fuel Systems (2-4-3)

*Offered Spring Semester*

This course is a basic study of diesel engine fuel systems including pumps, governors, and injectors.

## DHM 151 Drive Trains (3-3-4)

*Offered Summer Semester*

This course is a study of the theory and repair of drive train systems.

## DHM 155 Power Trains (2-4-3)

*Offered Spring Semester*

This course covers the theory and repair of transmission drive shafts and differentials.

## DHM 171 Introduction to Heavy Equipment Welding (1-6-3)

*Offered Summer Semester*

This course introduces the proper welding techniques utilized to alter a sub-frame, alter a unit, or add equipment to improve payload space, safety, or location.

## DHM 173 Electrical Systems I (2-4-3)

*Offered Fall Semester*

This course is a study of basic electrical theory as applied to truck and heavy equipment batteries, starters, and alternators.

## DHM 205 Diesel Engines II (2-4-3)

*Offered Fall Semester*

Prerequisite: DHM 105

This course covers the practical application of diesel engine repair, including engine disassembly, unit repair, reassembly, and testing.

## DHM 216 Medium Diesel Engines (2-4-3)

*Offered Fall Semester*

Prerequisites: DHM 101, DHM 125

This course is the study of major manufacturers' configuration of medium diesel engines, diagnostic adjustment and settings, specific exhaust turbo performance settings, and reassembly techniques.

## DHM 225 Electronic Fuel Systems (2-4-3)

*Offered Fall Semester*

Prerequisite: DHM 125

This course covers the theory and practical application of electronic fuel power systems.

## DHM 232 Heating, Cooling, & Air Conditioning Systems (2-4-3)

*Offered Summer Semester*

This course is an introduction to engine heating and cooling systems used in modern trucks. Various truck and heavy equipment air conditioning systems are explored.

## DHM 251 Suspension and Steering (1-6-3)

*Offered Summer Semester*

This course is a study of steering systems, suspension systems, and basic front-end alignment techniques.

## DHM 255 Air Brake Systems (2-4-3)

*Offered Fall Semester*

This course is a study of air compressors, valves, electrical controls and brake designs.

## DHM 262 ABS and TCS Brake Systems (1-5-2)

*Offered Spring Semester*

Prerequisites: DHM 121, DHM 255

This course is a study of the theory and practical application of ABS (Automatic Braking Systems) and TCS (Traction Control Systems) for truck safety systems.

## DHM 265 Hydraulic Systems (2-4-3)

*Offered Spring Semester*

This course is a study of the theory, application, testing, and repair of diesel and heavy equipment hydraulic systems.

## DHM 271 Auxiliary Power Units (1-5-2)

*Offered Spring Semester*

Prerequisites: DHM 101, DHM 121, DHM 231, DHM 255, DHM 260, DHM 262

This course is a study of auxiliary power units, including application, placement, installation, and diagnostics.

## DHM 272 Trailer Technology (3-3-4)

*Offered Spring Semester*

Prerequisites: DHM 121, DHM 255, DHM 262

This course is a study of the theory and practical application of service, repair, and maintenance of common road trailer units.

## DHM 273 Electrical Systems II (2-4-3)

*Offered Fall Semester*

Co-requisite: DHM 173

This course covers advanced electrical/electronic controls for diesel trucks and heavy equipment. Troubleshooting and repair techniques are included.