

DIESEL EQUIPMENT TECHNOLOGY - 3 credits

PREREQUISITES:

1. Eleventh and twelfth grade level
2. Mechanical aptitude and strong problem-solving skills
3. Good health
4. Courses in English, Mathematics, and Physics provide a strong educational background
5. Excellent attendance record

DESCRIPTION:

The diesel engine is the workhorse powering the Nation's trucks and buses, because it delivers more power and is more durable than its gasoline-burning counterpart. Diesel-powered engines are becoming more prevalent in light vehicles, including pickups and other work trucks.

This course will introduce students to the fundamentals of diesel equipment technology. Students will become familiar with the proper use of hand and power tools, and precision measurement. Students will identify, disassemble, clean, inspect and rebuild various components of a diesel engine. Students will be introduced to the fundamentals of tune up and troubleshooting used in diesel equipment technology.

Medium and heavy truck preventative maintenance & inspection used in diesel equipment technology will also be covered in the program. During a routine maintenance check on a vehicle, students follow a checklist that includes inspecting brake systems, steering mechanisms, wheel bearings, and other important parts. Following inspection, students will repair or adjust parts that do not work properly or remove and replace parts that cannot be fixed. Students will study support systems and the heavy truck chassis concepts which are used in diesel equipment technology.

The National Institute for Automotive Service Excellence (ASE) is recognized as the standard of achievement for diesel service technicians and mechanics. This certification is not provided as part of the student's training at the James Rumsey Technical Institute but does help prepare the student for voluntary examination at the student's personal expense.

Offered 2007-2008

DIESEL EQUIPMENT TECHNOLOGY II: 174209 (3 credits)

DSLEQ-CMPNT – Diesel Engine Components (180 hours, 1st semester) 174119

DSLEQ-SPPRT – Diesel Support Systems (180 hours, 2nd semester) 174729

DSLEQ-TRUCK – Diesel Truck Chassis Concepts (180 hours, both semesters) 174919 & 174929

Offered 2008-2009

DIESEL EQUIPMENT TECHNOLOGY I: 174109 (3 credits)

DSLEQ-FUND – Fundamentals of Diesel Equipment Technology (180 hours, 1st semester) 175119

DSLEQ-TUNEUP – Diesel Equipment Tune-up (180 hours, 2nd semester) 174329

DSLEQ-MAINT – Diesel Equipment Maintenance (180 hours, both semesters) 174519 & 174529

The Diesel Technology curriculum alternates annually. Students are expected to complete a two year program for skilled level program certification.