

Diesel Engine Technology

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****please note:*** add the words “**Parent Note**” in the subject line of any Email to ensure delivery

Course Description:

This course is designed to introduce students to a variety of career opportunities in the diesel engine field and to use industry related resources that will serve them both in their professional and personal lives. Diesel Engine Technology is a three year program.

- First year studies include the cycle of operation, engine fundamentals, disassembly and reassembly, measurement, related shop math.
- The second year covers auxiliary systems --cranking systems, air intake and exhaust systems including natural aspiration, blowers, superchargers and turbochargers as well as water-jacketed exhaust systems found in marine applications and standard vehicle exhaust systems. The engine cooling systems will cover air-cooled engines, heat exchanger, intercoolers and after coolers.
- The third year covers engine operation as pertains to transportation, marine and stationary applications plus troubleshooting, testing and engine operations.

Course Objective:

Students are prepared for entry-level positions in in the field. Students are able to diagnose problems on small engines such as ATV's, motorcycles and Jet Ski's then develop and implement a plan to repair. Students who complete the program will take an Industry credential test of ASE/NATEF T-1.

Course Requirements:

Students are required to pass all quizzes and tests, complete all projects in accordance with stated specifications, and demonstrate a competency using industry related resources and equipment.

Criteria for Assessing Student Performance:

- Class Participation – 50%
- Projects – 30%
- Tests/Quizzes – 20%

Textbooks, Software:

- Industry journals
- User manuals
- The students research to locate relevant resources to support their applications diagnosis and solving