



COURSE SYLLABUS
DIESEL TECHNOLOGY II
Fall 2022

PROGRAM TITLE: Diesel Technology II

DOE CODE: 5624

RECOMMENDED GRADE LEVELS: 12

PREREQUISITES: Diesel Technology I

HIGH SCHOOL CREDITS: 3 per semester (6 total per school year)

QR: This program qualifies as a quantitative reasoning course.

ELECTIVE INFORMATION: Counts as a Directed Elective or Elective for all diplomas

HOW WCC CAN HELP MEET GRADUATION PATHWAYS:

Pathway 1

CTE elective high school credits

Technical Honors Diploma

Pathway 2

Work-Based Learning

Pathway 3

Technical honors diploma

Industry Certification

2 Advanced CTE Courses

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PROGRAM DESCRIPTION: Diesel Technology II expands on the classroom and laboratory experiences from Diesel Technology I and focuses on all phases of diagnostic techniques and repair of diesel electrical systems used to power tractor trailers, electrical generators, construction and farm machinery, and similar equipment. Utilization of analog and digital meters, wiring diagrams, and other diagnostic tools are stressed as students are introduced to automotive electrical theory, batteries, charging systems, starting systems, wiring repairs, lighting systems, and accessories. Upon completion of this program, students are prepared for entry-level employment in the diesel technology industry. Students may also continue their education in 2 and 4-year degree programs at the postsecondary level.

MAJOR LEARNING OBJECTIVES:

1. Demonstrate employability skills to prepare for diesel service careers or additional training opportunities.
2. Construct personal goals to structure successful paths recognized by business and industry.
3. Analyze all components of diesel electrical systems to determine corrective actions needed for diagnosis and repair.

REQUIRED TEXT/CURRICULUM MATERIALS:

- Fundamentals of Medium/Heavy Duty Diesel Engines; 1st Edition; CDX Learning
- Fundamentals of Medium/Heavy Duty Diesel Systems; 2nd Edition; CDX Learning
- All-Data Online System
- SP2 Online Safety Training System
- Truck Series Online System

INDUSTRY CERTIFICATIONS AVAILABLE:

ASE (Automotive Service Excellence) Student Certification:

T2 - Diesel Engines

T4 - Brakes

T5 - Suspension & Steering

T6 - Electrical/Electronic Systems

T8 - Preventative Maintenance Inspection

Testing required. Fees may apply. Qualifies for THD and Pathway Industry-Recognized Certification.

DUAL CREDITS AVAILABLE:

DESL 130 Diesel Engine Systems
Vincennes University 3 credits

DESL 130L Diesel Engine Systems Lab
Vincennes University 3 credits

METHODS OF INSTRUCTIONAL DELIVERY:

This course will be delivered using a variety of delivery methods. Lecture, class discussion, lab work, and individual and group exercises and activities will be used to deliver the class material.

EVALUATION METHODS:

- Classroom work
- Lab work
- Dual credit course projects and exams
- Certification projects and exams
- Participation and attendance

GRADING CRITERIA:

Assignments are divided into three categories: Classwork (40%), Projects/Assessments (40%), and Work Ethic (20%). Work Ethic includes daily participation and engagement in the class.

GRADING SCALE:

A+	99-100%	C	72-77%
A	92-98%	C-	70-71%
A-	90-91%	D+	68-69%
B+	88-89%	D	62-67%
B	82-87%	D-	60-61%
B-	80-81%	F	59% and below
C+	78-79%		

ATTENDANCE AND DISCIPLINE:

WCC attendance and discipline policies will be followed as detailed in the Student Handbook.

REQUIRED CONSUMABLE MATERIALS AND EQUIPMENT:

- Student kit