

MINNESOTA WEST COMMUNITY & TECHNICAL COLLEGE

COURSE OUTLINE

DEPT. DSL

COURSE NUMBER: 1100

NUMBER OF CREDITS: 3

Lecture: 3 Lab: 0 OJT 0

Course Title:

Diesel Engine Theory

Catalog Description:

Diesel Engine Theory explains the function of the diesel combustion, chamber designs, valve train operation, rings, cylinders, pistons, crankshafts, connecting rods, and components that compliment basic engine theory.

Prerequisites or Necessary Entry Skills/Knowledge:

None

FULFILLS MN TRANSFER CURRICULUM AREA(S)

- Goal 1: Communication: By meeting the following competencies:
- Goal 2: Critical Thinking: By meeting the following competencies:
- Goal 3: Natural Sciences: By meeting the following competencies:
- Goal 4: Mathematics/Logical Reasoning: By meeting the following competencies:
- Goal 5: History and the Social and Behavioral Sciences: By meeting the following competencies:
- Goal 6: The Humanities and Fine Arts: By meeting the following competencies:
- Goal 7: Human Diversity: By meeting the following competencies:
- Goal 8: Global Perspective: By meeting the following competencies:
- Goal 9: Ethical and Civic Responsibility: By meeting the following competencies:
- Goal 10: People and the Environment: By meeting the following competencies:

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Topics to be Covered

Diesel combustion

Diesel engine components

Diesel engine operation

Student Learning Outcomes

Describe diesel combustion

Identify chamber designs

Explain how a valve train works

Discuss the function of rings, cylinders, pistons, crankshafts, connecting rods and other components that affect the function of the diesel engine.

Diagnose engine related issues

Identify tools necessary to measure component quality.

Is this course part of a transfer pathway: Yes No

Revised Date: August, 2021