

MINNESOTA WEST COMMUNITY & TECHNICAL COLLEGE

COURSE OUTLINE

DEPT. DSL

COURSE NUMBER: 2137

NUMBER OF CREDITS: 5

Lecture: 0 Lab: 5 OJT 0

Course Title:
Fuel Systems Lab

Catalog Description:
Fuel Systems Lab applies theory in the laboratory environment. Students will disassemble, inspect, evaluate, reassemble and calibrate a mechanical pump.

Prerequisites or Necessary Entry Skills/Knowledge:
DSL 1135

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:

Topics to be Covered
Distributor and inline mechanical fuel systems
Combination mechanical and electronic injection systems
Diagnosis, service and repair of fuel systems

Student Learning Outcomes
Determine different types of fuel delivery systems
Determine the effects of fuel grades on engine performance
Experiment with different types of governor systems
Inspect and analyze engine and fuel systems to determine methods to enhance performance
Differentiate distributor and inline pumps
Demonstrate how the governor and fuel system operate together
Diagnose and repair fuel system issues in diesel engines

Is this course part of a transfer pathway: Yes ☐ No ☒

Revised Date: 8/2021