

# MINNESOTA WEST COMMUNITY & TECHNICAL COLLEGE

## COURSE OUTLINE

DEPT. DSL

COURSE NUMBER: 2155

NUMBER OF CREDITS: 3

Lecture: 1 Lab: 2 OJT 0

### Course Title:

Diesel Engine Control Systems

### Catalog Description:

Diesel Engine Control Systems explains the operation of all the different governors and electronically controlled engines.

### 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:

### Topics to be Covered

Governors

Electrically Controlled Engines

Computer Programs

Computer Diagnostics

Engine Specifications

### Student Learning Outcomes

Control engine speed with governors

Operate electronically controlled engines

Operate different types of engines with computer programs

Analyze fault codes

Diagnose and repair engine systems according to manufacturers' specifications

Is this course part of a transfer pathway: Yes  No

Revised Date: 8/2021