

# MINNESOTA WEST COMMUNITY & TECHNICAL COLLEGE

## COURSE OUTLINE

DEPT. TRAN

COURSE NUMBER: 1145

NUMBER OF CREDITS: 2

Lecture: 1 Lab: 1 OJT: 0

### Course Title:

Engine Performance I

### Catalog Description:

Engine Performance I identifies the proper techniques necessary to diagnose and repair OBDI I computer systems using diagnostic equipment. This course also covers fuel system components testing and repair.

### Prerequisites or Necessary Entry Skills/Knowledge:

None

### FULFILLS MN TRANSFER CURRICULUM AREA(S) (*Leave blank if not applicable*)

- 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

Emission systems

Fuel systems

Scanners, factory and manufacturer

Resource, skills, and information management

| <b>Student Learning Outcomes</b> |
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| Explain vehicle emission systems |
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| Test fuel system/pressure |
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| Service system filters |
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| Utilize scan tool |
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| Explain diagnostic code |
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| Analyze diagnostic code |
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| Comply with personal and environmental safety practices associated with clothing; eye protection; hand tools; power equipment; proper ventilation; and the handling, storage, and disposal of chemicals/materials in accordance with local, state, and federal safety and environmental regulation. |
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| *The required outcomes follow the Auto Service Technician (AST) model of the Board of the National Institute for Automotive Service Excellence (ASE) |
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| <b>Is this course part of a transfer pathway: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></b> |
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Revised Date: 04/2022