Faculty members are required to have the outline submitted to the Academic Affairs Office. The course outline is the form used for approval of new courses by the Academic Affairs and Standards Council.

DEPT. TRAN COURSE NUMBER: 1145

NUMBER OF CREDITS: 2 Lecture: 1 Lab: 1

Course Title:
Engine Performance I

Catalog Description:
Students will demonstrate the proper techniques necessary to diagnose and repair OBDI I and OBDI II computer systems using diagnostic equipment. This course also covers fuel system components testing and repair.

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:

Prerequisites or Necessary Entry Skills/Knowledge:
None
### Topics to be Covered
- Domestic computer system fundamentals
- Import sensors, throttle body injection, port fuel injection
- Scanners, factory and manufacturer
- Manage resources, skills, and information
- Solve problems
- Work interdependently

### Student Learning Outcomes
- Identify and interpret engine performance concerns
- Diagnose abnormal engine vibrations
- Perform cylinder leakage test
- Diagnose ignition/fuel related problems
- Inspect, service, or replace filters

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

*If yes, please list the competencies below*

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Revised 1/20