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:

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.

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<th>Is this course part of a transfer pathway:</th>
<th>Yes</th>
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