# Heating and Air Conditioning Systems

## Catalog Description:
Heating and Air Conditioning Systems analyzes cab heating and ventilation systems used in all types of units used in the industry today as well as servicing and repair of the system for comfort of in-cab climate. The course discusses concerns that need to be addressed when making repairs to the heating and air conditioning system.

## 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
- Air conditioning components.
- Heating systems
- Electrical operation
- Temperature control

## Student Learning Outcomes
- Discuss the operation of air conditioning systems
- Illustrate how heating and ventilation systems work together and on their own
- Diagnose and repair heating and ventilation systems
- Practice reclaiming and recharging of air conditioning systems according to EPA standards
- Explain flushing procedures in heating and air conditioning systems
Determine system cycle events

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

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