## Course Title:
Heating and Air Conditioning Controls

## Catalog Description:
Heating and Air Conditioning Controls introduces basic heating and cooling system installation, control and troubleshooting.

## 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
- Installation and troubleshooting of heating and cooling systems
- Electrical symbols and diagrams
- Wiring of heating and cooling systems

## Student Learning Outcomes
- Identify electrical symbols
- Examine schematic diagrams
- Identify components of heating and cooling systems
- Describe electric heating systems including forced air and boiler
- Describe gas heating systems including forced air and boiler
<table>
<thead>
<tr>
<th>Describe Cooling systems</th>
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<tbody>
<tr>
<td>Wire electrical power for heating, ventilation and cooling systems</td>
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<tr>
<td>Wire electrical controls for heating, ventilation and cooling systems</td>
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<tr>
<th>Is this course part of a transfer pathway:</th>
<th>Yes</th>
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Revised Date: 02/14/2020