

**Air Conditioning, Heating and Refrigeration Technology
Program Level Student Learning Outcomes**

Students completing the Air Conditioning, Heating and Refrigeration Technology Program will be able to:

1. Work safely and in accordance with all applicable regulations and codes to ensure personal and public safety.
2. Demonstrate how to charge air-conditioning units.
3. Diagnose electrical and electronics problems. Repair electrical and electronics problems.
4. Install heating, refrigeration, air conditioning systems, and associated components.
5. Interpret air conditioning, heating, and refrigeration schematic diagrams
6. Demonstrate how to select and use a variety of heating, refrigeration, and air conditioning tools and equipment safely and properly.
7. Solve math and applied science problems required to effectively install and maintain heating, refrigeration, and air conditioning systems, and associated components.
8. Predict and troubleshoot heat pump systems.

ACR 111 - Upon completion, students should identify system components and understand their functions, identify and use common and specialty HVAC/R tools, and maintain components of a basic compression refrigeration system.

ACR 112 - Upon completion, students should be able to properly recover/recycle refrigerants and demonstrate safe, correct service procedures which comply with the no-venting laws.

ACR 113 - Upon completion, students should comprehend related terminology, and be able to fabricate pipe, tubing, and pipe fittings.

ACR 119 - Upon completion, students will be able to install and service gas furnaces in a wide range of applications.

ACR121 - Upon completion students should understand and be able to apply the basic principles of HVACR circuits and circuit components.

ACR 122 - Upon completion, student should understand standard wiring diagrams and symbols and be able to construct various types of electrical circuits.

ACR 123 - Upon completion, students should be able to install electrical components and determine their proper operation.

ACR 126 - . Upon completion, student should be able to troubleshoot and perform general maintenance on commercial heating systems

ACR 132 - Upon completion, students will be able to service and repair residential air conditioning systems.

ACR 135 - Upon completion, students should be able to apply code requirements to all work.

ACR 148 - Upon completion students will be able to install and service heat pumps in a wide variety of applications.

ACR 203 - . Upon completion students should be able to service and repair commercial refrigeration systems.

ACR 209 - Upon completion, the student should be able to troubleshoot and perform general maintenance on commercial and residential HVAC/R systems.