

HVAC2-115: Refrigeration 1

Course Description:

Studies and calculations are made of the basic refrigeration cycle using the Mollier Diagram. The operation of the major parts is discussed along with the use of service tools such as gauges, meters, vacuum pumps, and refrigeration recovery. Gain a knowledge of basic refrigeration.

Total Credits: 4.00

Course Competencies

- 1. Describe basic air conditioning and refrigeration terminology, thermodynamics, and refrigeration cycle.**
- 2. Demonstrate proper use of basic tools use in refrigeration and air conditioning.**
- 3. Demonstrate the principles of Pressure Enthalpy Diagrams (Mollier).**
- 4. Perform charging, evacuating, and recovery of a refrigeration system.**

Requirements for CPLE to be issued:

Professional Experience Requirement:

- A minimum of three (3) years of verifiable experience field experience with an HVAC/R contractor or within a facility performing HVAC/R maintenance in-house.
- EPA 608 Universal Technician Certification

Verification of Experience:

- Candidates are required to provide documented evidence of their work experience, on company letterhead, including but not limited to:
 - Employment records or letters of recommendation from previous employers.
 - Certificates of completion for relevant training programs or workshops.
 - Any other verifiable documentation substantiating the candidate's experience in commercial refrigeration and air conditioning equipment maintenance/service.