
Student Syllabus

Course Title: HVAC Technician Training
Course Code: HART 1038
Course Length: 120 hours

Course Description: Course designed for entry into the workforce with skills and knowledge for increased productivity in the commercial or residential markets. This course includes Residential, Commercial and Industrial refrigeration and Building Management Systems, trade mathematics, theory and troubleshooting.

Learning Outcomes: Given lecture, handouts and discussion, the student will be able to:
Define the basic principles of HVAC
Explain how to solve problems using trade math
Identify and demonstrate selection, preparation, joining and support for copper and plastic piping and fittings
Select and demonstrate tools, materials and safety precautions for soldering and brazing
Identify types of iron and steel pipe and fittings.
Explain power generation, distribution, electrical components, DC circuits and safety
Explain heat transfer, refrigeration and pressure-temperature relationship principles.
Describe/demonstrate air distribution systems and their components

Pre-requisites: None

Course Structure: Content: 240.0 hours

- Safety
- Tools
- Blueprints
- Introduction to HVAC
- Trade Mathematics
- Copper and Plastic Piping Practices
- Soldering and Brazing
- Ferrous Metal Piping Practices
- Basic Electricity/Alternating Currents
- Introduction to Cooling
- Introduction to Heating
- Air Distribution Systems
- Commercial Air Side Systems
- Chimneys, Bents, Flues

Schedule: Tri-Weekly 6:00 PM - 9:00 PM

Evaluation: Student Assessments, Passing 70%

Books: Handouts will be supplied

Reference: NCCER Core and HVAC Level 1- 4 Trainee Guides

Course Outline

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Workforce Education

Delivery Method: Classroom / Lecture/ Lab
Small group discussions

Audience: General

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