

# *CEFA*

## Course descriptions

All course material used by CEFA is the Contren Learning Series. Nationally recognized credentials are earned upon successful completion of each module.

### **Core Curriculum** (a pre-requisite to ALL craft courses)

72.5 Hours

Consists of covering Basic Safety, Introduction to Construction Math; Introduction to Hand Tools, Introduction to Power Tools, Introduction to Blueprints, Basic Rigging

### **HVAC**

#### **Level 1**

Consists of: Introduction to HVAC; Trade Mathematics; Tools of the Trade; Copper and Plastic Piping Practices; Soldering and Brazing; Basic Electricity; Introduction to Cooling; Introduction to Heating; EPA, 508, R410A

#### **Level 2**

Consists of: Air Distribution Systems; Chimneys, Vents and Flues; Maintenance Skills for the Service Technician; Alternating Current; Basic Electronics; Electric Heating; Introduction to Control Circuit Troubleshooting; Accessories and Optional Equipment; Metering Devices; Compressors; Heat Pumps; Leak Detection, Evacuation, Recovery, and Charging; HVAC Excellence

#### **Level 3**

Consists of: Planned Maintenance; Troubleshooting Gas Heating; Troubleshooting Electric Heating; Troubleshooting Oil Heating; Troubleshooting cooling; Troubleshooting Heat Pumps; Troubleshooting Accessories; Troubleshooting Electronic Controls; Hydronic Heating and Cooling Systems; Airside Systems; Air Properties and Air System Balancing

#### **Level 4**

Consists of: Advanced Blueprint Reading; Indoor Air Quality; Energy Conservation Equipment; Building Management Systems; Water Treatment; System Startup and Shutdown; Heating and Cooling System Design; Commercial and Industrial Refrigeration; HVAC Excellence