

Heating, Ventilation, Air Conditioning, And Refrigeration

Mode of Delivery	Residential
Credential Awarded	Diploma
Contact Hours	960
Program Quarter Credits	64
Instructional Weeks	48
Total Clock Hours	Including Homework Hours: 1,600

Objective

The objective of the program is to provide the student with the skills and knowledge required for entry-level employment in the Heating, Ventilation, Air Conditioning and Refrigeration industry. The program is designed to be comprehensive in nature, including extensive hands-on training, covering service for residential and commercial refrigeration, gas and oil furnaces, heat pumps, electric furnaces, and air conditioning equipment.

Description

The Heating, Ventilation, Air Conditioning & Refrigeration program is designed for persons interested in a career in the field of climate control systems, focusing on learning objectives identified as the key knowledge points for an HVACR Technician. The student will be adept at using a variety of tools to work with refrigerant lines and air ducts. They use voltmeters, thermometers, pressure gauges, manometers, and other testing devices to check airflow, refrigerant pressure, electrical circuits, burners, and other components. Students will be required to take and pass the EPA certification exam. Students are trained to work as heating, air conditioning and/or refrigeration service technicians in both residential and commercial sites.

Credentialing Exams

This program prepares students for the following EPA Recovery, Recycling and Reclaim Certifications: Type I Small Appliance, Type II Split System and Heat Pumps, and Type III Low-pressure and Chillers.

Career Opportunities

Upon satisfactory completion of the program, students will be able to assume entry-level positions as heating, air conditioning, and refrigeration technicians in both residential and commercial sites. The graduate will be adept at using a variety of tools, including acetylene torches, manifold gages, volt meters, recovery machines, manometers, air velocity meters, and other tools to diagnose and repair must types of equipment.

Plan of Study

Course Code	Name	Contact Hours	Clock Hours	Credits	Quarter Credits
SKW101	Introduction to the Skilled Professions	0	60	0	4
HVR105	Thermodynamics	0	60	0	4
HVR110	Practical Applications of Electricity	0	60	0	4
HVR115	HVACR Controls	0	60	0	4

HVR120	Controls, Motors, and Motor Controls	0	60	0	4
HVR125	Refrigerants	0	60	0	4
HVR130	Residential Air Conditioning	0	60	0	4
HVR140	Commercial Refrigeration Concepts	0	60	0	4
HVR141	Industrial Refrigeration and Commercial Air Conditioning	0	60	0	4
HVR150	Electric Heat and Heat Pumps	0	60	0	4
HVR155	Gas Heating Systems	0	60	0	4
HVR160	Oil Heating Systems	0	60	0	4
HVR165	System Performance	0	60	0	4
HVR170	Water-Based Heating Systems	0	60	0	4
HVR175	HVAC Troubleshooting and Service Calls	0	60	0	4
HVR180	EPA Certification Preparation	0	60	0	4

Schedule

Morning: 9:00 a.m. to 2:30 p.m. Monday through Thursday

Evening: 5:30 p.m. to 10:30 p.m. Monday through Thursday