



Heating, Ventilation, Air Conditioning, & Refrigeration Technology

The HVAC & R program is an individual program that prepares students to work in a variety of jobs in the field of air conditioning and refrigeration. Students are prepared to troubleshoot, repair, and maintain residential and commercial refrigeration; air conditioning; heat pumps; humidifiers; and electrical and gas heating. Students also learn the fundamentals of electricity, electric motors, and controls. Graduates of the program will be able to install and braze refrigeration tubing, diagnose electrical problems; install duct systems; repair light commercial equipment; recover air conditioning and refrigeration refrigerants; locate and repair leaks.

Program/Location	Length	Days	Time
Day Program/ Knoxville Campus	16 Months	Monday-Friday	8:00am—2:30 pm
Night Program/Knoxville Campus	16 Months	Monday-Friday	3:30 pm—10:00 pm
Day Program/Strawberry Plains	16 Months	Monday-Friday	8:00am—2:30 pm

Curriculum/Courses	Completion Award	Required Hours
HVA 0001 Worker Characteristic		
HVA 1010 Technology Foundations	HVAC Mechanic Assistant	Certificate 432
HVA 1020 OSHA		
HVA 1030 Shop Safety	Domestic Unit Repair	Certificate 864
HVA 1040 Refrigeration Fundamentals	Heating, Ventilation, and Air	Diploma 1296
HVA 1050 Tools Equip & Shop Practices	Conditioning Technician	
HVA 1060 Electricity and Controls I	Heating, Ventilation, Air	Diploma 1728
HVA 1070 Installation	Conditioning and Refrigeration	
HVA 1080 Green Awareness	Technician	
HVA 1090 Employment Readiness Exam		
HVA 0002 Worker Characteristic		
HVA 2010 Introduction to System Service		
HVA 2020 Basic Automatic Controls		
HVA 2030 Motors		
HVA 2040 Domestic Appliances		
HVA 2050 EPA		
HVA 2060 Employment Readiness Exam		
HVA 0003 Worker Characteristic		
HVA 3010 Gas Electric and Heat		
HVA 3020 Air Conditioning (Cooling)		
HVA 3030 Heat Pumps		
HVA 3040 Carbon Monoxide		
HVA 3050 All Weather Systems Exam		
HVA 0004 Worker Characteristic		
HVA 4010 Electricity and Controls II		
HVA 4020 Commercial Refrigeration		
HVA 4030 Employment Readiness Exam		

HOW TO APPLY

All Documents Must be Presented Together to Apply

- ⇒ Complete the **Free Application For Federal Student Aid (FAFSA)** online – the website is www.fafsa.ed.gov and our school code is 004025.
- ⇒ Complete **TCAT Knoxville Application for Enrollment** online at <https://apply.tbr.edu/?tcat=knoxville>