HVAC Technician

LEARNING OBJECTIVES

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So, you want to be an HVAC/R (Heating Ventilation Air Conditioning Refrigeration) tech. Here's why that's a smart decision: HVAC/R technician is one of the most in-demand jobs in the market—and opportunities are expected to skyrocket over the next ten years. Why? Because heating and air conditioning units aren't a luxury—they're a basic necessity—and as businesses expand and neighborhoods grow, the need for professionals with a working knowledge of what it takes to keep these machines up and running will continue to increase.

But, if you want to take advantage of the fantastic pay and long-term job security, you need to brush up on your HVAC/R knowledge. Through a combination of theoretical and practical applications, this course will teach you how each system works and prep you for a number of entry-level positions in the field.

Fundamentals

- Define standard terms and jargon.
- Explore core competencies required for success.
- Review the basic (and necessary) tools of the trade.

HVAC Science

• Learn how to calculate system capacity.

Refrigeration Systems and Components

• Explore the inner workings of refrigerators.

Refrigeration Practices

• Learn the best approach when inspecting or repairing a refrigeration system.

HVAC/R Electrical Systems and Components

• Find out how basic mechanics keep HVAC/R systems running.

Air Conditioning Systems

• Explore the inner workings of air conditioning units.

Heating Systems

• Explore the inner workings of heating units.

Heat Pump Systems

• Find out what heat pumps do and how they work.

System Design, Sizing, and Layout

• Discuss the various residential and commercial HVAC designs you'll encounter out in the wild.

Commercial Environmental Systems

• Review how HVAC/R units are built to reduce environmental impact.

Commercial Refrigeration Systems

• Learn the difference between residential refrigerators and the systems required for commercial use.

Installation, Maintenance, Service, and Troubleshooting

• Learn how to install, maintain, and repair HVAC/R systems.

