

# INTRODUCTION TO HVAC - (QUICKSKILLS) CERTIFICATE - HVA7

Introduction to HVAC certificate is a “stackable certificate” that is embedded in the HVAC Associate in Applied Science Degree. Classroom and in shop training focuses on basic principles and theories of HVAC, specialized tool usage, and the opportunity to obtain the Environmental Protection Agency 608 certification. The A2L Refrigerant Certification exam will also be offered. Students develop knowledge of the refrigeration cycle, basic components of the refrigeration cycle, and an understanding of thermodynamics through the refrigeration cycle. OHM's law, the proper usage of the volt/ohm meter, and the skills to interpret readings of the meter are cultivated within the certificate. Familiarization of major tools and equipment used in metal fabrication and proper usage of the tools and equipment are part of skills acquired through hands on training. Courses in the Introduction to HVAC certificate place a strong emphasis on safety with proper usage of personal protection equipment, tag out/lock out policies and procedures, and a general overview of safety in the industry. Students entering this program will develop knowledge and skills for entry-level employment as installers or mechanics in the air conditioning, refrigeration, and heating industry. It also provides supplemental training for persons previously or currently employed in the field.

## Student Learning Outcomes

1. Use most tools and meters associated with the air conditioning and refrigeration industry.
2. Apply safety rules and regulations when working.
3. Install, repair, and service most light commercial refrigeration systems.
4. Use a wiring schematic in troubleshooting most air conditioning, heating, and refrigeration systems.

## Requirements

Courses	Course Title	Credit Hours
<b>Required Course Information</b>		
ACR 102	Tools and Service Techniques	3
ACR 106	Basic Electricity for HVAC/R	4
ACR 108	Refrigeration Fundamentals	3
ACR 150	Basic Sheet Metal	2
ACR 175	EPA 608 Certification Preparation	1
Subtotal		13
<b>Total Hours</b>		<b>13</b>

## Application and Advising

If you are ready to start your education, there are a few simple steps involved in enrolling at Piedmont Technical College.

Get Started Today (<https://www.ptc.edu/admissions/new-students/>)

## Student Program learning Outcomes

### Purpose Statement

The HVAC Introduction to HVAC certificate is dedicated to assisting adult learners in the development of the skills and knowledge necessary to the student's success and to support their educational goals for entry level employment and professional growth in the HVAC field.