



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. 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 is also provides supplemental training for persons previously or currently employed in the field.

2. Apply safety rules and regulations when working.
3. Construct and install most air condition and ventilation air duct systems.
4. Interpret pressure/ temperature readings associated with most types of air conditioning and refrigeration systems.
5. Obtain EPA 608 certification.

Requirements

Courses	Course Title	Credit Hours
Required Course Information		
ACR 101	Fundamentals of Refrigeration	5
ACR 105	Tools and Service Techniques I	1
ACR 106	Basic Electricity for HVAC/R	4
ACR 150	Basic Sheet Metal	2
Subtotal		12
Total Hours		12

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.

Student Learning Outcomes

1. Use most tools and meters associated with the air conditioning and refrigeration industry.