

**RELATED INSTRUCTION OUTLINE OF THE  
HVAC CURRICULUM**

<b>HVAC LEVEL 1</b>			
<b>Module #</b>	<b>Module Name</b>	<b>Module Objectives</b>	<b>Perf. Profile</b>
1	03101-13 Introduction to HVAC	This module provides a broad introduction to the world of the HVAC technician. The most basic operating principles of HVAC systems are presented along with a review of technician licensing and trade-governing regulations. The final portion of the module describes potential career paths for well-trained HVAC technicians.	No
2	03102-13 Trade Math	This module reinforces and extends the math skills reviewed in the Core Curriculum. Common skills practices include calculations for units of measurement in both the inch-pound and metric systems. Basic algebraic equations are practiced along with the identifying characteristics of various geometric figures.	No
3	03106-13 Basic Electricity	This module introduces the concepts of power generation and distribution, common electrical components, AC and DC circuits, and electrical safety as it related to the HVAC field. The basic concepts of reading and interpreting wiring diagram are also introduced.	Yes
4	03108-13 Introduction to Heating	This module provides HVAC technicians with an overview of common residential heating systems. Fundamental concepts of heating and combustion systems are described with an emphasis on gas forced-air heating systems. Hydronic heating systems and different types of electric forced-air heating systems are also described.	Yes
5	03107-13 Introduction to Cooling	This module introduces the fundamental concepts of the mechanical refrigeration cycle and examples of the primary components required to make it work. Some common refrigerants and their characteristics are also introduced. Upon completion, trainees will be able to identify typical pressure and temperature measuring instruments and some of the most common primary and secondary controls.	Yes
6	03109-13 Air Distribution Systems	This module introduces the fundamental concepts of air movement and explains how these concepts form the basis for air distribution system design. With an understanding of these fundamentals, trainees are introduce to air measurement devices and the mechanical equipment used to initiate and maintain air movement. Trainees will practice using various air measurement devices and interpret charts related to air distribution system sizing.	Yes
7	03103-13 Basic Copper and Plastic Piping Practices	This module introduces the various types of copper tubing and plastic piping and the various fittings that are used with them in the HVAC industry. This module focuses on handling, cutting, bending, and mechanically joining copper tubing and plastic piping.	Yes
8	03104-13 Soldering and Brazing	This module explains soldering and brazing as the two methods used for joining copper tubing and fittings. It describes the safety equipment, tools, and materials needed for soldering and brazing copper tubing in various applications.	Yes
9	03105-13 Basic Carbon Steel Piping Practices	This module provides basic knowledge and skills needed to thread and install carbon steel piping systems. In addition, the concepts of assembling and installing grooved piping systems are also presented. Also provides coverage of basic piping system installation considerations and coverage of piping system hangers and supports.	Yes