



1-DAY COURSE SYLLABUS

Introduction to HVAC Systems for Non-Technical Individuals

HVBE06-ONL26 · ONLINE (ZOOM)

This course provides a comprehensive introduction to HVAC systems tailored specifically for non-technical individuals. Whether you are a building owner, facility manager, or simply curious about how HVAC systems work, this course provides the foundational knowledge you need to understand these complex systems. Starting from the basics, this course introduces the core principles of HVAC systems in an accessible and jargon-free manner. Participants will gain insight into the fundamental components of HVAC systems and learn about different types of HVAC systems commonly found in residential, commercial, and industrial settings. Participants will have a solid understanding of how HVAC systems operate and the key considerations of the HVAC system selection process.

CEUS / PDHS	INSTRUCTOR	DAYS	PRICE	WORKSHOPS	SKILL LEVEL	COURSE CODE
0.6 / 6	Dr. Mohamed Hamed, PhD, P.Eng., FEC	1	\$495.00 CAD	None	Beginner	HVBE06- ONL26

DESCRIPTION

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WHAT YOU WILL LEARN

- Meaning of Air Conditioning and Comfort
- Common HVAC terminology and concepts explained in simple terms
- An overview of Various Types HVAC systems
- Guidelines for HVAC systems Selection

COURSE OUTLINE

- 01 Overview of HVAC system components and functions
- 02 Heating and Cooling Processes
- 03 Types of HVAC Systems including single-zone and multi-zone systems
- 04 Selection of HVAC Systems for Various Applications

WHO SHOULD ATTEND

- Non-technical individuals who would like to manage their building's HVAC systems
- Those looking to communicate more effectively with HVAC professionals
- Those looking to enhance their general HVAC knowledge
- Anyone seeking essential insights to navigate the world of HVAC systems with confidence

REGISTER NOW →

Customize this course — We can offer a customized version of this course, in terms of duration and content, upon request.

REQUEST CUSTOMIZATION

DAILY SCHEDULE

1-Day Course Schedule

START

10:00 AM EST

END

5:00 PM EST

FORMAT

Live Online

One-hour lunch break each day, plus refreshment and networking breaks each morning and afternoon session.

DAY	TOPIC	SUBTOPICS
DAY 1	Overview of HVAC System Components and Functions	· The meaning of Air Conditioning · Comfort conditions
	Heating and Cooling Processes on the Psychrometric Chart	· Moist-air properties · The Psychrometric chart
	Types of HVAC Systems - Single-zone systems	· Packaged terminal air conditioner · Packaged DX rooftop unit · Split DX system · Chilled-water terminal system · Dedicated outdoor-air system · Variable-air-volume (VAV) system
	Types of HVAC Systems: Multiple-zone systems	· Multi-zone air handling unit (AHU) · Changeover-bypass system · DX rooftop VAV system · Packaged self-contained VAV system · Central chilled-water VAV system · Two-fan, dual-duct VAV system
	Selection of HVAC Systems for Various Applications	· Factors affecting selection · Selection maps for single-purpose occupancies · Selection maps for multi-purpose occupancies