



2-DAY COURSE SYLLABUS

Psychrometry of HVAC Systems

HVBE07-ONL26 · ONLINE (ZOOM)

This course is designed to help you master Psychrometry and the Psychrometric chart, crucial tools for understanding HVAC systems. Mastering Psychrometry and the Psychrometric chart is essential for anyone working with HVAC systems. This course focuses on using the Psychrometric chart to determine moist air properties and to represent, analyze, and understand various air conditioning processes and cycles. The material is introduced in a way that's accessible for beginners while also offering valuable insights for experienced professionals.

CEUS / PDHS	INSTRUCTOR	DAYS	PRICE	WORKSHOPS	SKILL LEVEL	COURSE CODE
1.1 / 11	Dr. Mohamed Hamed, PhD, P.Eng., FEC	2	\$995.00 CAD	None	Beginner	HVBE07 - ONL26

DESCRIPTION

This course is designed to help you master Psychrometry and the Psychrometric chart, crucial tools for understanding HVAC systems.

Mastering Psychrometry and the Psychrometric chart is essential for anyone working with HVAC systems. This course focuses on using the Psychrometric chart to determine moist air properties and to represent, analyze, and understand various air conditioning processes and cycles. The material is introduced in a way that's accessible for beginners while also offering valuable insights for experienced professionals.

WHAT YOU WILL LEARN

- Gain a solid understanding of moist air properties and the Psychrometric chart
- Perform sizing calculations for air conditioning system components
- Analyze and select appropriate part-load control strategies for HVAC systems

COURSE OUTLINE

- 01
- Moist Air Properties
- 02
- The Psychrometric Chart
- 03
- Moist Air Processes
- 04
- Air-Conditioning Cycles
- 05
- Control Strategies at Part-Load

WHO SHOULD ATTEND

- Design and project engineers
- Architects
- Technologists
- Plant and facility engineers
- Consultants
- Mechanical engineers and technologists
- Maintenance and operation personnel
- Other technical personnel needing to develop/upgrade/refresh their HVAC system knowledge
- Engineering students

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

2-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 I	Psychrometry	- Moist air properties - The Psychrometric chart - Moist air processes
	HVAC System Cycles	- System layout - Supply air conditions
DAY II	HVAC System Cycles - Continued	- Typical cooling and heating cycles - at full load - Coil selection - Cooling and heating capacity
	Part-load Control of HVAC Systems	- Control strategies - constant air volume and variable air volume - Reheat system - Dual duct system - Face and by-pass system - VAV system