



2-DAY COURSE SYLLABUS

Air-Handling Equipment and Systems

HVBE08-ONL26 · ONLINE (ZOOM)

This course provides a comprehensive overview of air-handling equipment, fan types, air filters, and air distribution, offering essential insight for both beginners and experienced professionals. It covers various types of air-handling equipment, fan performance and selection, types and selection of air filters, as well as duct design, sizing, and the selection of air diffusers and grills. The material is accessible for individuals with little background in HVAC systems while providing valuable information for more 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	1 workshop	Beginner	HVBE08 - ONL26

DESCRIPTION

This course provides a comprehensive overview of air-handling equipment, fan types, air filters, and air distribution, offering essential insight for both beginners and experienced professionals.

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WHAT YOU WILL LEARN

- Gain a solid understanding of air-handling equipment and systems used in various HVAC systems
- Learn systematic procedures for fan selection and performance evaluation
- Understand the fundamentals of air cleaning and filter selection
- Perform duct layout and sizing calculations
- Size and select appropriate supply diffusers and return grills

COURSE OUTLINE

- 01 Air-Handling Equipment
- 02 Fans – Types, Performance and Selection
- 03 Air Filter – Fundamentals and Selection
- 04 Duct Design, Layout, and Sizing
- 05 Air Distribution Devices – Sizing and Selection

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 knowledge of HVAC systems
- 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	Air-Handling Equipment and Systems	- Types of equipment - Applications in different building types
	Fan Types and Selection	- Classification of fans - Performance curves - Selection procedure
	Air Filter Fundamentals and Selection	- Air filter types - Selection criteria - Maintenance considerations
DAY II	Duct Design, Layout, and Sizing	- Duct design principles - Layout methods - Sizing calculations
	Supply Diffusers and Return Grills	- Types of diffusers and grills - Selection guidelines - Integration into duct systems
	Workshop	Design a duct system under instructor guidance