ASHRAE eLearning Course Catalog
Web-based, On-Demand Training

ASHRAE Learning Institute

EDUCATION **PARTNER**

Virtual Learning for Your Team
Affordable, Convenient, Effective!

5 Great Reasons to Use ASHRAE eLearning:

Easy Administration: No special software required. Transcripts maintained automatically. Free tracking reports.

Economical: 12 months of access. No travel expenses. Save even more with corporate discounts.

Expertise: Created by HVAC&R professionals using ASHRAE's extensive pool of knowledge.

Convenient: Employees can train around their work schedule from any computer with Internet access.

Flexible: Choose from more than 90 courses and a wide variety of 12 month subscription options, including individual Courses, Packages and Libraries.

"A great resource. The short time spent taking the course at my own convenience is equal in value to months of working experience."

—Brian Randleman, Design Specialist, Climatec BTG

To Order: https://elearning.ashrae.org | For more Information: eLearning@ashrae.org | 678-500-3917

Course Packages

Building Performance

PDHs: 10.0
Price: $116 | ASHRAE Member: $89

The following courses are included:

- Commissioning
- Integrated Design
- School of Hard Knocks: Controlling Moisture and Humidity in Buildings

System Design

PDHs: 5.0
Price: $119 | ASHRAE Member: $90

The following courses are included:

- Introduction to HVAC Design
- The Design Process
- HVAC System Selection Issues

Sustainability

PDHs: 32.5
Price: $312 | ASHRAE Member: $237

The following courses are included:

- Basics of Sustainable Design
- Energy Conservation
- LEED Guidance
- Indoor Environmental Quality
- Ventilation and IAQ
- AEDG Small Office Building Lighting
- AEDG Small Retail Buildings Design Strategies & Recommendations
- Achieving Zero-Energy Building Design

Loads and Modeling

PDHs: 3.5
Price: $81 | ASHRAE Member: $60

The following courses are included:

- Building Information Modeling
- Load Calculations

Fundamentals: HVAC Systems – (I-P)

PDHs: 19.5
Price: $364 | ASHRAE Member: $275

The following courses are included:

- Introduction to HVAC Design
- Introduction to HVAC Systems
- Indoor Environmental Conditions for Human Comfort
- Load Calculations
- Essentials of Controls
- Humidity Control Design: Basic Principles, Loads and Equipment
- Ventilation and IAQ
- Psychrometrics
- Ethics for the Built Environment Professional Engineer

Fundamentals: HVAC Systems – (SI)

PDHs: 19.5
Price: $364 | ASHRAE Member: $275

The following courses are included:

- Introduction to HVAC Systems
- Indoor Environmental Conditions for Human Comfort
- Ventilation and IAQ
- Essentials of Controls
- Humidity Control Design: Basic Principles, Loads and Equipment
- Ethics for the Built Environment Professional Engineer
- Central Plants
- Introduction to HVAC Design
- Psychrometrics

Components and Equipment

PDHs: 11.5
Price: $231 | ASHRAE Member: $176

The following courses are included:

- Air-Conditioning System Components: Heat Transfer Equipment
- Air-Conditioning System Components: Pumps, Valves, Piping and Ductwork
- Building Control
- Introduction to Zones
- Single Zone Air Handlers and Unitary Equipment
- Multiple Zone Air Systems

I-P – Inch Pound   SI – Metric Units   Dual – Both I-P and SI Units

System Essentials

PDHs: 9.5
Price: $156 | ASHRAE Member: $120

The following courses are included:

- Central Plants
- Air-and-Water Systems
- Controls
- Energy Conservation

Air Systems

PDHs: 2.5
Price: $116 | ASHRAE Member: $89

The following courses are included:

- Introduction to All-Air Systems
- Dual-Duct and Multizone All-Air Systems
- Simple Rooftop All-Air Systems

Hydronic Systems

PDHs: 11
Price: $154 | ASHRAE Member: $118

The following courses are included:

- All-Water Systems
- Hydronic Systems
- Hydronic Systems Architecture
- Controls

Special Systems

PDHs: 7.0
Price: $77 | ASHRAE Member: $59

The following courses are included:

- Special HVAC Systems
- Special Applications

DDC Controls – (I-P)

PDHs: 10
Price: $119 | ASHRAE Member: $90

The following courses are included:

- DDC Networks and Protocols
- DDC Specification, Installation and Commissioning
- DDC Introduction to Hardware and Software

DDC Controls – (SI)

PDHs: 9.0
Price: $77 | ASHRAE Member: $59

The following courses are included:

- DDC Introduction to Hardware and Software
- DDC Specification, Installation and Commissioning

HVAC Control Systems – (I-P)

PDHs: 33.5
Price: $347 | ASHRAE Member: $265

The following courses are included:

- Essentials of Controls
- Basics of Electricity
- Control Valves and Dampers
- Sensors and Auxiliary Devices
- Self-and System-Powered Controls
- Electric Controls
- Pneumatic Controls
- Control Diagrams and Sequences
- DDC Networks and Protocol

HVAC Control Systems – (SI)

PDHs: 23.5
Price: $193 | ASHRAE Member: $147

The following courses are included:

- Basics of Electricity
- Control Valves and Dampers
- Control Diagrams and Sequences
- DDC Introduction to Hardware and Software
- DDC Specification, Installation and Commissioning

Data Center Design

PDHs: 5.5
Price: $154 | ASHRAE Member: $118

The following courses are included:

- Computer Cooling Equipment
- Airflow, Equipment Placement and Heat Release
- Liquid Cooling and Facility Cooling Systems
- Building Facility and Chilled-Water Systems

I-P – Inch Pound   SI – Metric Units   Dual – Both I-P and SI Units

AC and Refrigeration Principles

PDHs: 5.0
Price: $123 | ASHRAE Member: $92

The following courses are included:

- Psychrometrics
- Refrigeration System Parameters and Performance
- Compressors

Refrigerants – (SI)

PDHs: 11.0
Price: $168 | Member Price: $0
The following courses are included:

- Introduction to Refrigerants
- Refrigerant Selection
- Refrigerant Management
- Refrigerants Handling for Technicians - Best Practices

Standard 62.1: Ventilation for Acceptable Indoor Air Quality

PDHs: 10.1
Price: $193 | ASHRAE Member: $147

The following courses are included:

- Standard 62.1-2007: Natural Ventilation and Exhaust
- Standard 62.1-2013: Natural Ventilation Procedure
- Standard 62.1-2010: Ventilation Rate Procedure
- Standard 62.1-2007: Recirculating and Treating Indoor Air
- Standard 62.1-2007: Moisture and Mold Control

Standard 90.1: Energy Standard for Buildings

PDHs: 9.8
Price: $154 | ASHRAE Member: $118

The following courses are included:

- Standard 90.1-2004: Lighting – General and Mandatory Provisions
- Standard 90.1-2004: Energy Cost Budget Method
- Using Standard 90.1-2010 to Meet LEED Requirements
- Architects: Overview of Mechanical Systems

Standard 189.1-2011 – High Performing Green Buildings

PDHs: 7.5
Price: $116 | ASHRAE Member: $89

The following courses are included:

- Standard 189.1-2011: Water, Sites, and Materials
- Standard 189.1-2011 for High-Performance Green Buildings: Energy Efficiency
- Standard 189.1-2011 for High-Performance Green Buildings: Indoor Environmental Quality

Electrical System Design

PDHs: 6.5
Price: $193 | ASHRAE Member: $147

The following courses are included:

- Power Distribution Applications
- Design for Building Electrical Systems
- Building Electrical Power Components
- The Electric Utility
- Direct Current Electrical Systems

"ASHRAE eLearning is a well put-together program. What makes the program unique is the immediate feedback system, which allows you to go back through the exercises and exams to help ensure your understanding of the topics covered. Most programs out there only provide you with a passing percentage once the course is over, not explaining what concepts you really understood."

—Huan Nguyen, Design Application Engineer, Climatec BTG

Libraries

Advanced Technologies
PDHs: 38.0
Price: $373 | ASHRAE Member: $284

The following packages are included:

- Sustainability
- Data Center Design

Control Systems – (I-P)
PDHs: 43.5
Price: $373 | ASHRAE Member: $284

The following packages are included:

- HVAC Control Systems
- DDC Controls

Control Systems – (SI)
PDHs: 32.5
Price: $216 | ASHRAE Member: $165

The following packages are included:

- HVAC Control Systems
- DDC Controls

Fundamentals
PDHs: 47.0
Price: $709 | ASHRAE Member: $535
The following packages are included:

- Fundamentals: HVAC Systems
- Components and Equipment
- AC and Refrigeration Principles
- Refrigerants

HVAC Design and Operation
PDHs: 18.5
Price: $253 | ASHRAE Member: $191

The following packages are included:

- Building Performance
- System Design
- Loads and Modeling

HVAC Systems
PDHs: 36.0
Price: $557 | ASHRAE Member: $426

The following packages are included:

- System Essentials
- Air Systems
- Hydronic Systems
- Special Systems
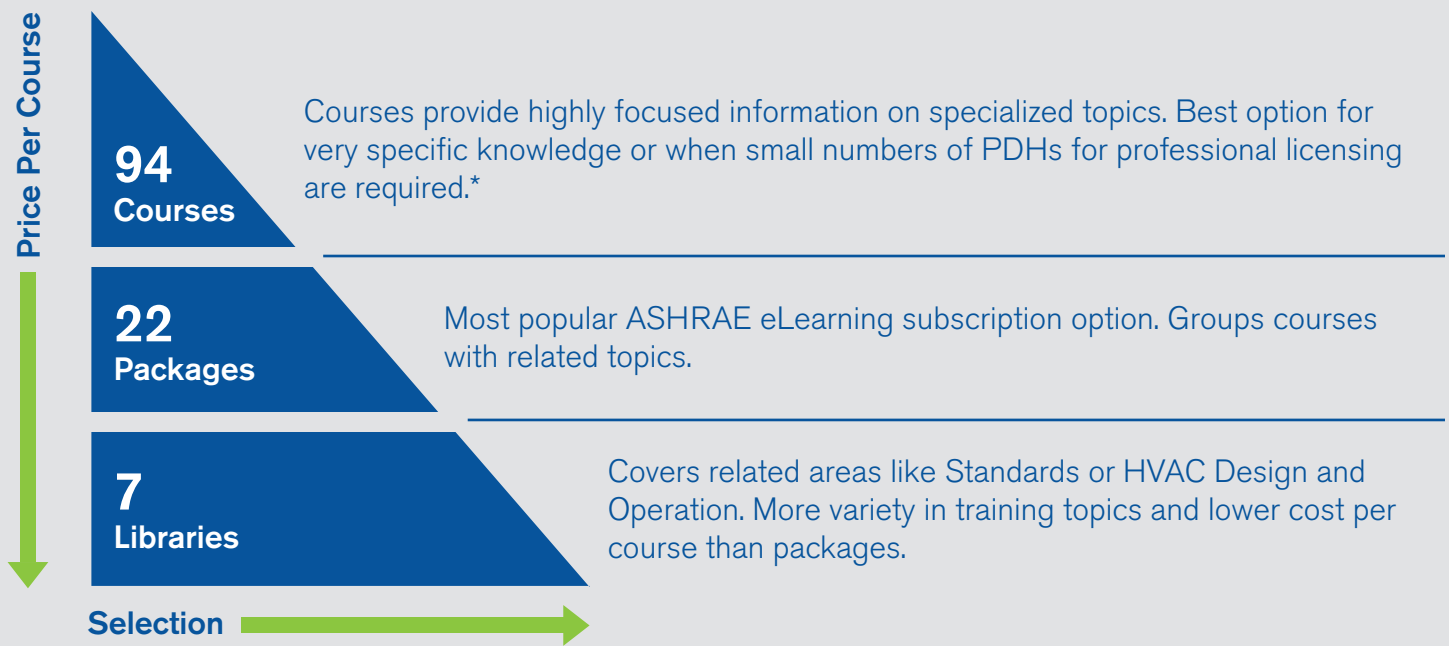- Electrical System Design

Standards
PDHs: 27.4
Price: $370 | ASHRAE Member: $284

The following packages are included:

- Standard 62.1: Ventilation for Acceptable Indoor Air Quality
- Standard 90.1: Energy Standard for Buildings
- Standard 189.1-2011 - High Performing Green Buildings

Price Per Course

94 Courses
Courses provide highly focused information on specialized topics. Best option for very specific knowledge or when small numbers of PDHs for professional licensing are required.*

22 Packages
Most popular ASHRAE eLearning subscription option. Groups courses with related topics.

7 Libraries
Covers related areas like Standards or HVAC Design and Operation. More variety in training topics and lower cost per course than packages.

Selection

How Customers Are Using ASHRAE eLearning

Enhance and Extend In-Person Training
eLearning before, during, and after a face-to-face workshops helps trainees "hit the ground running," improving their retention and learning times.

Self-Guided Study
Used by thousands of engineers to advance their industry skills and knowledge.

Just-In-Time and On-Demand Training
Authoritative, guidance for emerging projects requiring new knowledge.

Extend the Lunch-n-Learn Session
eLearning at the end of lunch-n-learn sessions helps employees retain key knowledge.

In-University Programs
Used in undergraduate mechanical and architectural engineering programs.

Peer-to-Peer Collaboration
eLearning's discussion forums allow colleagues to share ideas

Purchasing Options

Per Course Price: $55
($42 ASHRAE members)

Package Prices: from $77 to $364 ($59 to $275 ASHRAE members)

Library Prices: from $216 to $709 ($165 to $535 ASHRAE members)

Group Discounts

Groups purchasing identical subscriptions for 5 or more people are eligible for these discounts:

Group Size	Corporations	ASHRAE Chapter
5-10 users	10% off list price	5% off list price
10-19 users	15% off list price	10% off list price
20-49 users	20% off list price	15% off list price

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* ASHRAE is an approved Continuing Education provider for the American Institute of Architects (AIA) and a USGBC Education Partner. Continuing Education hours earned from ASHRAE courses may be applied toward renewal of state-licensed professionals and maintenance of LEED® professional credentials.

Continuing Education (CE) hours earned from ASHRAE courses may be applied toward maintenance of state-licensed professionals (Architects and Professional Engineers), LEED credentials, and ASHRAE Certifications.