

# ASHRAE Learning Institute

Seminars & Courses at ASHRAE's Winter Conference and AHR Expo in Dallas, TX

## 2 WAYS TO REGISTER

**Internet:** [www.ashrae.org/dallascourses](http://www.ashrae.org/dallascourses)

**Phone:** Call 1-800-527-4723 (US and Canada) or 404-636-8400 (worldwide)

## Full-Day Professional Development Seminars

\$485/\$395 ASHRAE Member -- Earn 6 PDHs/AIA LUs or .6 CEUs

**The Commissioning Process in New & Existing Buildings**  
Saturday, Jan 26 – 8:00 a.m. to 3:00 p.m.

**Data Center Energy Efficiency**  
Saturday, Jan 26 – 8:00 a.m. to 3:00 p.m.

**Healthcare Facilities: Best Practice Design & Applications**  
Saturday, Jan 26 – 8:00 a.m. to 3:00 p.m.

**Complying with Standard 90.1-2010**  
Tuesday, Jan 29 – 9:00 a.m. to 4:00 p.m.

**Energy Modeling Best Practices and Applications:  
HVAC/Thermal**  
Tuesday, Jan 29 – 9:00 a.m. to 4:00 p.m.

## Half-Day Short Courses

\$159/\$119 ASHRAE Member -- Earn 3 PDHs/AIA LUs or .3 CEUs

**Air-to-Air Energy Recovery Fundamentals**  
Sunday, Jan 27 – 2:00 p.m. to 5:00 p.m.

**Humidity Control: Applications, Control Levels  
and Mold Avoidance**  
Sunday, Jan 27 – 2:00 p.m. to 5:00 p.m.

**Air-to-Air Energy Recovery Applications: Best Practices**  
Monday, Jan 28 – 8:30 a.m. to 11:30 a.m.

**Application of Standard 62.1-2010:  
Multiple Spaces Equations & Spreadsheet**  
Monday, Jan 28 – 8:30 a.m. to 11:30 a.m.

**Combined Heat & Power: Design through Operations**  
Monday, Jan 28 – 8:30 a.m. to 11:30 a.m.

**Understanding Standard 189.1-2011 for  
High-Performance Green Buildings**  
Monday, Jan 28 – 2:45 p.m. to 5:45 p.m.

**Introduction to Ultraviolet Germicidal  
Irradiation (UVGI) Systems**  
Monday, Jan 28 – 2:45 p.m. to 5:45 p.m.

**Commissioning Process & Guideline 0**  
Monday, Jan 28 – 2:45 p.m. to 5:45 p.m.

**Evaluating the Performance of LEED®-Certified Buildings**  
Monday, Jan 28 – 2:45 p.m. to 5:45 p.m.

**Optimization of HVAC Systems & Components:  
Techniques & Real-World Examples**  
Tuesday, Jan 29 – 9:00 a.m. to 12:00 p.m.

**Energy Management in New and Existing Buildings**  
Tuesday, Jan 29 – 9:00 a.m. to 12:00 p.m.

**Avoiding IAQ Problems**  
Tuesday, Jan 29 – 9:00 a.m. to 12:00 p.m.

**Designing Toward Net Zero Energy Commercial Buildings**  
Tuesday, Jan 29 – 1:00 p.m. to 4:00 p.m.

**Understanding & Designing Dedicated Outdoor Air Systems**  
Tuesday, Jan 29 – 1:00 p.m. to 4:00 p.m.

**Laboratory Design: The Basics and Beyond**  
Tuesday, Jan 29 – 1:00 p.m. to 4:00 p.m.

## HVAC Design Training

Jan 14-18, 2013 • Jan 30-Feb 1, 2013 (Level I only) • Mar 18-22, 2013 • Jun 3-7, 2013 • Aug 12-16, 2013

### HVAC Design: Level I - Essentials

Gain practical skills and knowledge in designing, installing and maintaining HVAC systems that can be put to immediate use. The training provides real-world examples of HVAC systems, including calculations of heating and cooling loads, ventilation and diffuser selection using the newly renovated ASHRAE Headquarters building as a living lab.

### HVAC Design: Level II - Applications

Developed by industry-leading professionals, the workshop provides participants with advanced level information about designing, installing and maintaining HVAC systems that can be put to immediate use. Participants will gain an in-depth look into Standards 55, 62.1, 90.1, and 189.1 and the Advanced Energy Design Guides, as well as a range of other HVAC topics including: HVAC equipment and systems; energy modeling; designing mechanical spaces; designing a chiller plant; and BAS controls.

Visit [www.ashrae.org/hvacdesign](http://www.ashrae.org/hvacdesign) to register