



Iowa Chapter

## Advanced VAV Control Sequences &

## Optimizing Chilled Water Plant Controls

with Steven Taylor, P.E. F ASHRAE  
November 12, 2013  
Des Moines, IA

*Advanced VAV Control Sequences sponsored by the Iowa Energy Center*

**Time:** 8 am- 1 pm CDT (includes lunch)

**Location:** Iowa Events Center, HyVee Hall, Room 101, 730 Third St., Des Moines, IA

**Cost:** \$90 (ASHRAE Central Iowa Chapter members receive a 50% discount)

**Continuing Education Credits:** 4 PDH (Professional Development Hours)

**REGISTER NOW!**

*Optimizing Chilled Water Plant Controls sponsored by the Central Iowa Chapter of ASHRAE*

**Time:** 1 -5 pm CDT, with Dinner to follow

**Location:** Iowa Events Center, HyVee Hall, Room 101, 730 Third St., Des Moines, IA

**Cost:** \$90 (ASHRAE Central Iowa Chapter members receive a 50% discount)

**Dinner:** \$20 for guests (Free for ASHRAE Central Iowa Chapter members)

**Continuing Education Credits:** 4 PDH (Professional Development Hours)

**REGISTRATION info:** Visit the ASHRAE Iowa Chapter website [EVENT REGISTRATION](#) page or Contact Britt Vincent at [bvincent@mechsales.com](mailto:bvincent@mechsales.com) - (515) 276-9005.

**PLEASE NOTE: YOU MUST REGISTER FOR BOTH EVENTS SEPARATELY.**



### About the Speaker

Steven Taylor of Taylor Engineering, Alameda, CA is a professional engineer and ASHRAE Fellow with over 30 years of commercial and institutional HVAC system design experience. He is a member of the committee responsible for ASHRAE Standard 90.1 "Energy Conservation in New Non-residential Buildings", a standard that is the basis of energy conservation codes in every state in the country. Mr. Taylor is an experienced control system designer. He is the author of an ASHRAE sponsored textbook on the Fundamentals of HVAC Control Systems and served as chair of ASHRAE's Control Theory & Application Technical Committee 1.4 and ASHRAE's Guideline Committee 13 Specifying Direct Digital Control Systems.

### **Advanced VAV Control Sequences**

The Iowa Energy Center will sponsor a half day seminar focusing on advanced VAV control sequences. Steven Taylor of Taylor Engineering, Alameda, CA is the featured speaker. Mr. Taylor is a professional engineer and ASHRAE Fellow with over 30 years of commercial and institutional HVAC system design experience.

This seminar will summarize recent ASHRAE Research Projects such as:

- RP 1455, "Advanced Control Sequences for HVAC Systems - Phase I Air Distribution and Terminal Systems."
- RP 1515, "Thermal and Air Quality Acceptability in Buildings that Reduce Energy by Reducing Minimum Airflow from Overhead Diffusers."
- RP 1547, "CO2-based Demand Controlled Ventilation for Multiple Zone HVAC Systems."

Topics will include:

- VAV Box Control Sequences
- Zone Groups & Modes
- AHU Control Sequences
- Demand Controlled Ventilation for VAV Systems
- Automatic Fault Detection and Diagnostics

**Questions:** Contact Denise at [djunod@iastate.edu](mailto:djunod@iastate.edu) or (515) 965-7055

### **Optimizing Chilled Water Plant Controls**

The Central Iowa Chapter of ASHRAE will sponsor Mr. Taylor's afternoon seminar, Optimizing Chilled Water Plant Controls, which is based primarily on the background research performed in the creation of the ASHRAE Journal Series, "Optimizing the Design and Control of Chilled Water Plants", published in 2011 and 2012, particularly Part 5: Optimized Control Sequences published June 2012.

Topics will include:

- Quick Summary of Chilled Water System Design
- Determining Optimized Sequences
- Chilled Water Pump Control
- Chilled Water Temperature and DP Setpoint Reset
- Tower Fan Speed Control
- Condenser Water Pump Control
- Chiller Staging

**Questions:** Contact Britt Vincent at [bvincent@mechsales.com](mailto:bvincent@mechsales.com) or (515) 276-9005.

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