2025

# PROFESSIONAL DEVELOPMENT CATALOG



www.boland.com/training (240) 306-3000 training@boland.com



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# OUR COMMITMENT TO CLIENTS

We aspire to provide the knowledge and skills needed for success.

Our instructors are highly skilled, knowledgeable, and passionate about our industry. These course offerings are carefully selected to provide the most pertinent, up-to-date information. Our company strives to be more sustainable, so we appreciate you going green with us by using our digital textbooks.

Thank you for taking the initiative to increase your knowledge and improve our industry.

We look forward to hosting you!

Sincerely,

Chief Executive Officer & Chairman

Emis M. Boland



# **BENEFITS**



# CLIENT SATISFACTION RATE

# **EARN**



Continuing Education Unit (CEU) hours after course completion. Boland is approved by the Maryland DLLR to offer CEU hours for licensing requirements.

# **LEARN**



the most up-to-date training information and receive a downloadable class certificate for licensing or employers through our online training portal.

# **NETWORK**



and make valuable connections with our industry experts and others within the HVAC industry in the DC Metropolitan area.

# **EXPERIENCE**



our state-of-the-art VRF Training Center in Lanham, MD, and Louis J. Boland Professional Development Center in Gaithersburg, MD.

# **CLIENT TESTIMONIALS**

"Instructor was very knowledgeable, learned a lot in a small amount of time"

"Instructor was passionate about subject and enjoyed answering all of our questions."

"Wonderful class that taught well in-depth knowledge about the subject. And open and welcoming to all questions with amazing answers and feedback."

"This class was extremely informative and I left away with a ton of information! Highly recommend the class!

"Clean and modern facility. Professional atmosphere"

# REGISTRATION PROCESS



Visit boland.com/training or scan the QR code and select the desired course.



Enroll by selecting the "register" option and completing the registration form. We accept ACH/Check, Debit Card, or Credit Card (credit cards will incur a 2.5% surcharge).



Check your email inbox for a registration confirmation email. Contact training@boland.com for assistance or to ask questions regarding course offerings.



**Due to high demand and limited seating for our 3-Day VRF City MULTI Essentials® course,** cancellations must be received by email (training@boland.com) **no later than 15 business days** before the class date. **All other Professional Development cancellations** must be received by email (training@boland.com) **no later than 5 business days before the class date.** 

# **OUR TRAINING SPACES**



# Louis J. Boland Professional Development Center

30 West Watkins Mill Road, Gaithersburg, MD 20878

With state-of-the-art technology, the Professional Development Center at Boland HQ fosters an environment of learning for up to 30 students.



# **VRF Training Center**

4720 Boston Way Units J&K, Lanham, MD 20706

The VRF Training Center provides a hands-on experience for our 3-Day VRF CITY MULTI® Essentials Course, featuring the latest VRF equipment to practice what is taught in the classroom.

# OVERVIEW OF COURSE OFFERINGS

We offer Professional Development courses in the spring and fall semesters and offer 3-Day VRF CITY MULTI® Essentials year-round. **All classes include a complimentary breakfast and lunch.** 

- 3-Day VRF CITY MULTI® Installation, Startup & Service Essentials
- 2-Day Basic HVAC
- Schematics & Wiring Diagrams
- Variable-Air-Volume (VAV) & Direct Outdoor Air Terminal Units
- Variable Frequency Drive (VFD) Theory
- Self-Contained Units (SCU) & MJC
- Voyager® Precedent Rooftop Units
- Symbio® 700
- IntelliPak® Rooftop Units
- Horizon® Dedicated Outdoor Air Systems (DOAS)
- Split-Systems
- Tracer® Ensemble
- Tracer® SC & SC+®
- Scroll Chillers (CGAM)
- Series R Chillers (Helical Rotary)
- Centrifugal Chillers

Bolded classes are offered twice a year.

# **COURSE DESCRIPTIONS**

# 3-Day VRF CITY MULTI® Essentials

This three-day course provides an in-depth discussion of the techniques for properly installing, servicing, and troubleshooting CITY MULTI® systems. A Windows-based laptop is required.

# Class Agenda:

- · Installation and DSB software
- Start-up and Maintenance Tool software
- · Service essentials

**Recommended for** Service Managers, Service Technicians, Field Supervisors, Facility Management Staff, General Contractors, and Building Engineers

2.1 CFU

1.6

**CFU** 

# 2-Day Basic HVAC

This two-day course provides an understanding of basic HVAC principles.

#### Class Agenda:

- · Basic refrigeration cycle
- Principles of heat generation
- Transfer and rejection
- · In-depth system components
- · Types of heat exchangers
- · System accessories and controls

**Recommended for** General Contractors, Service Managers, Service Technicians, and Project Managers

# **Schematics & Wiring Diagrams**

Troubleshoot and repair a variety of systems using schematics and wiring diagrams.

# Class Agenda:

- Learn the latest ANSI diagrams (including ladders, logic, keys, and legends)
- Recognize components and circuits (including resistors, transistors, capacitors, transformers, coils, and relays)

**Recommended for** Building Engineers, Service Managers, General Contractors, and Service Technicians

0.8 CEU

# **VAV & Direct Outdoor Air Terminal Units**

Understand Variable-Air-Volume (VAV) and the concept of air movement, including machine components, system types, and controls.

### Class Agenda:

- · Identify special tools and calibration techniques
- Check the system, perform system tests, and seasonal start-up procedures
- Apply service maintenance and understand how the systems operate

**Recommended for** Service & Facility Managers, Service Technicians, Field Supervisors, General Contractors

8.0

**CEU** 

# Variable Frequency Drive (VFD) Theory

Understand variable frequency drive theory and VFD troubleshooting.

#### Class Agenda:

- · Identify VFD components
- · Troubleshoot VFD issues
- · Determine control wiring and related issues

Recommended for Building Engineers, HVAC Technicians, and Electricians

8.0

**CEU** 

# Self-Contained Units (SCU) & MJC

Learn about self-contained and MJC units, layout, troubleshooting, tips and tricks, and maintenance equipment.

#### Class Agenda:

- SWUA
- SWUD
- · SCWF (signature series)
- SCWG (modular series)
- · MJC modular SCUs

**Recommended for** Building Engineers, Service Technicians, General Contractors, and anyone interested in SCUs

0.8

**CFU** 

# **Voyager® Precedent Rooftop Units**

You will be exposed in detail to these units' mechanical, electrical, and control systems.

### Class Agenda:

- Reliable controls and the various board functions
- Start-up, maintenance, and troubleshooting requirements
- Updates on Voyager® units, including fans, compressors, and refrigerant

**Recommended for** Service Managers, Service Technicians, General Contractors, Field Supervisors, Facility Management Staff, and Foremen

8.0

CEU

# IntelliPak® Rooftop Units

Determine module identification location and use case moving through legacy IntelliPAK® and IntelliPAK 3 Symbio®.

#### Class Agenda:

- Identify the differences between units supplied cooling & heating methods, and economizer decision-making
- Understand supplied air decision operations such as CV and SZVAV modes
- Determine unit HI navigation, introduction to test mode, setup, and set-point source options
- Navigate schematic diagrams, safety circuit termination, impact & fault notification, and testing

8.0

CEU

Recommended for Service Managers, Service Technicians, Project Managers

# Symbio® 700

You will be able to learn the latest Symbio® 700 for Voyager® Precedent Rooftop Units. Students are strongly encouraged to take the Voyager® course before enrolling in this course.

#### Class Agenda:

- Learn the control and component locations
- Interpret Precedent w/ Symbio 700 electrical wiring schematics
- · Understand what the transducer does
- · Determine unit options by performing a model number breakdown

**Recommended for** Controls Technicians, Building Engineers, Field Supervisors, Project Managers, General Contractors, and Facility Management Staff

0.8

**CEU** 

# **Split-Systems**

 $Learn \ the \ Split-Systems \ installation \ requirements, \ controls, \ service, \ and \ refrigerant \ components.$ 

### Class Agenda:

- · Determine the different models
- · Learn how to install app guides
- Understand the refrigerant cycle and components
- · Navigate the controls wiring diagrams
- Troubleshoot and maintenance

**Recommended for General Contractors, Service Technicians, Installers** 

8.0

**CEU** 

# Tracer® Ensemble®

Learn about daily Ensemble operations and tasks like user management, status, overrides, working with schedules, alarms, and data logging. A laptop and access to your Tracer Ensemble site are highly recommended.

### Class Agenda:

- Learn user management (adding and removing users)
- · Monitor and manipulate overrides
- Learn change schedules (holiday schedules and exception schedules)

**Recommended for** Property and Portfolio managers, Building Engineers, and Service Technicians

8.0

**CEU** 

# Tracer® SC & Tracer SC+®

Learn about the latest improvements in building automation systems and building operations. A laptop is highly recommended.

#### Class Agenda:

- Assess the Tracer® SC & SC+® system
- · Set up and route alarms
- Understand the general navigation
- Determine the variable air systems and chiller plant control applications

**Recommended for** Controls Technicians, Building Engineers, Field Supervisors, Project Managers, General Contractors, and Facility Management Staff

0.8

**CEU** 

# **Scroll Chillers (CGAM)**

Learn about the CGAM Air-Cooled Scroll Chiller system interface, CH530 controls, common problems, and troubleshooting techniques.

# Class Agenda:

- Learn about the Acend<sup>™</sup> Air-Cooled Chiller models ACS and ACX: 140 TO 230 nominal tons
- Understand Air-Cooled Scroll Chillers model CGAM: 20 to 130 tons
- Determine the Variable Frequency Drive (VFD) configuration

**Recommended for** Sales Managers, Service Managers, Project Managers, Foremen, and General Contractors

8.0

**CEU** 

# Series R Chillers (Helical Rotary)

Explore the theory behind the Series R Helical Rotary Air-Cooled Chiller system operation and learn how to troubleshoot.

#### Class Agenda:

- · Identify the refrigerant and lubrication of the equipment
- Determine preventative maintenance tasks
- Navigate control panels (CLD, UCM, and CH530)
- Understand compressor operation and basic principles

**Recommended for** Sales Managers, Service Managers, Project Managers, Service Engineers, and General Contractors

8.0

**CEU** 

# **Centrifugal Chillers**

Explore Centrifugal Chiller system components and water-cooled systems.

### Class Agenda:

- · Operate logic of the interface
- Identify problems that reduce damage to equipment

**Recommended for** Sales Managers, Service Managers, Project Managers, Foremen, and General Contractors

8.0

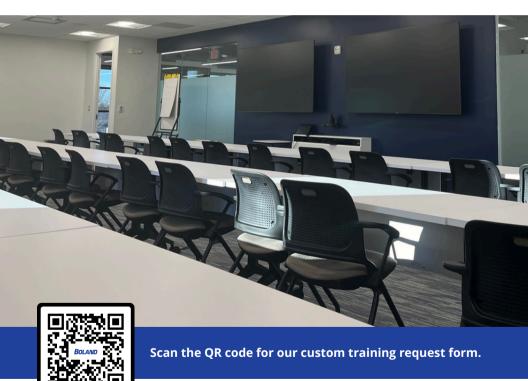
**CEU** 

# **CUSTOM TRAINING**

We offer custom training courses year-round at your site or our facility. Each course is tailored to your team's objectives and HVAC experience levels.

# Your custom training fee includes the following:

- Customized digital course materials
- Subject matter expert(s) to instruct the course
- · Certificates of completion with CEU hours



Boland is approved by the Maryland DLLR to offer CEU hours for licensing requirements.

# **MEET THE INSTRUCTORS**



**Steve Barnes**Subject Matter Expert in **Centrifugal Chillers**Started in the HVAC Industry in 1982



Steve Beaton
Subject Matter Expert in Voyager®
Precedent & Symbio® 700
Started in the HVAC Industry in 1989



Daniel Brodsky
Subject Matter Expert in VRF CITY
MULTI® Installation, Startup &
Service Essentials
Started in the HVAC Industry in 2023



**John Garrison**Subject Matter Expert in **Split-Systems**Started in the HVAC Industry in 2003



Fred Harris
Subject Matter Expert in Basic HVAC &
IntelliPAK® Rooftop Units
Started in the HVAC Industry in 2002



Brad Hornbeak
Subject Matter Expert in Variable-Air-Volume (VAV) & Direct Outdoor Air
Terminal Units (DOATU)
Started in the HVAC Industry in 1984



**Josh Lambert**Subject Matter Expert in **Scroll Chillers**Started in the HVAC Industry in 2012



Jason Lawrence
Subject Matter Expert in VRF CITY
MULTI® Installation, Startup &
Service Essentials
Started in the HVAC Industry in 2000



Andrew Mish
Subject Matter Expert in Self-Contained
Units (SCU) & MJC
Started in the HVAC Industry in 2014



**Francisco Miyares**Subject Matter Expert in **Horizon Dedicated Outdoor Air System (DOAS)**Started in the HVAC Industry in 2012



Adnan Mohamed-Burhan
Subject Matter Expert in Tracer® SC &
Tracer SC+®
Started in the HVAC Industry in 2016



**Sam Murphy**Subject Matter Expert in **Self-Contained Units (SCU) & MJC**Started in the HVAC Industry in 2002



**Paul Singh**Subject Matter Expert in **Series R Chillers (Helical Rotary)**Started in the HVAC Industry in 2003



**Dean Smith**Subject Matter Expert in **Tracer**® **Ensemble**®
Started in the HVAC Industry in 1996



**Tim Todd**Subject Matter Expert in **Variable Frequency Drive (VFD) Theory**Started in the HVAC Industry in 1985



**Damian Young**Subject Matter Expert in **Basic HVAC & Schematics and Wiring Diagrams**Started in the HVAC Industry in 2008

# TRAINING PORTAL ACCESS

24 hours after your class ends, you will receive an email from **Boland Training (smtpauth@boland.com)** with steps to access your certificate.

**Step 1:** Complete the Professional Development Survey.

**Step 2:** Visit **clientportal.boland.com/training** and log-in/sign-up using the same email address used to register for the course.

**Step 3:** Go to the **Training** tab, click **My Training Classes**,



and scroll down to **Trainings I've Attended.** Find the class you attended and hit **Download** to receive your certificate.

#### **Trainings I've Attended**

Below are training events you have attended since October 2022. Please contact marketing@boland.com regarding events not listed below.

# BOLAND