



Technical and Sales Training & NATE Testing Catalog

February – April 2015



**REGISTER FOR TRAINING CLASSES AND NATE TESTING
ON THE FOLLOWING WEBSITE**

<https://cematraining.com/>

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TECHNICAL TRAINING CLASS SCHEDULE

Chesapeake VA

March 20, 2015	8:00am to 12:00pm	Residential Zoning
April 3, 2015	8:00am to 12:00pm	Residential Controls
April 14, 2015	8:00am to 12:00pm	A/C Charge & Tune
April 16, 2015	8:00am to 12:00pm	Variable Speed A/C & Heat Pumps
April 17, 2015	8:00am to 12:00pm	Electric Motors

Hanover MD

March 5, 2015	8:00am to 12:00pm	Variable Speed A/C & Heat Pumps
March 9, 2015	8:00am to 12:00pm	NATE Core Test Review
March 24, 2015	8:00am to 12:00pm	Residential Zoning
April 1, 2015	8:00am to 12:00pm	A/C Charge & Tune
April 8, 2015	8:00am to 4:00pm	Carrier / Bryant Light Commercial RTUs and Split Systems
April 10, 2015	8:00am to 4:00pm	Geothermal
April 22, 2015	8:00am to 12:00pm	Electric Motors
April 28, 2015	8:00am to 12:00pm	Residential Controls

Richmond VA

March 10, 2015	8:00am to 12:00pm	A/C Charge & Tune
March 12, 2015	8:00am to 12:00pm	Variable Speed A/C & Heat Pumps
March 24, 2015	8:00am to 12:00pm	Residential Zoning
April 7, 2015	8:00am to 12:00pm	Residential Controls
April 21, 2015	8:00am to 12:00pm	Electric Motors

Roanoke VA

March 4, 2015	8:00am to 12:00pm	Variable Speed A/C & Heat Pumps
March 25, 2015	8:00am to 12:00pm	Residential Zoning
April 9, 2015	8:00am to 12:00pm	A/C Charge & Tune
April 23, 2015	8:00am to 12:00pm	Electric Motors
April 29, 2015	8:00am to 12:00pm	Residential Controls

South Charleston, WV

March 4, 2015	8:00am to 12:00pm	Variable Speed A/C & Heat Pumps
March 25, 2015	8:00am to 12:00pm	Residential Zoning
April 9, 2015	8:00am to 12:00pm	A/C Charge & Tune
April 23, 2015	8:00am to 12:00pm	Electric Motors
April 29, 2015	8:00am to 12:00pm	Residential Controls

Sterling VA

March 3, 2015	8:00am to 12:00pm	Variable Speed A/C & Heat Pumps
March 11-12, 2015	8:00am to 4:00pm	Carrier 3V / VVT Controls Systems
March 23, 2015	8:00am to 12:00pm	NATE Core Test Review
March 25, 2015	8:00am to 4:00pm	Carrier / Bryant Light Commercial RTUs and Split Systems
March 26, 2015	8:00am to 12:00pm	Residential Zoning
April 2, 2015	8:00am to 12:00pm	A/C Charge & Tune
April 21, 2015	8:00am to 12:00pm	Electric Motors
April 24, 2015	8:00am to 4:00pm	Geothermal
April 30, 2015	8:00am to 12:00pm	Residential Controls

Virtual (Web-Based)

March 4, 2015	8:00am to 12:00pm	Variable Speed A/C & Heat Pumps
March 25, 2015	8:00am to 12:00pm	Residential Zoning
April 9, 2015	8:00am to 12:00pm	A/C Charge & Tune
April 23, 2015	8:00am to 12:00pm	Electric Motors
April 29, 2015	8:00am to 12:00pm	Residential Controls

SALES TRAINING CLASS SCHEDULE

Chesapeake VA

March 27, 2015	8:00am to 12:00pm	Carrier Cor Thermostat – Own the Wall. Own it All. (Carrier Only)
April 15, 2015	8:00am to 12:00pm	Avoiding the Pitfalls for HVAC Retail Sales

Hanover MD

February 17, 2015	8:00am to 12:00pm	Service Connections to AOR Opportunities
March 12, 2015	8:00am to 12:00pm	Carrier Cor Thermostat – Own the Wall. Own it All. (Carrier Only)
March 31, 2015	8:00am to 12:00pm	Avoiding the Pitfalls for HVAC Retail Sales

Richmond VA

February 19, 2015	8:00am to 12:00pm	Service Connections to AOR Opportunities
March 11, 2015	8:00am to 12:00pm	Avoiding the Pitfalls for HVAC Retail Sales
March 26, 2015	8:00am to 12:00pm	Carrier Cor Thermostat – Own the Wall. Own it All. (Carrier Only)

Roanoke VA

March 13, 2015	8:00am to 12:00pm	Avoiding the Pitfalls for HVAC Retail Sales
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Sterling VA

February 18, 2015	8:00am to 12:00pm	Service Connections to AOR Opportunities
March 9, 2015	8:00am to 12:00pm	Win with Wi-Fi, Featuring Bryant Housewise Tstats (Bryant Only)
March 9, 2015	1:00pm to 5:00pm	Bryant Advanced Evolution Solutions (Bryant Only)
March 13, 2015	8:00am to 12:00pm	Carrier Cor Thermostat – Own the Wall. Own it All. (Carrier Only)
April 7, 2015	8:00am to 12:00pm	Avoiding the Pitfalls for HVAC Retail Sales

Virtual (Web-Based)

April 8, 2015	8:00am to 12:00pm	Avoiding the Pitfalls for HVAC Retail Sales
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NATE TESTING SCHEDULE

Hanover MD

March 9, 2015	1:00pm to 5:00pm	NATE Testing Session
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(Registration Deadline is February 23, 2105)

Sterling VA

March 23, 2015	1:00pm to 5:00pm	NATE Testing Session
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(Registration Deadline is March 9, 2015)

TECHNICAL TRAINING CLASS DESCRIPTIONS

A/C Charge & Tune

This class is designed for installation and service personnel.

Topics to be covered:

- Refrigerant Cycle Review
- Charging Principles
- Proper Tools
- Importance of Airflow
- Cleaning and Care
- Troubleshooting

Class Cost: \$65 per student

FAD Credit: 4 Hours Technical

Carrier / Bryant Light Commercial RTUs and Split Systems

This class is designed for commercial service technicians to further their knowledge of Carrier / Bryant small to medium size package RTUs and Split systems.

Topics to be covered:

- Model / serial number nomenclature
- Troubleshooting common OEM parts
- Economizers
- Low ambient controls
- Split system refrigerant piping
- Scrolling marquee display

Lunch will be provided

Class Cost: \$125 per student

FAD Credit: 8 Hours Technical

Carrier 3V / VVT Controls Systems

This class is designed for commercial service technicians to further their knowledge of light commercial Carrier controls systems. This class is required for dealers to purchase Carrier 3V / VVT Controls.

Topics to be covered:

- Proper Installation Practices
- Communication and Controls Wiring
- Proper Use of System Pilot for Addressing and Programming 3V Controllers and Commissioning

****Class Size is Limited. No more than 2 students from any company will be accepted****

Class is Scheduled for 2 days. Lunch will be provided.

Class Cost: \$250 per student

FAD Credit: 16 Hours Technical

Electric Motors

This class is designed for basic and intermediate level installation and service technicians.

Topics to be covered:

- Basic Electrical Principles
- PSC Motor Design
- Capacitors
- ECM / ECMx Motor Design
- Wiring
- Troubleshooting

Class Cost: \$65 per student

FAD Credit: 4 Hours Technical

Geothermal Training

This class is designed to train technicians in the troubleshooting procedures on the new line of Carrier / Bryant ground source heat pumps.

Topics to be covered:

- Measuring Refrigerant Performance
- Measuring Water Side Performance
- Controls
- System Set Up
- Diagnostics

Lunch will be provided

Class Cost: \$125 per student

FAD Credit: 8 Hours Technical

NATE CORE Review

This class is designed to prepare installation and service technicians to take the NATE Core exam.

Topics to be covered:

- Successful Testing Pointers
- HVAC Formulas
- Definitions and Terminology
- Communication Skills
- Equipment Operation

Class Cost: \$65 per student

FAD Credit: 4 Hours Technical

Residential Controls

This class is designed for sales, installation, and service personnel.

Topics to be covered:

- Bryant and Carrier Thermostat Lines
- Differences Between Thermostats
- Wiring
- Configuration
- Operation
- Wi-Fi Operations
- Humidification / Dehumidification Settings

Class Cost: \$65 per student

FAD Credit: 4 Hours Technical

Residential Zoning

This class is designed for basic and intermediate level installation and service personnel.

Topics to be covered:

- Basic Zoning Principles
- Zoning Kits Available
- Comfort Versus Efficiency
- Damper Types and Wiring
- Understanding By-Pass Dampers
- Wiring
- Troubleshooting

Class Cost: \$65 per student

FAD Credit: 4 Hours Technical

Variable Speed A/C & Heat Pumps

This class is designed for sales, installation, and service personnel. This class is required for dealers to purchase Bryant and Carrier Variable Speed A/C and Heat Pumps.

Topics to be covered:

- Greenspeed / Extreme Overview
- 18/19 VS Overview
- Installation
- Servicing
- Troubleshooting

Class Cost: \$65 per student

FAD Credit: 4 Hours Technical

SALES TRAINING CLASS DESCRIPTIONS

Avoid the Pitfalls for HVAC Retail Sales

This course is designed to help sales reps see the potential sale from a technical perspective which can enhance the sale, prevent costly errors and call backs that eat away at the job's profitability. As well as sales reps will learn how to add additional "sellable work" to the job instead of "eating" the cost, such as pulling new electrical wire because the current wire is insufficient.

Course Work Includes:

- Site Assessment
- Current equipment and what information is gleaned from it
- Potential pitfalls to be aware of BEFORE you sell a system
- The end user interview (how and what to ask)
- Reviewing the customer's expectations with them
- Choosing equipment that meets the end user's needs
- Selling a system that meets the end user's expectations

Instructor: Tom Hoffmaster with CE Mid-Atlantic

Class Cost: FREE

Brand: Bryant and Carrier

FAD Credit: 4 Hours Sales

Bryant Advanced Evolution Solutions

This course is for those who are familiar with Bryant Evolution systems features and benefits. Attendees will develop their selling story on Evolution systems in a hands-on way and learn how to overcome consumer objections.

Instructor: Bill Kinnard with Grandy and Associates

Class Cost: FREE

Brand: Bryant Only

FAD Credit: 4 Hours Sales

Carrier Cor Thermostat – Own the Wall. Own it All.

This course covers the new Carrier Cor thermostat. The course presents an overview of a connected home, the place of Wi-Fi thermostats in energy management, brand promise, and the benefits of the Cor thermostat for the dealer and homeowner

Course Work Includes:

- Describe the evolution of the connected home
- Explain the importance of Wi-Fi thermostats
- Define the features and benefits of the Carrier Cor thermostat
- Communicate the Carrier controls sales story

Instructor: Mike Poirier with CE Mid-Atlantic

Class Cost: FREE

Brand: Carrier Only

FAD Credit: 4 Hours Sales

Service Connections to AOR Opportunities

This course equips service technicians with the knowledge, tools, and ability to know when and how to recommend a replacement instead of a repair. They will be shown an objective tool designed to educate the homeowner about the current system's operation. Participants will discover the lifecycle concept of all system components and how to explain it to homeowners using non-technical language.

Course Work Includes:

- Consider the life expectancy of all household equipment – including HVAC systems
- Explore tools which can be used to create an objective evaluation of equipment
- Review how advances in HVAC technology improve system efficiency and how the savings from today's equipment offsets some of the cost
- Use the Repair/Replace score sheet to document the homeowner's existing equipment
- Complete pricing examples using lifetime cost of ownership for new vs. existing equipment
- Use real life case studies in the classroom to sharpen skills so they can practice before they present to homeowners

Instructor: Mike Poirier with CE Mid-Atlantic

Class Cost: FREE

Brand: Bryant and Carrier

FAD Credit: 4 Hours Sales

Win with Wi-Fi, Featuring Bryant Housewise Tstats

This covers the full line-up of the Bryant Wi-Fi thermostats including the new Bryant Housewise thermostats. Attendees will learn about the opportunity to drive more sales and profits by including Wi-Fi thermostats in the sales process.

Instructor: Bill Kinnard with Grandy and Associates

Class Cost: FREE

Brand: Bryant Only

FAD Credit: 4 Hours Sales

NATE TESTING SESSION OVERVIEW

During our test session, participants will be able to take up to two of NATE's 19 Tests. To become NATE certified you must pass both a CORE and a SPECIALTY test of your choice. The certification can be in either the INSTALLATION or SERVICE path. Completing the Service Certification includes the Installation Certification. Completing the Heat Pump Certification includes the Air Conditioning Certification. Here is a list of the 19 Tests being offered:

Core (same for Installation and Service)

Air Conditioning Installation	Air Conditioning Service
Air Distribution Installation	Air Distribution Service
Air to Air Heat Pump Installation	Air to Air Heat Pump Service
Gas Heating (Air) Installation	Gas Heating (Air) Service
Oil Heating (Air) Installation	Oil Heating (Air) Service
Hydronics Gas Installation	Hydronics Gas Service
Hydronics Oil Installation	Hydronics Oil Service
Light Commercial Refrigeration Installation	Light Commercial Refrigeration Service
Commercial Refrigeration Installation	Commercial Refrigeration Service

NATE Tests Cost \$150 per Test.

More information on study materials to help prepare for the NATE exams can be found by visiting the NATE website at the following address: <http://www.natex.org>.

Participants must bring a valid photo ID, two Number 2 pencils, and a non-programmable calculator to the testing session.

Registration is 2 weeks prior to the test session.

Test Session Begins Promptly at 1:00pm. Late Arrivals Will NOT Be Allowed to Attend.

Contact John Gobble at (410) 981-4463 or via email to john.gobble@carrierenterprise.com if you have questions regarding NATE Testing.