

2019 Course Schedule

Educational and Instructional Training for the HVAC Industry

## **Training Site Locations and Registration Information:**

New York 45-18 Court Square Long Island City, NY 11101 718-269-3600 Phone marketingny@trane.com New Jersey 19 Chapin Road Pine Brook, NJ 07058 973-244-7000 Phone marketingnj@trane.com Long Island 245 Newtown Rd, Ste 500 Plainview, NY 11803 718-269-3506 Phone limarketing@trane.com





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## Tracer® Synchrony™ Operation

Building System and Controls training offers a comprehensive portfolio of technical courses to help you effectively monitor and coordinate your HVAC equipment and systems using your Trane building automation system.

Plainview, NY 7:30 AM - 5:00 PM May 13-15

Fee: \$1100 per person

Includes: All literature and a full

breakfast and lunch

You can earn 2.6 CEU credits

## Trace® 3D Plus

TRACE® 3D Plus is a next generation building design and analysis software program that delivers faster, more accurate results through a seamless workflow that closely aligns with today's building process. The latest HVAC systems and controls can be modeled quickly, precisely and with the intricacies of today's many building applications. TRACE 3D Plus is built on the U.S. Department of Energy's EnergyPlus engine and enhanced with Trane's industry leading expertise to help designers validate and interpret projects with confidence and clarity. All of these new features plus a more robust support experience to get you up and running quickly.

Pine Brook, NJ October 29-30

Fee: \$500

Includes: All literature and a full breakfast and lunch.

Prequisite: You must hold a valid license for the software.

## Centrifugal Owners & Operations Seminar

A one day Centrifugal Chiller Operation and Maintenance Seminar that presents an overview of the product, theory of operation and general maintenance guidelines. It is designed for operators and owners of Trane Centrifugal Chillers.

New York, NY 8:00 AM-4:00 PM March 20 & 28

Pine Brook, NJ 8:00 AM-4:00 PM April 4 Fee: \$400 for non-contract customers
FREE for Service Contract Customers

(Trane Service Clients please contact your sales representative)

Includes: All literature and a full breakfast and lunch

For Information:

New York 718-269-3600 marketingny@trane.com Long Island 718-269-3506 limarketing@trane.com New Jers ey 973-244-7000 marketingnj@trane.com

## Air Conditioning Clinic

The Air Conditioning Clinic is a comprehensive battery of 12 classes designed to give an overview of the entire HVAC industry. Each class deals with a specific area of the many disciplines required to successfully design, install and service comfort providing equipment.

#### To register, go to:

https://www.tranenynj.com and click on training and events to register.

New York, NY 5:30 PM - 7:30 PM

Session 1: March 25, 27; April 1, 3, 8, 10, 15, 17, 22, 24, 29; May 1

Session 2: March 26, 28; April 2, 4, 9, 11, 16, 18, 23, 25, 30; May 2

Plainview, NY 5:30 PM - 7:30 PM

March 25, 27; April 1, 3, 8, 10, 15, 17, 22, 24, 29; May 1

Pine Brook, NJ 6:00 PM - 8:00 PM

February 4, 11, 25; March 4, 11, 18, 25; April 1, 8, 15, 22, 29

Fee: \$575 per person

Includes: All literature,

Framed Cert. of Completion,

Light snack at each class

You can earn 2.0 CEU and 4 PDH credits

## Absorption Owner's Operation and Maintenance Seminar

A one day Absorption Chiller Operation Maintenance Seminar that presents an overview of the product, theory of operation and general maintenance guidelines. It is designed for operators and owners of Trane Absorption Chillers. Significant time is allotted for questions and answers with Trane Service Engineers.

New York, NY 8:00 AM-4:00 PM February 7

Fee: \$400 for non-contract customers FREE for Service Contract Customers

(Trane Service Clients please contact your sales representative)

Includes: All literature and a full breakfast and lunch

## Trane-Mitsubishi Ductless Training

#### 5-Day Essentials

The course provides an in-depth functional study of the system along with a discussion of the theories associated with properly applying, installing, commissioning and troubleshooting systems. This course is recommended for installers, startup, or service personnel.

Acquire the in-depth knowledge and skills needed to install and troubleshoot M&P Series systems. You will be introduced to the concepts and theories of M&P Series system operation, including an in-depth functional study of the unique technologies employed. From there, you will move into detailed discussions surrounding the theories of properly applying, installing and troubleshooting M&P Series systems. Concepts and theory are covered in the classroom and reinforced through practical hands-on exercises. Static displays and fully functional M&P Series systems are installed for system analysis and practical troubleshooting exercises.

#### 3-Day CITI MULTI Essential

The 3-day CITY MULTI Service Course provides an in-depth functional study of the system along with a discussion of the theories associated with properly applying, installing, commissioning and troubleshooting systems. This course is recommended for installers, startup, or service personnel.

#### 2-Day M&P Essentials

Acquire the in-depth knowledge and skills needed to install and troubleshoot M&P Series systems. Throughout the 2-day M&P Series Course, which is held at the BTC, you will be introduced to the concepts and theories of M&P Series system operation, including an in-depth functional study of the unique technologies employed. From there, you will move into detailed discussions surrounding the theories of properly applying, installing and troubleshooting M&P Series systems. Concepts and theory are covered in the classroom and reinforced through practical hands-on exercises. Static displays and fully functional M&P Series systems are installed for system analysis and practical troubleshooting exercises.

Pine Brook, NJ 8:00 AM- 5:30 PM

**5 Day Essentials** Fee: \$500 per person

May 13-17

3 Day CITI MULTI Essential Fee: \$300 per person

*April 16-18; October 8-10* 

2 Day M&P Essentials Fee: \$200 per person

April 2-3; September 17-18

## Engineers Newsletter Live

Please check our website for exact dates and times for our Engineers Newsletter Live presentations.

New York, Plainview, Pine Brook: March TBD

Topic – Specifying Controls for Small Rooftop Systems

Recent innovations provide several options to consider for controls in smaller buildings. This ENL will review different packaged rooftop system configurations (single-zone constant-volume, single-zone VAV, changeover bypass, changeover VAV, and multiple-zone VAV with zone heat) and discuss the advantages and limitations of technology options available to control each system. Finally, we will demonstrate how to specify the controls to best meet the needs of the client.

New York, Plainview, Pine Brook: May TBD

Topic – Design Considerations for Hydronic Heating Systems

The 2016 version of ASHRAE Standard 90.1 requires chilled-water cooling coils be selected for at least a 15 degree delta T. This ENL demonstrates the process for selecting coils and control valves to meet this new requirement, illustrates coil configuration impact on part-load performance, and discusses the impact on chiller plant design and operation.

New York, Plainview, Pine Brook: October TBD

Topic – Air and Waterside Economizing

This programs reviews air and waterside economizing advantages, drawbacks and considerations when using one versus the other. ASHRAE Standards 90.1 requirements and exceptions will also be discussed.

New York, Plainview, Pine Brook: November TBD

Topic – Chilled-Water Coil Design for 90.1-2016

This program investigates various methods of providing efficient hydronic heating, including the use of heat-recovery chillers, heat pumps and boiler systems.

You can earn 1.5 CEU credits

Fee: FREE

# Precedent™/Voyager™ II Rooftop Operation (2-Day Seminar)

#### **Topics Addressed**

This is a product introductory seminar with emphasis on installation, component overview and operation, diagnosis and troubleshooting for the 3-25 ton Precedent™ and Voyager™ II Rooftop Units using the ReliaTel™ control system. The class includes coverage for all HVAC operations as well as economizer and heating systems.

#### **References Required:**

Purchase training support literature set for each class attendee. (Binder or other materials may be required.)

#### **Specific Course Objectives:**

- Familiarize on usage of Precedent and Voyager ReliaTel™ microelectronic hardware.
- Learn application and operation of rooftop electronic controls.
- Know the diagnostic, checkout, testing and troubleshooting procedures for these controls.
- Become familiar with combustion cycle and operation and troubleshooting of heating components.
- Learn system maintenance requirements.
- Review Trane wiring diagram conventions.

# A. Application and Options

- 1. Precedent and Voyager Applications
- 2. Systems and Control Components
- 3. Refrigeration Cycle

#### **B. System Operation**

- 1. Mechanical Cooling
  - a. Components
  - b. Options
  - c. Operation
  - d. Checkout
- 2. Economizer and Cooling
  - a. Installation
  - b. Operation
  - c. Adjustment
  - d. Maintenance
- 3. Heating
  - a. Components
  - b. Operation
- 4. Heat Pump
  - a. Components
  - b. Operation
  - c. Defrost Cycle

#### C. Maintenance

- 1. Mechanical
- 2. Cleaning
- 3. Troubleshooting

#### **D. Electrical Wiring**

- 1. NSI-Style Diagrams
- 2. Power Wiring
- 3. Connection Diagrams
- 4. Control Schematics

Pine Brook, NJ 8:00 AM- 4:00 PM

### **Coming Spring 2019**

Please check www.tranenynj.com under Training and Events for the exact date for this event

Fee: \$540 per person
Includes: Light refreshments

For Information:

New York 718-269-3600 marketingny@trane.com Long Island 718-269-3506 limarketing@trane.com New Jers ey 973-244-7000 marketingnj@trane.com

#### **Sales Offices:**

#### **New York**

45-18 Court Square New York, NY 11101 888.530.4922

#### Long Island

245 Newtown Road, Suite 500 Plainview, NY 11803 888.472.1993

#### Westchester

12 Skyline Drive Hawthorne, NY 10532 914.593.0303

#### **New Jersey**

19 Chapin Road Building B, Suite 200 Pine Brook, NJ 07058 888.602.1104

#### **Parts Locations:**

#### **Pine Brook**

26 Chapin Road Pine Brook, NJ 07058 973.882.3220

#### Teterboro

800 Huyler Teterboro, NJ 07608 201.489.9001

#### **Brooklyn**

115 49th Street Brooklyn, NY 11232 347.404.5814

## Piscataway South Plainfield

3005 Hadley Road #3 South Plainfield, NJ 07080 908.412.1001

#### **Plainview**

245 Newtown Road, Ste 500 Plainview, NY 11803 631.952.9477

#### **Hawthorne**

12 Skyline Dr Hawthorne, NY 10532 914.593.0303

#### **Long Island City**

45-18 Court Square Long Island City, NY 11101 718.269.3632

#### Ronkonkoma

87 Raynor Avenue Ronkonkoma, NY 11779 516.874.7357

Visit TraneNYNJ.com to learn more.



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