



2019 FALL

**TECHNICAL
& SALES
TRAINING
SCHEDULE**

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2019 FALL TECHNICAL & SALES — TRAINING SCHEDULE —

SINGLE & TWO-STAGE GAS FURNACES



The Professional's Choice

COURSE DESCRIPTION:

This class will introduce the Armstrong 80% and 90% condensing furnaces. A review of proper installation with special consideration given to vent and combustion air piping. The sequence of operation for single stage, two stage will be discussed. Proper setup and troubleshooting will be an important part of the class. **Class includes text & lunch**

DAY	DATE	LOCATION	TIME	COST
Tuesday	September 17	Rosedale	8:30 AM – 12:30 PM	No charge
Thursday	September 19	Dulles	9:00 AM – 1:00 PM	No charge
Tuesday	September 24	Salisbury	9:00 AM – 1:00 PM	No charge



2019 FALL TECHNICAL & SALES — TRAINING SCHEDULE —

MODULATING GAS FURNACES



The Professional's Choice

COURSE DESCRIPTION:

This class will introduce the Armstrong modulating furnace. A review of proper installation with special consideration given to vent and combustion air piping. The sequence of operation for the modulating furnace will be discussed. Proper setup and troubleshooting will be an important part of the class. **Class includes text & lunch**

DAY	DATE	LOCATION	TIME	COST
Tuesday	October 1	Rosedale	8:30 AM – 12:30 PM	No charge
Thursday	October 3	Dulles	9:00 AM – 1:00 PM	No charge
Tuesday	October 8	Salisbury	9:00 AM – 1:00 PM	No charge



2019 FALL TECHNICAL & SALES — TRAINING SCHEDULE —

20 SEER A/C AND HEAT PUMP



The Professional's Choice

COURSE DESCRIPTION:

This class is designed for certification of the 20 SEER Allied equipment. If you are interested in installing the 20 SEER equipment now is the time to register for the class! The Armstrong modulating heat pump allows for a new level of comfort for the home owner, installation, operation, repair and safety factors when working with an inverter controlled compressor.

Class includes text & lunch

DAY	DATE	LOCATION	TIME	COST
Tuesday	October 15	Rosedale	8:30 AM – 12:30 PM	No charge
Thursday	October 17	Dulles	9:00 AM – 1:00 PM	No charge
Tuesday	October 22	Salisbury	9:00 AM – 1:00 PM	No charge



2019 FALL TECHNICAL & SALES — TRAINING SCHEDULE —

ECOER A/C & HEAT PUMP



Making your home Green & Smart

COURSE DESCRIPTION:

The ECOER A/C & Heat pump is a very versatile inverter driven unit that can be connected to almost any correct capacity inside coil with the addition of a TXV. It can provide the customer with the comfort of inverter technology at a more comfortable price. Class will cover best practices of installation, the theory of operation, typical sequence of operation, the charging procedure and diagnosing possible problems. The Ecoer Smart Gateway which monitors the operation of the heat pump 24/7 will be discussed.

DAY	DATE	LOCATION	TIME	COST
Thursday	October 24	Salisbury	9:00 AM – 1:00 PM	No charge
Tuesday	October 29	Rosedale	8:30 AM – 12:30 PM	No charge
Thursday	October 31	Dulles	9:00 AM – 1:00 PM	No charge

HEAT PUMP CONTROLS AND DIAGNOSTICS



The Professional's Choice

COURSE DESCRIPTION:

This class is designed for the field technician. The three types of defrost boards used by Armstrong on residential and commercial systems will be discussed. Also includes several types of defrost sensors, sequence of operation and safeties connected to the defrost controls.

DAY	DATE	LOCATION	TIME	COST
Tuesday	November 5	Rosedale	8:30 AM – 10:30 AM	No charge
Thursday	November 7	Dulles	9:00 AM – 11:00 AM	No charge
Tuesday	November 12	Salisbury	9:00 AM – 11:00 AM	No charge



2019 FALL TECHNICAL & SALES — TRAINING SCHEDULE —

LG DFS04 CLASS



COURSE DESCRIPTION:

This class is designed to introduce the technician to trouble shooting techniques for LG systems. Included is hands on troubleshooting practices with live LG single wall mount systems. There will also be training on the SIM 2.0. This class is a requirement for completing the LG Excellence Contractors Program.

Class includes Lunch and Text.

DAY	DATE	LOCATION	TIME	COST
Tuesday	November 19	Rosedale	9:00 AM – 1:00 PM	No charge
Thursday	November 21	Dulles	9:00 AM – 1:00 PM	No charge
Tuesday	November 26	Salisbury	9:00 AM – 1:00 PM	No charge

COMMERCIAL PACKAGE & SPLIT SYSTEMS 2 TO 25 TON



COURSE DESCRIPTION:

This class will cover installation of both commercial and split systems. Controls systems for A/C and their gas furnaces as well as heat pump controls will be reviewed. Recommended commissioning practices and formulas to accurately adjust air flow and economizer minimum air will be presented.

Class includes lunch.

DAY	DATE	LOCATION	TIME	COST
Tuesday	December 3	Rosedale	8:30 AM – 12:30 PM	No charge
Thursday	December 5	Dulles	9:00 AM – 1:00 PM	No charge
Tuesday	December 10	Salisbury	9:00 AM – 1:00 PM	No charge



2019 FALL TECHNICAL & SALES TRAINING SCHEDULE

SYSTEM DESIGN

COURSE DESCRIPTION:

United Products Distributors, in conjunction with Allied Air Commercial, will present a course in basic heating, ventilating, and air conditioning system design and application. The course is structured for HVAC system designers such as mechanical engineers, design/build contractors, and facilities engineers. The course covers the fundamentals of load estimating, psychrometrics, and the refrigeration cycle. Various HVAC system types will be discussed, along with different control strategies. The course is intended to present a logical progression from an accurate estimate of the cooling and heating loads to the final selection of HVAC equipment and control strategy that is optimized for the specific application.

Instructor: Lance Neighoff



Location: United Products Distributors, Inc.
1200 68th Street Baltimore, Md. 21237

Times: 5:00 to 7:00 PM • Tuesdays and Thursdays

Cost: \$100.00 per person (Entire Course)

CLASS	TOPIC	DAY	DATE
1	Psychrometric Properties of Air	Tuesday	15 October
2	Cooling and Heating Load Components	Thursday	17 October
3	Estimating Cooling and Heating Loads (Part 1)	Tuesday	22 October
4	Estimating Cooling and Heating Loads (Part 2)	Thursday	24 October
5	The Refrigeration Cycle	Tuesday	29 October
6	HVAC System Design Concepts	Thursday	31 October
7	Packaged Cooling and Heating Systems	Tuesday	5 November
8	Design and Application of Centrifugal Fans	Thursday	7 November
9	Design and Application of Heat Transfer Coils	Tuesday	12 November
10	Equipment Selection Methodology	Thursday	14 November
11	HVAC System Control Strategies	Tuesday	19 November
12	HVAC Zone Control Strategies	Thursday	21 November

COURSE MATERIALS PROVIDED:

1. Basic System Design Binder (provided at the beginning of Class 1).
2. Twelve Numbered Index Tabs (provided at the beginning of Class 1).
3. Course Numerical Index Sheet (provided at the beginning of Class 1).
4. Individual Class Booklets (provided at the end of each Class).
5. Graduation Certificate listing classes attended and CEU credits earned.



2019 FALL TECHNICAL & SALES — TRAINING SCHEDULE —

V AND M SERIES



COURSE DESCRIPTION:

This class will cover the introduction to the Magic-Pak V and M Series and overview where each can be best applied and general principles of proper location. The overview of the installation process and discussion about the controls and troubleshooting the systems. This class would be good for sales people as well as service techs. **Class includes Lunch**

DAY	DATE	LOCATION	TIME	COST
Tuesday	January 7	Rosedale	8:30 AM – 12:30 PM	No charge
Thursday	January 9	Dulles	9:00 AM – 1:00 PM	No charge
Tuesday	January 14	Salisbury	9:00 AM – 1:00 PM	No charge



2019 FALL TECHNICAL & SALES — TRAINING SCHEDULE —

TXV OPERATION, DIAGNOSTICS & CHARGING CRITICAL SYSTEMS



The Professional's Choice



COURSE DESCRIPTION:

When the Temperature Controlled Expansion Valve fails the system fails. Correct charging prevents call backs. The parts & theory of operation of this critical refrigerant control will be reviewed. The class will review the best practices to analyze the operation of the TXV. Some areas considered: determining super heat, diagnosing the A/C TXV in winter, adjusting sub cooling.

DAY	DATE	LOCATION	TIME	COST
Tuesday	January 21	Rosedale	8:30 AM – 10:30 AM	No charge
Thursday	January 23	Dulles	9:00 AM – 11:00 AM	No charge
Tuesday	January 28	Salisbury	9:00 AM – 11:00 AM	No charge



2019 FALL TECHNICAL & SALES — TRAINING SCHEDULE —

CFC CERTIFICATION

COURSE DESCRIPTION:

Class is an overview of the proper handling of chlorofluorocarbons as required by the EPA. Study materials will be available two weeks in advance. Time will not permit all areas of the test to be covered in class, so it is recommended that the student read the study guide before coming to class. **Study guide included.**

AVAILABLE UPON REQUEST

Please call Ken Loignon at (410) 866-6800

NATE CERTIFICATION TEST

THIS CLASS IS FOR TESTING ONLY!

No instructions will be provided. All persons should get a study guide from UPD or from NATE well in advance of the test. The core exam and one specialty are required to receive certification. Test offered are Core, A/C Heat Pumps, Gas Furnaces. Cost \$175 per Test – No more than two test per person.

AVAILABLE UPON REQUEST

Please call Ken Loignon at (410) 866-6800



REGISTRATION FORM

Last Name: _____

First Name: _____

Company: _____

Address: _____

City: _____ State: _____ Zip: _____

Phone Work: _____

Phone Home: _____

Email: _____

I would like to register for the following classes:

Class Description _____ Cost: _____

Class Description _____ Cost: _____

Class Description _____ Cost: _____

Class Description _____ Cost: _____

Class Description _____ Cost: _____

TOTAL \$ _____

PLEASE REGISTER AT LEAST ONE WEEK BEFORE CLASS DATE.

Call Linda @ 410-866-6800 ext. 1300, Fax to: 410-866-4198

Credit Cards Accepted: (Circle One) Mastercard Visa Discover

Number: _____

Expiration Date: _____ Code: _____

Signature: _____



REGISTER ONLINE TODAY!

You can register for any of our classes online at

WWW.UPDINC.COM

Account Resources – Training Schedule Tab

**2019 FALL
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REGISTER
ONLINE TODAY!**

09/2019

UNITED PRODUCTS DISTRIBUTORS INC.

ROSEDALE BRANCH

1200 68th Street
Baltimore, MD 21237
(410)-866-6800
(888)-907-9675
(410)-866-1048 Fax

SALISBURY BRANCH

201 Marvel Road
Salisbury, MD 21801
(410)-749-6800
(888)-907-9675
(410)-749-6865 Fax

VIRGINIA BRANCH

22725 Dulles Summit Court
Dulles, VA 20166
(703)-481-6800
(888)-907-9675
(703)-481-6855 Fax