



# Service Training Schedule 2011 - 2012

**The definition of the word “experience” is something that is acquired by going through an event. Let us give you the experience before you need it.**

**Residential Gas Furnaces:** We will cover 80% & 90% gas furnaces, operation, controls, sequence of operation, circuit boards and troubleshooting. Combustion air and venting requirements will also be covered. Class will be taught by Bruce Neilson. NATE credits given.

<i>San Diego</i>	<i>November 1</i>	<i>Chatsworth</i>	<i>November 15</i>
<i>Riverside</i>	<i>November 3</i>	<i>Industry</i>	<i>November 17</i>
<i>Cathedral City</i>	<i>November 8</i>	<i>Temecula</i>	<i>November 22</i>
<i>Anaheim</i>	<i>November 9</i>	<i>Burbank</i>	<i>November 29</i>
<i>Camarillo</i>	<i>November 10</i>	<i>Hesperia</i>	<i>December 1</i>

**Residential Airflow & Distribution:** The class will start by covering the basics of airflow, duct sizing, layout and then wrap it up servicing and diagnosing air side systems. Classes will be taught by Mike Welsh. PLEASE NOTE CLASS WILL BEGIN AT 5:00 INSTEAD OF 6:00. NATE credits given.

<i>Cathedral City</i>	<i>December 6</i>	<i>Camarillo</i>	<i>December 14</i>
<i>Anaheim</i>	<i>December 8</i>	<i>San Diego</i>	<i>December 15</i>
<i>Industry</i>	<i>December 13</i>		

**Mitsubishi Mr. Slim:** This four hour service seminar provides the participant with a brief overview of information required for designing, installing, commissioning and servicing Mr. Slim M&P series systems. Some of the objectives are: a description of their components, refrigerant flow, appropriate tubing requirements, high and low voltage wiring, internal electrical circuits, typical operation, pressure and temperature reading and voltage measurements during a system check of the Mr. Slim system. The course is recommended for installers, startup and service personnel for Mr. Slim M&P systems. Class will be taught by Bruce Neilson. NATE credits given. PLEASE NOTE CLASS WILL BEGIN AT 5:30 AND END AT 9:30 PM.

<i>Industry</i>	<i>January 3</i>	<i>Cathedral City</i>	<i>January 24</i>
<i>San Diego</i>	<i>January 10</i>	<i>Camarillo</i>	<i>January 31</i>
<i>Anaheim</i>	<i>January 17</i>		

**Basic Gas Heating:** This class series is comprised of 10 sessions. This series of modules will provide the information and foundation you will need to understand the basics of gas furnaces. Each subsequent module builds on the previous module. The series is taught in the following sequence: Introduction to Gas Heating, Principles of Gas Combustion, Gas Furnaces, Gas Burners, Gas Controls, Gas Ignition Systems, Safety and Operating Controls, Installation Practices, Ventilation and Combustion Air, and Troubleshooting. The class will be conducted 2 nights per week for 4 weeks. Several sessions will cover more than 1 module. A certificate will be provided for successful completion of the course. The cost of the class is \$250.00 per student. Classes will be taught by Mike Welsh.

<i>Industry</i>	<i>January 4, 5, 11, 12, 18, 19, 25, 26</i>
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**PSC & ECM Motors:** This class will cover basic induction motors, theory of operation, capacitive loads, inductive loads and troubleshooting. We will also be covering constant torque and constant airflow ECM motor types, theory of operation, methods of control and troubleshooting. Class will be taught by Mike Welsh. NATE credits given.

<i>Industry</i>	<i>February 1</i>	<i>Anaheim</i>	<i>February 16</i>
<i>Cathedral City</i>	<i>February 2</i>	<i>San Diego</i>	<i>February 21</i>
<i>Chatsworth</i>	<i>February 7</i>	<i>Burbank</i>	<i>February 23</i>
<i>Riverside</i>	<i>February 9</i>	<i>Temecula</i>	<i>February 28</i>
<i>Hesperia</i>	<i>February 15</i>		

**Rooftop Package:** This class will focus on York commercial gas electric package products up to 25 tons capacity. Starting with a brief product familiarization followed by concentrating on the unit controls to include Simplicity Lite, Simplicity 1A, VAV board, four stage expansion board and controls. Troubleshooting and product manuals will be part of the hand out materials. Classes will be taught by Craig Walker. NATE credits given

<i>Burbank</i>	<i>March 1</i>	<i>Riverside</i>	<i>March 15</i>
<i>Industry</i>	<i>March 6</i>	<i>Cathedral City</i>	<i>March 20</i>
<i>Hesperia</i>	<i>March 7</i>	<i>Anaheim</i>	<i>March 22</i>
<i>San Diego</i>	<i>March 8</i>	<i>Temecula</i>	<i>March 27</i>
<i>Camarillo</i>	<i>March 13</i>	<i>Chatsworth</i>	<i>March 29</i>

**Air Conditioning Mechanical Troubleshooting:** This class will cover diagnostic troubleshooting of the mechanical refrigeration system. We will evaluate system problems by systematically determining causes and effect when different components in the system malfunction. Classes will be taught by Mike Welsh. NATE credits given.

<i>Anaheim</i>	<i>April 3</i>	<i>Burbank</i>	<i>April 12</i>
<i>Lancaster</i>	<i>April 4</i>	<i>Camarillo</i>	<i>April 17</i>
<i>Riverside</i>	<i>April 5</i>	<i>Chatsworth</i>	<i>April 19</i>
<i>Industry</i>	<i>April 10</i>	<i>Temecula</i>	<i>April 24</i>
<i>Cathedral City</i>	<i>April 11</i>	<i>San Diego</i>	<i>April 26</i>

**Refrigerant Charging Techniques:** This class will cover procedures for correctly charging systems. With the introduction of Micro Channel Condensing coils and the changeover to R410A refrigerant, the charging procedures are considerably more critical. We will review evacuation and dehydration procedures as they relate to R410A refrigerant and synthetic oils. Classes will be taught by Mike Welsh. NATE credits given.

<i>Lancaster</i>	<i>May 1</i>	<i>San Diego</i>	<i>May 17</i>
<i>Industry</i>	<i>May 2</i>	<i>Cathedral City</i>	<i>May 22</i>
<i>Camarillo</i>	<i>May 3</i>	<i>Anaheim</i>	<i>May 24</i>
<i>Riverside</i>	<i>May 8</i>	<i>Temecula</i>	<i>May 29</i>
<i>Chatsworth</i>	<i>May 10</i>	<i>Hesperia</i>	<i>May 31</i>
<i>Burbank</i>	<i>May 15</i>		

**Electrical Wiring Interpretation:** This class will start with a review of the most common symbols used in electrical diagrams for HVAC. From there, we will cover the use of these symbols in ladder, pictorial and component diagrams. Learn how to interpret the sequence of operation of the unit using the electrical diagrams. Troubleshooting techniques will also be covered using the hop scotch method of meter placement. Handouts to include literature pertaining to subject covered. Classes will be taught by Craig Walker. NATE credits given.

<i>Industry</i>	<i>June 5</i>	<i>Temecula</i>	<i>June 21</i>
<i>Camarillo</i>	<i>June 7</i>	<i>Chatsworth</i>	<i>June 26</i>
<i>San Diego</i>	<i>June 12</i>	<i>Hesperia</i>	<i>June 27</i>
<i>Anaheim</i>	<i>June 14</i>	<i>Riverside</i>	<i>June 28</i>
<i>Cathedral City</i>	<i>June 19</i>		

## General Information

**Hours:** Classes begin at 6:00 PM and last approximately three hours unless noted otherwise.

**Tuition:** The cost is \$45.00 unless noted otherwise (Basic Gas Heating \$250.00). Tuition is due at time of registration via check, money order or credit card. Companies with an active line of credit may submit a purchase order.

**Class Locations:** Held at USACD branch locations except for Anaheim and Camarillo. Anaheim classes are held at the Howard Johnson, 1380 S. Harbor Boulevard. Camarillo classes are held at the Best Western, 295 E. Daily Drive.

**Discounts:** *Multiple Student Discount* - Receive a \$5.00 discount per student when registering two or more students. Students must attend to receive the discount. *Certified Comfort Expert Discount* - Receive a \$10.00 discount per student; multiple student discount cannot be applied.

**Miscellaneous:** A light meal is included prior to start of class. Most classes qualify for 3 hours of NATE continuing education credit. Classes are subject to a minimum enrollment and to change without notice. Instructors are US Air Conditioning Distributor employees in the Customer Assurance Department.

**RSVP's and Cancellations:** RSVP's can be done online <http://www.us-ac.com/TrainingSignup.asp> or by completing a registration form. RSVP's and cancellations must be made 24 hours in advance. Student substitutions are always welcome if the registrant is unable to attend. Late cancellations and no shows will be billed for the class.

**Questions:** Please contact Marie Rohde 626-854-6833 or [m.rohde@us-ac.com](mailto:m.rohde@us-ac.com)



## Registration Form

Student Name

Company Name

Email:

Street/PO Box

City

State

Zip Code

Telephone

Fax

### Please Indicate Location / Date /Tuition

Location

Date

Tuition

### Please Indicate Payment Method And Accompany With Registration Form

Bill Me PO# \_\_\_\_\_ on USACD Acct # \_\_\_\_\_

Check or Money Order (Payable to USACD)

Credit Card

Please Choose Appropriate Card  MasterCard  Visa  American Express

Card Number

Cardholder Name

Cardholder Signature

Expiration Date (mo/year)

Credit Card Code # (last 3 digits on back of card)

By signing and sending this form you authorize USACD to process the above amount to the listed credit card number and to the terms outlined in the course advertisement.

### Remit to

Via Mail: US Air Conditioning Distributors, Attention: Marie Rohde, PO Box 1111, La Puente, CA 91749-1111

Via Email: [m.rohde@us-ac.com](mailto:m.rohde@us-ac.com)

Via Fax: 626-854-6840

**Questions?** Contact Marie Rohde 626-854-6833