

## Invensys Controls Uni-Line®

### NATE® Recognized Courses (North American Technicians Excellence)

For more information regarding NATE recognized courses with Invensys Controls or to request training in your area, log into our Customer Toolbox at: [www.toolbox.invensyscontrols.com](http://www.toolbox.invensyscontrols.com)



**NATE-Recognized**

### Heating Basics – Gas Valve Systems

**Course ID: 3084-0002, NATE Recognized hours: 2 hours**

GAS FURNACE SERVICE / GAS HEATING SERVICE / HYDRONICS – GAS SERVICE

Overview of the types of gas valves and ignition control boards used in heating systems. Includes basic characteristics of natural gas and propane, inlet and outlet pressure, pressure measurements, thermocouples, step open, slow open, and standard open gas valves. Sequence of heating events of electronics including thermostats, main gas valves, ignitors and control functions for hot surface, intermittent pilot, and direct spark ignition systems.

### Commercial Refrigeration Basics

**Course ID: 3084-0003, NATE Recognized hours: 2 hours**

AIR DISTRIBUTION / REFRIGERATION COMM. – SERVICE & INSTALATION

Technical overview of basic commercial refrigeration temperature, pressure and defrost controls. Topics include refrigeration system components, discharge temperature and defrost control, super-heat, sub-cooling, and cut-in & cut-out modes.

### Heating and Cooling Basics – Thermostat Control

**Course ID: 3084-0004, NATE Recognized hours: 2 hours**

AIR CONDITIONING / AIR DISTRIBUTION / HEAT PUMP / GAS HEATING / OIL HEATING – SERVICE & INSTALLATION

Overview of thermostats and how they control HVAC systems. Features will be discussed such as humidity control, enthalpy control, balance point, staging, differentials, and communications with Zoning and Indoor Air Quality Products.