Unit 1: Commercial technology overview

This unit is a primer on all natural gas technologies used in the commercial market segment including various types of heating, cooling, water heating, cogeneration, foodservice, and other technologies.

Unit 2: Commercial Heating – Boilers

Boilers and boiler application will be reviewed. Students will learn about various different types of hot water and steam boilers, how they work, system design and related boiler components such as burners, controls, steam traps, economizers, deaerators, etc.

Unit 3: Commercial Heating – Hot Air, IR, Unit Heaters, RTUs

This unit will introduce numerous energy efficient technologies for warm air and infrared heating to the student. Types of technologies, size ranges, efficiencies, and best applications will be reviewed for each type heater.

Unit 4: Hot Water Heating

There are numerous ways to heat water to meet the various needs of the commercial market segment. In addition to the traditional tank and tankless water heating, students can expect to learn about direct contact water heaters, boilers, booster water heaters, gas heat pump water heaters and other technologies used to create hot water for commercial customers.

Unit 5: Gas Air Conditioning

Natural gas air conditioning is an opportunity for growth with existing commercial customers. There are numerous technologies to handle any application from small to large commercial customers including gas fired heat pumps, absorption chiller, engine driven chillers, and steam turbine chillers. Life Cycle costing and environmental benefits will be included.
Unit 6: Combined Heat and Power (CHP)

Cogeneration or combined heat and power is another growth opportunity within the commercial market. There are numerous products that generate electric and heat from a single natural gas input. This unit will help the student understand the opportunity and best applications for CHP as well as economics, as well as source to site and equipment efficiencies. Multiple prime movers and waste heat recovery technologies are included within this training unit.

Unit 7: CNG Vehicles

Students will be introduced to Natural Gas Vehicles and refueling options for fleets. Best practices and best applications for CNG and LNG vehicles will be the focus of this unit.

Unit 8: Food Service Technologies

The foodservice market is one of the most difficult markets to understand with well over 1000 different models of cooking equipment for the commercial kitchen. Students will be introduced to the primary cooking technologies used in the commercial kitchen.

Unit 9: Humidity Control

Most people are aware that too much or too little humidity is bad. This unit will discuss the negative health aspects of poor humidity control and introduce gas fired humidification and dehumidification technologies along with numerous benefits associated with proper humidity control.

Unit 10: Basic sales skills - Building Credibility & Consultative Sales

Now that the student is familiar with the gas fired technologies used with commercial customers, we will switch gears and introduce the student to sales skills and concepts to help them improve credibility with customers and close more deals.

Unit 11: Building automation systems, controls

This unit will look at the products available to help automate the HVAC systems to provide better comfort for occupants while saving energy.
Unit 12: Environmental Considerations - Emissions (Site to Source), Oil storage tanks

This unit will review environmental concerns and demonstrate how to bolster sales of natural gas. This unit will focus on the source to site emissions argument for gas versus electricity and also take a look at environmental issues surrounding the use of heating oil.

Unit 13: Green Certification Programs (LEED, Green Globes)

There are two primary green certification programs available to commercial buildings who wish to have their building certified as being green. This unit will introduce the student to LEED and Green Globes and compere & contrast the two programs.

Unit 14: Oil to Gas Conversion for Commercial Buildings

This is a supplemental unit that is specific to oil heat regions. There is no test and this is not required to complete the training program.