HVAC-R PROFESSIONAL

Course Details 2020

MTEC instructors have strategically developed a three and a half month long HVAC course that will prepare students to sit for Maine State licensing exams in an extremely accelerated time frame. For example, completion of the six-week long Oil Module will eliminate six months of apprenticeship time required for state licensing! This program also provides students with nationally recognized EPA Certification, allowing them to confidently seek employment in what is one of New England's leading workforces.

ALL Maine businesses and residences rely on heating, cooling, and refrigeration systems, which means the employment opportunities are plentiful. Our program is concentrated, direct, hands-on and designed to provide students the nuts and bolts knowledge that enables them to enter the industry workforce with confidence.

Please review the specific course outline below, as well as the list of required tools. To register, please remit the following form, or visit us on the web at: www.mtecenter.com

Oilheat: This six week, full-time intensive program is continually enhanced to include concentration on the newest in high efficiency technology and equipment, in addition to the latest energy conservation practices being implemented by professionals in the field. This course is comprised of hands-on training in our state-of-the-art lab, video simulated operations, and classroom lecture and discussion. The goal of this course is to train the 21st Century Home Energy Professionals that are in demand within the industry. Upon satisfactory completion of the course, the registrant will receive a Certificate of Completion from MTEC. This course, along with successful completion of the Journeyman Oil Burner Exam and (6) months of on-the-job training, will qualify the registrant for the State of Maine Journeyman Oil Burner Technician's License. For more information on licensing, fees, and testing requirements, please visit: http://www.maine.gov/pfr/professionallicensing.

The following code books for this course will be provided to you: National Oilheat Research Alliance "Oilheat Technicians Manual" {c. 2008}, NFPA 31, NFPA 211, NFPA 90B and the Maine State Code Book. These texts provide an up-to-date introduction to oil heat technology and service. The course is comprised of the following sections:

Principles, Theories & Basic Electricity – Fuel Oil Properties, Bio Fuel, Low Sulfur Diesel, Other Fuel Sources, Oil Burners, Basic Electricity Components & Controls – Ignition Systems, Motors, Fans & Couplings, Primary Controls, Limit Controls & Thermostats, Outdoor Reset Theory & Terminology

Fuel Systems & Venting – Tanks, Piping, Fuel Units & Oil Valves, Fuel Pumps and Oil Valves, Nozzles & Combustion Chambers, Draft & Venting, Pellet Vents, Combustion Air Zone, Combustion, Solid Fuel, Bio Mass

Heating Systems, Conservation, Customer Relations & Codes – Heating Systems, Heat Loss, Renewal Energy Types, Preventative Maintenance, Service Procedures, Energy Conservation, Energy Concepts, Pressure & Thermal Boundaries, Insulation Factors, Customer Service

Basic Air Conditioning w/ EPA Certification; Refrigeration & Troubleshooting:

This 72-hour course is designed to provide classroom and hands-on training in the following areas: Refrigerant Handling, Electrical Controls & Wiring, Brazing, Flaring, & Soldering, Electric Motors and Compressors, Air Flow Measurement, Charge and Evacuate, EPA Certification, Proper Tool Use & Care, Super Heat & Sub Cooling, Preventative Maintenance, and Refrigeration. During Part One, students will cover the basics of A/C and earn EPA Certification. Part Two will consist of in-depth training in A/C Refrigeration Installation & Service

Mini-Split Heat Pump 40 Hour Training

This 40-hour class will focus on Installation, Operations and Service of Ductless Mini Split Heat pump systems. The training will include discussions, live operations and 24 hours of hands on lab assignments. Topics will include System components, Operating cycles, Installation practices and Service procedures. During our lab training we will work with Mitsubishi, Daikin and Haeir products. **System Components Covered:** Indoor / Outdoor heat; exchanger; Compressor; Metering Device's; Reversing valves; Line driers; Defrost Controls; Thermostats.

Propane Basic Principles & Practices; Appliance Installation & Service; Tank Setter & Outside Piping:

These full-time intensive programs are enhanced versions of the National Propane Gas Association's Certified Employee Training Program (CETP). Successful completion of each course, passage of the included test and submission of the related skills assessment verification, will earn NPGA certification. Achievement of NPGA certification will prep students for the state licensing exam. The initial state license and/or endorsements will be issued according to the licensing law. Under both CETP rules and state requirements, all must pass, and become certified in the course known as Basic Principles & Practices in order to receive certification in any other segment of CETP or qualify for any state license endorsements.

Required Tools:

(2) 10" Adjustable Wrenches
Inches Water Column Gauge
(2) 10" Pipe Wrenches
8" Adjustable Wrench
Set of T Allen Wrenches
(SAE: 7/16" - 1/8"; 6 x 1/8", 9/64 ", 3/16", 7/32", Ð", 5/16")
Set of Combination Wrenches Ð" to Ð" and 5/16" to 9/16"
Set of Metric Compatible Wrenches
Set of T Metric Allen Wrenches
2" Three Ring Binder
25' or 30' tape rule
3/16" to Ð" Straight Blade Screwdriver 6", 9" 6 in 1 Screwdriver
Torx bit screwdriver
Flashlight
Grill Lighter
Clamp on Amp/Volt/Ohm Meter
Flaring Tool, Tubing Cutter (i.e. Rigid #15 with reamer)
Insulated Linesman's Pliers
Insulated Pump Pliers
Metal Cutting Pliers (Sheet Metal Snips)
Multi-Meter (Category III)
Needle Nose Pliers
Pocket Thermometer
Refrigerant Gloves
Safety Glasses
Set of Nut Drivers
Side Cut Pliers
Six in One (1/4" by 5/16") Screwdriver T10W
Press Gauge: T-10W
T15 Vacuum Gauge Torpedo Level
Tubing Cutter: 1/8" to 1 1/8"
Utility Knife or Leatherman
Colored Pencils, Highlighter
Torx Bit Set

REGISTRATION

MTEC 2020 HVAC Professional Certification

Day Classes; 7:30a-3p

- ☐ 10,795 Member
- ☐ 11,795 Non-Member

- ☐ Jan 20 - May 14
- ☐ Jan 30 - May 22
- ☐ June 1 - Sept 18
- ☐ July 8 - Oct 27
- ☐ Aug 31 - Dec 18

Last Name:_____ First Name:_____ D.O.B:_____

Address:_____ City:_____ State:_____ Zip:_____

Home phone:_____ Cell Phone:_____ Email:_____

Sponsoring Company (if applicable):_____

Company Contact:_____

Company Address:_____

City:_____ State:_____Zip:_____

Additional Student Information

Are you currently employed? Y N

If yes, Company Name:_____ Location:_____

How did you hear about MTEC? (Circle all that apply)

Radio TV School Employer Word-of-mouth Career Center VA office Other:

PAYMENT

MTEC 2020 HVAC Professional Certification

Registration + Refund Policy

A $500 non-refundable registration fee is required to register. Enrollment will not be processed until this registration fee is received.

100% of tuition is due fifteen (15) business days prior to the first day of class. Requests for refunds must be made no later than fifteen (15) business days prior to the first day of the course. Requests for refunds made within fifteen (15) business days of the first day of the course WILL NOT BE HONORED.

Transfers requested prior to fifteen (15) business days of the first day of a course will be permitted with no penalty.

MEMA Technical Education Center has a maximum and a minimum number of students it will serve per class. If the minimum is not achieved, all funds paid will be refunded. If the maximum number is achieved, no further registrants will be accepted. All registrations are on a first-come first-serve basis.

Payment Options

___ Check ___ Credit Card ___ Money Order _____ VA/ Career Center Sponsor ___ Please Invoice

Card:_____Expiration Date:_____ Code:_____

Name on Card:_____

I have read and acknowledge the Registration/Refund policy and deadlines as stated:

Signed by:_____ Date:_____

PLEASE REMIT TO MEMA/MTEC 25 Greenwood Road, Brunswick, Maine 04011

MEMA TECHNICAL EDUCATION CENTER