



2015 Course Catalog



10 Alcap Ridge Cromwell, Connecticut 06416

Tel: 860-893-0605 www.EntechTraining.org







Table of Contents

- Page 3 Nondiscrimination Policy / Student Prerequisites
- Page 4 ENTECH History
- Page 5 Important Dates & Directions
- Page 6 HVAC License Program Course Descriptions
- Page 7 HVAC License Program Course Descriptions
- Page 8 HVAC License Program Information
- Page 9 HVAC License Program Information
- Page 10 Apprenticeship Program Information
- Page 11 HVAC License Program Course Dates
- Page 12 HVAC License Program Course Dates
- Page 13 HVAC License Program Course Dates
- Page 14 HVAC License Program Course Dates
- Page 15 HVAC License Program Course Dates
- Page 16 Commercial Driver Training
- Page 17 Commercial Driver Training
- Page 18 CETP/Propane Training
- Page 19 CETP/Propane Training
- Page 20 BPI Building Analyst Training
- Page 21 BPI Building Analyst Training-Envelope & Shell
- Page 22 BPI Building Analyst Training-Heating Specialist
- Page 23 BPI Building Analyst Training-Multi Family
- Page 24 Professional Skills for Technicians
- Page 25 Solar Thermal Certification
- Page 26 Continuing Education for Plumbers
- Page 27 General Information
- Page 28 General Information
- Page 29 General Information
- Page 30 Tuition Assistance Programs
- Page 31 Veterans Benefits & Services
- Page 32 Tuition Assistance Programs
- Page 33 Apprenticeship Information

ENTECH is approved for training by the Connecticut Commissioner of Higher Education.

ENTECH is approved to receive TAA, WIA & VA training funds. Copyright 2015 Entech Advanced Energy Training



Notice of Nondiscriminatory Policy As To Students

ENTECH admits students of any race, color, national and ethnic origin to all the rights, privileges, programs and activities generally accorded or made available to students at ENTECH. ENTECH shall not

discriminate on the basis of race, color, marital or civil union status, national and ethnic origin in the

administration of its educational policies, admissions policies, and other school-administered programs.

Student Prerequisites

ENTECH courses are designed to meet the related instruction requirements for occupational licensing. They are offered in English only. Any prospective candidate who intends to pursue an occupational license must meet the requirements established by General Statutes, Chapter 393, Section 20-333 to be considered by the state as a candidate for licensing. *Licensing is not a prerequisite for enrollment*.

The prerequisites for licensing, as stated in Chapter 393 are copied below:

Connecticut General Statutes, Chapter 393, Section 20-333:

"To obtain a license under this chapter, an applicant shall have attained such <u>applicant's</u> <u>eighteenth birthday</u> and shall furnish such evidence of competency as the appropriate board, with the consent of the Commissioner of Consumer Protection, shall require. The applicant shall satisfy such board that such applicant is of <u>good moral character</u>, possesses a <u>diploma or other evidence of graduation</u> from the eighth grade of grammar school, or possesses an equivalent education to be determined on examination and has the requisite skill to perform the work in the trade for which such applicant is applying for a license and can comply with all other requirements of this chapter and the regulations adopted under this chapter."

ENTECH 10 Alcap Ridge Cromwell, Connecticut 06416 Phone (860) 893-0605 Fax (860) 632-1122 www.EnTechTraining.org

ENTECH is approved for training by the Connecticut Commissioner of Higher Education.

ENTECH is approved for apprenticeship training by the Connecticut Department of Labor as defined in Section 20-330 of the Connecticut General Statutes. Graduates of ENTECH'S day and evening HVAC programs will obtain 130 hours of OJT credit which will apply to Connecticut's Heating and Cooling Apprenticeship programs through the CT Dept. of Labor Office of Apprenticeship Training.

All S, B & D license courses are 36 hours in length. Both day and evening courses are available. Day courses are completed in one week and are held Monday through Friday from 8:00 am to 3:30 pm.

Welcome to ENTECH Advanced Energy

The very essence of green collar jobs, at their core, is trained professionals whose life work is the improvement of the energy efficiency of any energy-consuming appliance or dwelling. That is the very definition of the HVAC training ENTECH provides.

Our education center has led the HVAC industry and expanded our curriculum and training to include all aspects of the energy efficiency industry to reflect the latest needs of local energy conservation technician employers. Offering programs in HVAC, Energy Audits, Propane and Commercial Truck Driving.

ENTECH remains dedicated to the education of present and future energy conservation technicians. The facility remains true to its original concept of tradesmen and women teaching tradesmen and women. Fully licensed instructors with decades of experience follow a curriculum that is approved for apprenticeship training by the State of Connecticut Departments of Higher Education and Labor as defined in Section 20-330 of the Connecticut General Statutes.

We incorporate state of the industry training and use modern equipment donated from manufacturers and Association members along with one of a kind teaching aids created by our founders. Our training is designed to teach the theory behind what makes an HVAC system work and extensive hands-on training is used to teach how to trouble-shoot that system in the best and most diversely equipped HVAC lab in the State of Connecticut. After we teach the theory of a control circuitry-wiring diagram, students then build a training board incorporating the controls discussed in the theory class. After attending our school students have the basic knowledge and confidence needed to be an entry-level technician. Students can also attend additional programs and seminars at ENTECH to upgrade to a higher license category and attain the Continuing Education Units that come with these classes.

Our facility is centrally located in Cromwell, CT and is equipped with two modern classrooms, a large seminar room, and a 2,500 square foot lab. ENTECH is a short drive from major highways, there is ample parking and plenty of room for expansion. Additionally, we have a satellite school, The School for Energy Efficiency located in Waterbury CT, www.TSFEE.com. The School for Energy Efficiency offers a suite of home performance courses and is a Building Performance Institute certified test center.

Call ENTECH if you have any questions or require additional information. Visits and school tours by individuals and organizations are welcome. Anyone wishing to visit our facility should contact Kate Lennon, Administrator at 860-893-0605 or kate@entechtraining.org

School Director: Chris Herb chris@ctema.com

School Administrator: Kate Lennon kate@EntechTraining.org



ENTECH 2015 Important Dates

May 25 - 29, 2015 May 25, 2015 June 29-July 3, 2015 September 7-11, 2015 September 7, 2015 November 23-27, 2015 November 26, 2015 December 21-25, 2015 Memorial Day week – no day classes Memorial Day—no evening classes Independence Day week – no day classes Labor Day week – no day classes Labor Day—no evening classes Thanksgiving week – no day classes Christmas week – no day or evening classes

Directions

ENTECH is centrally located at 10 Alcap Ridge in Cromwell, Connecticut. From Interstate 91 take exit 21. Turn right onto CT-372 / Berlin Road.

Turn right onto Sebethe Drive. Turn left onto Alcap Ridge.

ENTECH is located on the right.



ENTECH Advanced Energy Training 10 Alcap Ridge Cromwell, CT 06416

> Tel: 860-893-0605 Fax: 860-632-1122

www.EntechTraining.org



HVAC Course Descriptions

AO018 Trade Math & AO066 Blueprint Reading

Students learn how to quickly solve many practical problems from simple math to measuring area and volume as it applies to the trade. The blueprint course covers symbols of the trade. Students learn scale and demonstrate how to make floor plans, determine elevation, and set up framework.

AO703 Science I and AO704 Science II

This course provides the student with an understanding of the scientific principles and laws of this trade. The student will learn the importance of BTU's and energy, laws of thermodynamics, and the operation of measuring devices. The course will also cover the fundamentals of safety procedures. The student will learn to cut, flair, swage, sweat, and braze tubing using air/ acetylene tanks.

AO709 Special Piping

This course provides the student with an understanding of heating and cooling load calculations. This information will enable the student to design and install the necessary duct size to distribute and balance airflow for heating and cooling. The student will learn to properly size supply and return, as well as return air registers and grills.

AO716 Oil Burners

This course covers oil burner components. Proper installation of oil burners will be reviewed. Students learn how to properly do vacuum testing and learn the correct method of measuring oil and pump pressures and how to check for defects. Students learn how to clean or replace a defective nozzle and how to check for water or sediment. Also, proper operation and maintenance of oil burner motors and annual tune-up procedures are covered.

AO717 Heating I Steam

This course provides the student with an understanding of installation, trouble-shooting, and maintenance of a steam system. The student will learn the fundamentals of one and two pipe steam systems. Critical near boiler piping, controls and traps as applied to a steam system will also be covered.

AO718 Heating II Hydronics

This course provides the student with an understanding of installation, trouble-shooting, and maintenance of a hydronic heating system. The student will learn the essentials of near boiler piping with control and zoning with circulators and zone valves.

AO728 Gas Heating Systems

This course covers chemical makeup, BTU content, and specific gravity of different types of gas. Students learn about gas pressure and sizing of gas lines. Gas burners, proper air mixture, ignition systems, and operation of gas valves are discussed. Students will learn chimney design.

AO729 Codes

This course covers the various industry codebooks: NFPA 31, NFPA 54, NFPA 58, and the ICC In-



HVAC Course Descriptions

AO768 Fuel Oil & Tank Piping

This course covers the chemical makeup of oil and its relative viscosity and pour point. Students learn proper sizing and piping of oil lines including one and two pipe systems. Students learn how to correctly install fill and vent pipes. They learn how to correctly locate inside fuel tanks and outside buried tanks. Demonstrations show how fuel is prepared for burning through pressure and atomization of primary and secondary air. Students learn how to properly size nozzles and how to determine their proper application.

AO769 Oil Burner Units & Auxiliaries

This course covers chimney draft and its effects on the heating system. Proper venting and vent sizing as well as natural, forced, and induced drafting is taught. Students learn about the different types of combustion chambers and their sizes. They learn how to properly install and test burners, how to properly size units, and how ignition systems work.

AO770 Basic Refrigeration

This course provides the student with an understanding of refrigerants and refrigerant oils. The student will learn the basic refrigeration components and the refrigeration cycle. System evacuation, recovery, recycling, and reclaiming procedures will be covered as well as procedures of charging and the use of calibrating instruments. EPA 608 Refrigeration Certification exam is administered to students.

AO771 Domestic Refrigeration

This course provides the student with an understanding of the application of domestic refrigeration systems. The student will learn about evaporators, condensers, compressors, expansion devices, and controls.

AO772 Commercial Refrigeration

This course provides the student with an understanding of the application of commercial refrigeration systems. It will teach the student about evaporators, condensers, compressors, expansion devices, and controls.

AO773 Air Conditioning

This course provides the student with the understanding of indoor air quality, comfort and psychometrics. The student will learn how the refrigeration system is applied to air conditioning & the student will be given instructions on the proper installation and operation of these systems.

AO777 Basic Electricity

This course covers electron theory, the structure of atoms, electromagnetism, inductance, insulators, and resistance. Students learn Ohm's law, series, parallel, and series/parallel circuits.

AO778 Oil Burner Controls

This course covers forced warm air controls. Thermostats, relays and primary controls are discussed. Students learn wiring, sequence of operation, and troubleshooting.

Heating, Ventilation, Air Conditioning (HVAC) Program S License

The apprenticeship program for an S-2 license (Heating and Cooling Mechanic) requires 8,000 hours (4 years) related on-the-job-training and related instruction. ENTECH provides a program to satisfy the educational requirement. The program consists of 16 individual courses. Both day and evening courses are available. Listed below are the courses and tuition requirements for the training. All prices are subject to change.

Course Title	Tuition
AO018/066 Trade Math / Blueprint Reading	\$1,165.00
AO 703/704 Science I / Science II	\$1,155.00
AO 709 Special Piping	\$1,155.00
AO716 Oil Burners	\$763.00
AO717 Heating I Steam	\$1,112.00
AO718 Heating II Hydronics	\$1,036.00
AO728 Gas Heating Systems	\$1,241.00
AO729 Codes	\$1,165.00
AO768 Fuel Oil and Tank Piping	\$874.00
AO769 Oil Burner Units and Auxiliaries	\$817.00
AO770 Basic Refrigeration	\$1,464.00
AO771 Domestic Refrigeration	\$1,155.00
AO772 Commercial Refrigeration	\$1,155.00
AO773 Air Conditioning	\$1,112.00
AO777 Basic Electricity	\$1,179.00
AO778 Oil Burner Controls	\$762.00
Non Member Total	
Tuition Cost	\$17,310.00

HVAC Heating Program B License

The apprenticeship program for a B-2 license (Oil Burner Service and Installer) requires 2,000 hours (1 year) related on-the-job-training and related instruction. ENTECH provides a program to satisfy the educational requirement. The program consists of 8 individual courses. Both day and evening courses are available. Listed below are the courses and tuition requirements for the training. All prices are subject to change.

Course Title	Tuition
AO018/066 Trade Math / Blueprint Reading	\$1165.00
AO716 Oil Burners	\$762.00
AO728 Gas Heating Systems	\$1241.00
AO729 Codes	\$1165.00
AO768 Fuel Oil and Tank Piping	\$874.00
AO769 Oil Burner Units and Auxiliaries	\$817.00
AO777 Basic Electricity	\$1179.00
AO778 Oil Burner Controls	\$762.00
Non CEMA Member Total Tuition Cost	\$7,965.00

HVAC Warm Air Heating and Cooling Program

D License

The apprenticeship program for a D-2 license (Warm Air Heating and Cooling Mechanic) requires 4,000 hours (2 years) related on-the-job-training and related instruction. ENTECH provides a program to satisfy the educational requirement. The program consists of 8 individual courses. Both day and evening courses are available. Listed below are the courses and tuition requirements for the training. All prices are subject to change.

Course Title	Tuition
AO018/066 Trade Math / Blueprint Reading	\$1,165.00
AO703/704 Science I / Science II	\$1,155.00
AO728 Gas Heating Systems	\$1,241.00
AO770 Basic Refrigeration	\$1,464.00
AO771 Domestic Refrigeration	\$1,155.00
AO772 Commercial Refrigeration	\$1,155.00
AO773 Air Conditioning	\$1,112.00
AO777 Basic Electricity	\$1,179.00
Non CEMA Member Total Tuition Cost	\$9,626.00



Connecticut Department of Labor Apprenticeship System

Apprenticeship programs in the State of Connecticut are administered by the Department of Labor, Office of Apprenticeship Training. Skilled consultants provide technical assistance, monitoring, and consulting services to qualified employers willing to take on the responsibilities and obligations of program sponsorship.

Apprenticeship, in simple terms, is a program of "learning while earning." Unlike other vocational training, which is held in a school setting, apprenticeship is based solidly on an employer-employee relationship. The apprentice employee has voluntarily entered into a mutual agreement with an employer regarding training. It can thus be perceived that employment and training are interrelated. Apprenticeship can be seen as part of the "conditions of work."

Apprenticeable areas are in occupations requiring a wide and diverse range of skills and knowledge, as well as a high level of maturity, reliability, and judgment. Additionally, they are clearly identified and commonly recognized as separate and distinct trades requiring broad skills applicable throughout the industry. To paraphrase an old cliché, we are talking about "the Butcher, the Baker, the Tool and Die Maker." In the apprenticeship system, proficiency in the job is known as "journeyperson status." A journeyperson has well-rounded ability in all phases of each trade and requires a minimum of supervision. For the most part, the day-to-day training of an apprentice rests upon the journeyperson who in turn conducts training under guidelines set forth by the employer. These guidelines conform with State and Federal standards. The Apprenticeship Index gives more detailed information on apprenticeable trades.

Firms who train apprentices in the manufacturing trades may be eligible for a credit against their corporate taxes per Public Act 95-284. Other less tangible, but no less important, advantages to participation in registered apprenticeship include: a dependable source of trained workers; a cost effective method of training (apprentices produce while they learn); reduced turnover (apprentices know they have jobs with a future); improved labor relations; public recognition for your company's participation in the program; and, in the case of the licensed trades, the ability to hire other than licensed journeypersons.

For information on apprenticeship programs, call (860) 263-6085 or visit their website at http:// www.ctdol.state.ct.us/progsupt/appren/appren.htm



HVAC Day Courses

January thru April 2015*

Class Time: Monday—Friday 8:00am—3:30pm

Course	Start Date*	End Date*
AO018/066 Trade Math & Blueprint Read-		
ing	January 5	January 9
AO777 Basic Electricity	January 12	January 16
AO729 Codes	January 19	January 23
AO768 Fuel Oil & Tank Piping	January 26	January 30
AO716 Oil Burners	February 2	February 6
AO769 Oil Burner Units & Auxiliaries	February 9	February 13
AO778 Oil Burner Controls	February 16	February 20
AO728 Gas Heating Systems	February 23	February 27
AO703/704 Science I & II	March 2	March 6
AO770 Basic Refrigeration	March 9	March 13
AO771 Domestic Refrigeration	March 16	March 20
AO772 Commercial Refrigeration	March 23	March 27
AO773 Air Conditioning	March 30	April 3
AO709 Special Piping	April 6	April 10
AO717 Heating I Steam	April 13	April 17
AO718 Heating II Hydronics	April 20	April 24

*Dates are subject to change. Please verify all information through our website www.EntechTraining.org or simply call ENTECH if you have questions 860-893-0605.



HVAC Day Courses

April thru August 2015*

Class Time: Monday—Friday 8:00am—3:30pm

Course	Start Date*	End Date*
AO018/066 Trade Math & Blueprint Read- ing	April 27	May 1
AO777 Basic Electricity	May 4	May 8
AO729 Codes	May 11	May 15
AO768 Fuel Oil & Tank Piping	May 18	May 22
AO716 Oil Burners	June 1	June 5
AO769 Oil Burner Units & Auxiliaries	June 8	June 12
AO778 Oil Burner Controls	June 15	June 19
AO728 Gas Heating Systems	June 22	June 26
AO703/704 Science I & II	July 6	July 10
AO770 Basic Refrigeration	July 13	July 17
AO771 Domestic Refrigeration	July 20	July 24
AO772 Commercial Refrigeration	July 27	July 31
AO773 Air Conditioning	August 3	August 7
AO709 Special Piping	August 10	August 14
AO717 Heating I Steam	August 17	August 21
AO718 Heating II Hydronics	August 24	August 28

*Dates are subject to change. Please verify all information through our website www.EntechTraining.org or simply call ENTECH if you have questions 860-893-0605.



HVAC Day Courses

September 2015 thru January 2016*

Class Time: Monday—Friday 8:00am—3:30pm

Course	Start Date*	End Date*
AO018/066 Trade Math & Blueprint Read-		
ing	August 31, 2015	September 4, 2015
AO777 Basic Electricity	September 14	September 18
AO729 Codes	September 21	September 25
AO768 Fuel Oil & Tank Piping	September 28	October 2
AO716 Oil Burners	October 5	October 9
AO769 Oil Burner Units & Auxiliaries	October 12	October 16
AO778 Oil Burner Controls	October 19	October 23
AO728 Gas Heating Systems	October 26	October 30
AO703/704 Science I & II	November 2	November 6
AO770 Basic Refrigeration	November 9	November 13
AO771 Domestic Refrigeration	November 16	November 20
AO772 Commercial Refrigeration	November 30	December 4
AO773 Air Conditioning	December 7	December 11
AO709 Special Piping	December 14	December 18
AO717 Heating I Steam	January 4, 2016	January 8, 2016
AO718 Heating II Hydronics	January 11, 2016	January 15, 2016

*Dates are subject to change. Please verify all information through our website www.EntechTraining.org or simply call ENTECH if you have questions 860-893-0605.



Night Courses January — December 2015* Monday & Wednesday Evenings Class Time: 5:3pm—8:30pm

No night class scheduled on the following Holidays: Memorial Day May 25, 2015 Labor Day September 7, 2015 Christmas Day Week December 21-25, 2015

Course	Start Date*	End Date*
AO771 Domestic Refrigeration	January 5	February 11
AO772 Commercial Refrigeration	February 16	March 25
AO773 Air Conditioning	March 30	May 6
AO709 Special Piping	May 11	June 22
AO717 Heating I Steam	June 29	August 5
AO718 Heating II Hydronics	August 10	September 21
AO703/704 Science I & Science II	September 28	November 4
AO770 Basic Refrigeration	November 9	December 16

*Dates are subject to change. Please verify all information through our website www.EntechTraining.org or simply call ENTECH if you have questions 860-893-0605.



Night Courses January — December 2015* Tuesday & Thursday Evenings Class Time: 5:30pm—8:30pm

No night class scheduled on the following Holidays: Thanksgiving Day November 26, 2015 Christmas Day Week December 21-25, 2015

Course	Start Date*	End Date*
AO728 Gas Heating Systems	January 6	February 12
AO768 Fuel Oil & Tank Piping	February 17	March 26
AO769 Oil Burner Units & Auxiliaries	March 31	May 7
AO716 Oil Burners	May 12	June 18
AO729/099 Codes & Building Trade Safety	June 23	July 30
AO018/066 Trade Math & Blueprint Reading	August 4	September 10
AO777 Basic Electricity	September 15	October 22
AO778 Oil Burner Controls	October 27	December 8

Dates are subject to change. Please verify all information through our website www.EntechTraining.org or simply call ENTECH if you have questions 860-893-0605.



Commercial Driver License Class B Training

Put ENTECH's expertise to work for you to obtain a Class B CDL license. Our program fully prepares you to meet the State of Connecticut Department Of Motor Vehicle's requirements and gives you the hands-on skills training that employers demand. We will prepare you for all aspects of the CDL license process including: written exam, skills exam and road test administered by the DMV at our CDL training facility in Cromwell.

The ENTECH - CDL Training Program

- 1. Classroom Preparation (For DMV written exam & permit)
- 2. DMV written exam & permit
 3. Field Training (pre trip inspection & skills maneuvers)
 4. Road Training (one-on-one on the road training)
 5. Simulated Pre test

- 6. DMV Test

Program Prerequisites

In order to be accepted into ENTECH's CDL license training program and obtain a CDL class B license you must meet the following requirements:

- •Students must visit the DMV website and provide self certification of driving type.
- •Successfully complete the Physical Exam & Drug Test prior to the written DMV exam.
- •Obtain a CDL Permit from the CT DMV.
- •Students are responsible for all fees for the Physical exam, Drug test and due to the DMV. •Be at least 18 years of age.

The CDL-B course is forty one (41) clock hours in length. Each class consists of different modules and is held on different times/days and is completed within a 6-8 week period. A complete course schedule which includes specific program dates and times will be given to you the first day of class. All courses are measured in clock hours, which consist of sixty (60) minutes each. Students that miss classes during each 41 hour session will be required to make up the time at their additional expense of \$105.00 per hour for practice and \$250.00 for retest or \$750.00 for 8 hours of practice and retest.

Program Description (Program is conducted over a six – eight week period)

Classroom Preparation for the DMV Written Exam and CDL Permit 1. One 8-hr day of group classroom instruction, preparing students on general knowledge, air brakes, and cargo tanker material of the CDL-B written exam. Students can further prepare by taking a 2-hr simulated written exam on an ENTECH computer.

2. DMV Written Exam and CDL Permit (done at the DMV)

3. Field Training Groups of 4 take 16-hrs of skills preparation in ENTECH's skills course on a test truck, learning pre-trip inspections and the maneuvers on which they will be tested.

4. Road Training Upon completion of Field Training, individual students will go on the road with an instructor for 3 hours of road test preparation.

5. Pre Test Following the one-on-one training in the vehicle, small groups will be scheduled for a simulated skills and road test exam and be graded as if by the DMV.

6. DMV Testing The DMV will come to ENTECH and administer the skills/road test to groups of six. This will be on site in ENTECH's skills course parking lot using vehicles students have trained on. This gives students extra confidence and increases the pass rate.

ENTECH's Instructor, Gary LaBrake, is a nationally recognized driver training and safety expert with over 30 years of experience, and is the former Director & CEO of the Connecticut Commercial Driver Training School. Committee chair for the development of the DMV's first Commercial Drivers Training manual.

2015 Class Start Dates*

January 20	July 14
February 10	August 11
March 10	September 8
April 14	October 13
May 12	November 10
June 9	December 8

Program Cost*: \$2,225.00

For more information contact Kate Lennon, at kate@entechtraining.org or 860-893-0605

 * Dates and costs are subject to change. Please verify all information through our website www.EntechTraining.org or simply call ENTECH if you have questions 860-893-0605. Payment is required prior to attending class.
 ENTECH reserves the right to cancel any class if the minimum number of required registrants is not met.







The Certified Employee Training Program (CETP) was developed by the Propane Education & Research Council to provide professional technical training to the propane industry. The CETP program's goals are: Encourage professionalism and integrity in the propane industry, Raise the level of technical competency, Establish job performance norms and create incentive for employees to improve themselves. The CETP program includes training materials written by industry experts and combines hands-on activities with written evaluations. Upon successful completion of each section the student will receive NPGA Certification. All prices are subject to change.

Course Descriptions / Dates / Cost

Program Cost \$4,425.00

CETP -1.0 Basic Principles and Practices in Propane Class Date—March 9-11, 2015*

This book is a prerequisite to the more advanced classes (except transport delivery) and includes physical properties and combustion characters of propane, identifying industry standards, safety codes and regulations, identifying basic parts of tanks, cylinders and bulk storage installation, maintaining a safe working environment, identifying commonly used hand tools and supplies and serving the customer. **ENTECH Reserves the right to cancel any class that does not meet the minimum requirement of at least 10 registered students**

CETP - 2.1,2.2 & 2.4 Propane Delivery Basics/Bobtail/Cylinder Delivery Class Date—March 17-19, 2015*

This Book covers propane delivery and includes: inspecting and operating propane delivery vehicles, filling storage containers, and customer deliveries. **ENTECH Reserves the right to cancel any class that does not meet the minimum requirement of at least 10 registered students**.

CETP - 2.5 Operating a Truck, Tank or Tractor Trailer to Deliver or Relocate ASME Tanks Class Date—TBD*

This Book covers propane delivery and includes: inspecting and operating propane delivery vehicles, filling storage containers, and customer deliveries. **ENTECH Reserves the right to cancel any class that does not meet the minimum requirement of at least 10 registered students**.

*Please confirm class dates through our website www.EntechTraining.org or simply call ENTECH if you have questions 860-893-0605.

Course Descriptions / Dates / Cost

CETP - 4.1 Vapor Distribution Operations-Layout & Design Class Date—March 23-25, 2015*

This Book covers the layout, design and selection of a vapor distribution system, the installation of propane storage tanks and cylinders, vapor regulation and metering systems, vapor distribution systems, liquid distribution and vaporizing systems, inspecting and pressure testing propane piping systems. **ENTECH reserves the right to cancel any class that does not meet the minimum requirement of at least 10 registered students**.

CETP - 4.2 Vapor Distribution Operations-Installation

Class Date—April 13-15, 2015*

This Book covers the preparation and installation of propane storage tanks and cylinders, vapor regulation and metering systems, vapor distribution systems, liquid distribution and vaporizing systems, inspecting and pressure testing propane piping systems. **ENTECH Reserves the right to cancel any class that does not meet the minimum requirement of at least 10 registered students.**

CETP-4.3 Installing Appliances & Interior Vapor Distribution Systems Class Date—April 20-22, 2015*

This Book is a prerequisite to 7.0. It reviews: placing equipment into service, identifying fundamental principles of venting, and ventilation, pressure testing and leak checking piping systems, controlling propane/air mixtures for proper combustion and sizing and installing natural draft venting systems. ENTECH reserves the right to cancel any class that does not meet the minimum requirement of at least 10 registered students.

CETP-7.0 Appliance Service Class Date—May 5-7, 2015*

This Book covers the identification of troubleshooting skills in electrical circuits/systems, meas-

uring electrical quantities, tics and components of comvices. ENTECH Reserves the not meet the minimum requirestudents.



identifying operating characterismon sensing and control deright to cancel any class that does ment of at least 10 registered

Students should bring the latest editions of NFPA 54 and NFPA 58 to class. Code Books are not included in the cost of class.

*Please confirm class dates through our website www.EntechTraining.org or simply call ENTECH if you have questions 860-893-0605.





Building Analyst Certification

BPI Building Analyst Training will give you the knowledge you need to perform a whole house energy audit. Learn the relationship between all the systems in the house and the effects on health, safety, comfort and efficiency. The whole house is a system, learn how it all works together and how flaws in one part can compromise performance throughout. Learn building science fundamentals, energy conservation strategies, heat loss calculations, duct testing and sealing, blower door testing, etc. Find the root cause of a problem and give them solutions that work! Learn about the whole house as a system.

Classroom Portion to Include:

Principles of Energy and Building Science The Energy Audit Process Building Shell and Thermal Envelope Airflow Basics Moisture Management Air Quality Combustion Safety and CO Monitoring Building Systems: HVAC, Lighting, Appliances, and DHW Diagnosing Common Building Problems Blower Door Testing Combustion Testing and Safety

Field Portion Equipment to Include:

Blower door Ambient Carbon Monoxide detector Manometer Natural gas detector Flue gas detector

Class Dates*

March 2-6, 2015 April 20-24, 2015 Tests are scheduled for the following week.

Cost \$1,645.00

Cost includes tests. Prices subject to change. This class takes place at The School for Energy Efficiency, 145 Railroad Hill Rd, Waterbury, CT, visit www.TSFEE.com









Envelope & Shell Certification

Enhance your skills as an energy auditor; the envelope shell class will give you specifics in enhancing the building envelope through air sealing and insulation techniques. The course is specific to building thermal and pressure boundaries. As an individual this course will prepare you to understand not only how to analyze a home, but help you to understand why the process is so important. Each home is unique and it is essential to understand what is happening within that building envelope and why problems such as moisture, ice dams, mildew and drafts were created in the first place, allowing you to give the homeowner options and ways to solve those building envelope issues. Prerequisite for this course is the BPI Building Analyst training and certification.

Classroom Portion to include:

Thermal & Pressure Boundary Evaluation Air Sealing & Dense-pack Techniques Prioritizing Air Sealing Work Insulation Techniques & Applications Window & Door Inspections Ventilation Requirements and Systems Health & Safety

Field Portion to include:

Testing In and Testing Out Procedures Indoor Air Quality Assessment Indoor Moisture Sources & Solutions Critical Shell Identification & Inspection Blower Door Applications

Class Dates*

To Be Determined Tests are scheduled for the following week.

Cost \$1,400.00

Cost includes tests. All prices subject to change. This class takes place at The School for Energy Efficiency, 145 Railroad Hill Rd, Waterbury, CT









Heating Specialist Certification

This course will prepare you to better understand heating system load and sizing, design, duct systems diagnostics, proper maintenance and efficiency analysis. It's another step in your education learning building science and to becoming a leader in "green" building practices. Prerequisite for this course is BPI Building Analyst training and certification.

Classroom Portion to include:

Health and Safety Heating System Science Load & Sizing Distribution System Design Combustion Safety Science Ducted System Diagnostics Combustion Gas Analysis Duct Repair & Sealing Combustion Appliance Vent Repair Ventilation System Installation Heating Appliance Clean & Tune Gas Oven Clean & Tune

Field portion to include:

Controls & Electrical Inspection Heat Exchanger Inspection Post-installation Inspection CAZ Testing

Class Dates* to be Determined

Cost \$2,000.00

Cost includes tests. All prices subject to change. This class takes place at The School for Energy Efficiency, 145 Railroad Hill Rd, Waterbury, CT, visit www.TSFEE.com









Multi Family Building Analyst Certification

Prerequisite for this class is BPI Building Analyst training and certification.

Are you ready to develop your energy audit skills even further? You have mastered the

single family home analysis and you need a new challenge.

Our Multifamily Building Analyst course is for you! This course will teach you to analyze larger housing units. This advanced level of training can bring you new business for years to come, providing building owners and their tenants with a more comfortable, safe and

durable building.

Classroom and/or Field Portion will include:

Overview of Multifamily Audit Process Data Collection & Data Management **Building Envelope** Ventilation & building Air Flow Heating and Hot Water Systems **Cooling Systems** Energy End Use Allocation Electrical Systems and Metering Schemes Building Energy Modeling Energy Measure Analysis Combined Heat and Power (CHP) Audit Reporting Energy Modeling Blueprint Evaluation Moisture Analysis **HVAC** System Analysis CAZ Testing

Class Dates* to be Determined

Cost \$1,800.00

Cost includes tests. All prices subject to change. This class takes place at The School for Energy Efficiency, 145 Railroad Hill Rd, Waterbury, CT, visit www.TSFEE.com





Professional Skills for Technicians

A basic common sense approach enabling energy conservation technicians to acquire a skill set for customer service and creating sales opportunities. Professionalism is vital in dealing with consumers. Students will take an active role in the class to learn concepts and skills for greetings customers and gathering information. Listening skills will be refined, teaching students how to acknowledge the needs and concerns of the customer. Students will learn ways to handle difficult situations and challenging customers, including how to end a service call on a positive note and skills to determine sales opportunities.

Professionalism throughout the industry is crucial and this course will set your technicians apart from competitors by teaching them customer service skills that build credibility and respect.

Topics include:

Greeting, listening skills Solving problems, difficult customers, difficult situations Strong closings, follow up, sales opportunities and handling objections Handling night calls, effective installation behavior Internal customer service, tips for success

Course Objectives:

Professionalism Evaluate information and acknowledge concerns Improve listening skills Provide solutions Customer service & sales

Class dates* to be determined

Cost \$775.00

All prices subject to change.

Payment is required prior to attending class. ENTECH reserves the right to cancel any class if the minimum



Solar Thermal Certification

This 24 hour—3 day course is designed for those individuals whom already hold Connecticut \$1,\$2,\$3,\$4 or P1,P2,P3,P4 licenses.

Our course will include all aspects of solar thermal work—installation, erection, repair, replacement, alteration or maintenance of active, passive and hybrid solar systems that directly convert ambient energy into heat or convey, store and distribute such ambient energy.

ENTECH's Solar Thermal Certification Course covers solar theory, solar energy fundamentals, energy wave forms, heat transfer, insulation values and how they are effected by location, season and climate. The theory of how to correctly measure and size a solar system and make a site assessment will be covered. How to check for defects in materials and components will be covered.

System piping, pool heaters, water relief, and other uses for Solar heated water will be discussed. Correct procedures, tools and equipment usage will be emphasized. National codes relating to Solar heating systems and piping will be reviewed.



Course Objectives:

Correctly answer questions relating to piping of solar systems. Properly identify tools, equipment and materials related to solar units. Appropriately answer questions relating to tanks, flow rates and wiring Accurately identify parts of a solar system. Determine structural compliance on installation. Worksite safety

Join us for this 24 hour—3 day course designed for those individuals who already hold a Connecticut \$1,\$2,\$3,\$4 or P1,P2,P3,P4 license and receive certification toward your Solar Thermal license.

Class Dates*

To Be Determined Hours 8am-4pm

Cost \$725.00

All prices subject to change.



Continuing Education for Plumbers—Journeypersons & Contractors

Tired of the same plumbing training classes? We'll make it worth your time! If your license is expiring and you need continuing education units, come join us for a good time and great training.

ENTECH's continuing education programs have been created to assist plumbers in obtaining their required credit hours for license renewal. Taught by individuals who possess the experience, knowledge and expertise to provide comprehensive, up to date, relevant training, safety, and code information. Through the use of our experiences and the input of those within the industry, we constantly strive to position ourselves as an industry leader and embrace our responsibility to do so.

Journeypersons are required to take five (5) hours of continuing education units every odd numbered year and Contractors are required to take seven (7) hours of continuing education units every even numbered year for license renewal.

Various topics will be discussed in class including:

- Latest technology and energy saving appliances
- Installation knowledge
- Understanding your role in relation to the environmental impacts of plumbing services
- Appliances and household practices
- Safety procedures
- Conservation
- Consumer information
- Tax exemptions
- Americans with Disabilities Act
- Business & law for contractors



Class Dates * To be Determined

Cost \$125.00 All prices subject to change. Payment must be made in full prior to class start.

Dates are subject to change. Please verify all information through our website www.EntechTraining.org or simply call ENTECH if you have questions 860-893-0605.

General Information

(1) Course Length:

All courses are thirty-six (36) clock hours in length. Day courses are from 8:00 am to 3:42 pm Monday through Friday and are completed in one (1) week. Evening courses are from 5:30 pm to 8:30 pm on either Mondays and Wednesdays or Tuesdays and Thursdays and take six (6) weeks to complete. All courses are measured in clock hours, which consist of sixty (60) minutes each. ENTECH classes meet the requirements of the State of Connecticut as defined in section 20-330 of the CT General Statutes.

(2) Attendance Policy:

Students are required to attend all scheduled instruction.

(3) Payment:

All tuition includes a \$50 non-refundable registration fee, lab fees and books and CT sales tax. *Payment is required prior to the start of each course.* Method of payment accepted is check, cash, Mastercard or Visa.

Tuition Assistance is available to qualifying students.

(4) Books and other supplies:

Books are included in the course fee. Books are distributed on the first day of instruction. EN-TECH makes no refunds for books. Other supplies such as trade tools, notebooks, pencils, and related items are the responsibility of the student and are not provided by or sold by ENTECH.

(5) Course / program completion:

Students who successfully complete individual courses of instruction receive a wallet card. Students who successfully complete an organized program of study will receive a certificate indicating the program completed. One transcript will be issued to student upon program completion at no charge.

(6) Tools:

Students will provide their own tools. ENTECH will provide a list of recommended tools but does not sell tools or recommend brand names.

(7) Prior Credit:

A student may receive credit for previously acquired training. This assessment is on a case by case basis and is at the sole discretion of the School Director. Students meeting this criteria are encouraged to meet with the School Director to see if credit may be applied.

(8) Employment:

ENTECH will notify CEMA member companies of a student's availability for work and provide the student with a list of member companies in his or her district if asked by the student. These notifications are a courtesy of ENTECH and are by no means a guarantee of employment.

General Information

(9) Cancellation and refund policies and procedures:

The terms and obligations related to tuition and cancellation are only binding once the applicant has been accepted for admission into the ENTECH and has signed a completed enrollment agreement. Following official enrollment, termination of a student's training can be made either by the student or the ENTECH.

(10) Involuntary dismissal:

ENTECH reserves the right to dismiss any student whose conduct is deemed to be unsatisfactory. Unsatisfactory conduct may be theft, use of alcohol or illegal drugs on school property, absenteeism, failure to abide by school regulations, assault upon a staff member or other student, destruction of property, insubordination to a faculty or staff member, or any deliberate disruption of classes or other school activities. Students who are found in possession of or under the influence of alcohol or illegal drugs on school premises, who threaten or deliver any student or staff member with physical harm or who willfully destroy school property will be immediately dismissed. Refunds will not be given to gav student so dismissed. The school reserves the right to terminate any student prior to course completion upon determination that the student is not complying with school conduct policies or is not achieving sufficient academic grades (a grade average of tests must be 70 or higher). A student who has been dismissed for unsatisfactory conduct may be considered for readmission at the discretion of the executive Director. Students may also file official complaints according to the procedures described in the catalog under "Student Complaint Procedures." Tuition charges or refunds in cases of termination will be made in accordance with the school's cancellation and refund policy. The ENTECH complaint/inquiry policy is displayed on the school bulletin board and copies are available to the student upon request.

(11) Refunds:

a. Prior to beginning of class:

A full refund of all tuition fees will be made if the student provides the ENTECH notification of cancellation of the enrollment agreement at least one week prior to the beginning of the class in question. The fees will be refunded within thirty (30) days of the date of notification. Notification within one week of the start of training will result in the school retaining a fifty (50) dollar fee for administrative expenses. Any student who wishes to withdraw from or cancel this enrollment agreement should notify the school in writing.

b. After the beginning of class:

Tuition fee refunds due to any student who has begun training will be made within thirty (30) days of the date that the termination decision was made, minus the \$50 non-refundable registration fee and books. All tuition charges assessed for termination after the start of class are calculated based on the hours of instruction completed and the total hours of the training course. The date of withdrawal is based on the last verifiable date of attendance. The calculation of the refund due is based on the following:

1. Daytime courses:

- 75% of tuition fees if termination is prior to the completion of the first day
- 50% of tuition fees if termination is prior to the completion of the second day
- 25% of tuition fees if termination is prior to the completion of the third day
- 0% of tuition fees if termination is after the start of the fourth day

General Information

(11) Refunds: Continued

2. Evening courses:

- 75% of tuition fees if termination is prior to the completion of the third class
- 50% of tuition fees if termination is prior to the completion of the sixth class
- 25% of tuition fees if termination is prior to the completion of the ninth class
- 0% of tuition fees if termination is after the start of the tenth class

(12) Grading Policy:

Grading is maintained as a numerical average of all written tests administered during each course of instruction. Students must maintain a test average of 70 or higher to successfully complete each course.

The following letter and point system is used:

 90—100
 A

 80—89
 B

 70—79
 C

 69 or below
 Failure

[13] Language:

Classes are all taught in English. Students must speak, understand and read English.

[14] Student Background and Abilities:

Section 10a-22k-5(d) of the Regulations of State Agencies requires that state schools shall admit only those students whose educational background and abilities qualify them to pursue a particular program, course or lesson for which enrollment is sought. As a result, prospective students need to know that Connecticut law prohibits any convicted felon from holding a professional license and/or various certifications. Hence, a convicted felon would not be able to obtain employment as a licensed professional technician or as a certified professional in the State of Connecticut.

[15] School Closings:

In the case of inclement weather students should tune to the following television stations WTIC, WVIT, WFSB, WTNH or call the school main number and listen to the main message and follow the instructions.

Need money to pay for your education?



Nutmeg State Federal Credit Union serves individuals who live, work, worship, attend school or volunteer in Hartford, Middlesex, or Tolland County.

As a full-service financial institution, with products such as savings, checking, VISA® Credit Card, ATM/Debit cards, 24-hour banking, mortgages, direct deposit, payroll deduction, Kidz Club, financial planning, and electronic services such as e-Banking, e-Pay, e-Statements, e-Loan, e-Mortgage and e-HomeEquity, we continue to try and find ways to help our members achieve their goals.

If you attend school, or are considering attending, you may need to borrow money to pay for tuition. Nutmeg State FCU can provide you with an **Educational Loan** to meet your needs.

Please call us at 1.800.526.6933 to find out more about how you can take advantage of all our products and services. You may also visit us online any time by logging onto to our website.

www.nutmegstatefcu.org

All Educational Loans are subject to credit approval. Payments are made directly to the educational institution for cost of tuition. For the most up to date rates, call us or visit us online.



ck

Ro

У

Government programs ENTECH participates in the following programs to provide stu-

dents with various options to finance their education.

Trade Adjustment Act

The Trade Act of 1974, as amended, provides Trade Adjustment Assistance (TAA) services and benefits for individuals certified by the Federal Government as having lost their jobs or reduced their hours of work and wages due to increased foreign imports, or a shift in production to certain countries. Training to assist an adversely affected worker who lacks marketable skills return to suitable full-time employment. **The worker is entitled to only one training plan under a single certification.** Allowable types of training include classroom training; on-the-job training; customized training designed to meet the needs of a specific employer or group of employers. Remedial training should generally include a skilled component, with the nature of skilled training at least identified. Qualified individuals can receive a benefit of up to \$20,000.00 for an approved training program. Contact Dept. of Labor for information.

Workforce Investment Act

The Workforce Investment Act was passed by Congress in 1998 to provides federal funds for employment and training assistance. WIA services help people improve their opportunities for getting a job, increase their wages and provides money for job skills training. The WIA program is administered by a Workforce Investment Board in each region. WIA procedures vary depending on the region of the state in which a person lives. Contact Dept. of Labor for information.

Vocational Rehabilitation & Employment Service

Veterans Benefits & Services

ENTECH is approved to receive Veterans Benefits by the CT State Department of Higher Education (state approving agency) May 25, 2004 as per Title 38 United Sates Code, Section 3676. **Approved programs are:**

> B License Certificate Building Analyst Certification CETP Propane Training Class B Commercial Driver Training Continuing Education for Plumbers D License Program Envelope & Shell Certification Heating Specialist certification Multi Family Analyst Certification S License Certificate

Training funds are authorized and administered by the Veterans Administration's Vocational Rehabilitation Program.

- The program's goals are to provide veterans with a comprehensive rehabilitation services program to assist their successful return to the workplace.
- Prospective ENTECH students must speak to an appropriate Veterans Administration representative to determine if they are eligible to receive training benefits. Upon proper screening & approval by a Case Manager, the Veterans Administration will pay for the complete cost of the "B", "S" Class B or CETP programs including: tuition, books, lab fees and registration fee. ENTECH will provide the VA with the necessary program information and student progress reports.

Qualified veterans can receive a training benefit to cover the entire cost of ENTECH's programs. Contact the Dept. of Veteran Affairs for information at http://www.va.gov/

The Eugene M. Mangini ENTECH Scholarship

The Eugene M. Mangini HVAC Scholarship is the creation of ENTECH a nonprofit 501 [c] [3] educational vocational technical school certified by the State of Connecticut's Board of Higher Education.

- ENTECH admits students of any race, color, national and ethnic origin to all the rights, privileges, programs and activities generally accorded or made available to students at ENTECH. ENTECH shall not discriminate on the basis of race, color, marital or civil union status, national and ethnic origin in the administration of its educational policies, admissions policies, and other school-administered programs.
- Eligibility for the scholarship is based on only those who are about to graduate from high school or those who have recently graduated from high school. Scholarship applications are reviewed by the ENTECH's School Advisory Board [SAB].
- Scholarship applications are available online at http://ENTECHtraining.org/ tuitionassistance or by contacting ENTECH at 860-893-0605





THE OFFICE OF APPRENTICESHIP TRAINING The Connecticut State Apprenticeship Council

Dedicated to promoting "The Other 4-Year Degree"

www.ctapprenticeship.com

·****

WHAT YOU NEED TO KNOW BEFORE YOU CAN TAKE YOUR STATE LICENSE EXAMINATIONS

As a new entrant to the HVAC profession, The State of Connecticut requires that, before you may sit for your license examination[s], you have first registered as an apprentice with the CT Department of Labor. Failure to register as an apprentice will mean that you will not be able to sit for your license exam.

The state Department of Labor (DOL) administers Connecticut's apprenticeship program, with advice from a 12-member State Apprenticeship Council. The council's members represent industry, labor, and the public. State law allows the council to adopt minimum standards of apprenticeship and related and supplementary instruction, issue certificates of completion to apprentices, and encourage employers to establish programs and individuals to participate in them.

The labor commissioner, with the council's advice, develops the program's overall work training standards and convenes business and labor groups to develop craft-specific training programs and apprenticeship terms. DOL's Office of Apprenticeship Training is responsible for these activities, for registering program sponsors and individual apprentices, and for ensuring that registered programs follow all program standards and terms (CGS §§ 31-22m to -22t; Conn. Agency Regs., 31-51d-1 to -12).

REGISTERING APPRENTICES

Apprentices register through approved employers. Apprentices must be at least 16 years old. They must pay DOL a fee when they register and each year until they complete the program and obtain a journeyman's license (if required for their trade) or withdraw from the program. Employers must annually pay a sponsor fee for each apprentice.

When they register, apprentices receive a registration form that contains the agreement between the employer and apprentice, which spells out each party's responsibilities. These include the wage progression schedule, the trade category in which they will apprentice, and credits for previous experience. Apprentices also receive a monthly journal in which they must record their work and classroom instruction hours and in which their supervisor grades their progress.

You may obtain a CT Apprenticeship Registration form from the ENTECH website at: http://www.ctdol.state.ct.us/progsupt/appren/online/at-5.pdf

For more information on CT Apprenticeship programs contact State Apprenticeship Program, CT Dept of Labor - 860-263-6785 / 200 Folly Brook Boulevard, Wethersfield, CT 06109

The State of Connecticut Apprenticeship website is at: http://www.ctdol.state.ct.us/progsupt/appren/appren.htm

Where do the pros look for the next generation

of HVAC technicians?

Right here at ENTECH!

HVAC careers offer excitement, security and true growth potential.



Our state-of-the-art facility offers training with the very latest technologies and equipment. Because ENTECH is affiliated with the Connecticut Energy Marketers Association, we have direct relationships with the companies you'll want to work for. Get started today, and you're just months away from an exciting new career. Schedule your tour of our facility today.

Contact us at 860-893-0605 kate@entrechtraining.org

www.EntechTraining.org 10 Alcap Ridge Cromwell, CT 06416





Notes:

