

# Continuing Education & Workforce Development

# Vermont Tech's Mission

To provide career-focused technical and professional education, which prepares students for immediate workplace success and continued learning.

We value our role in supporting the Vermont economy and meeting the needs of industry and business by preparing highly qualified individuals in high-growth, high-wage occupations that are the key economic drivers of our State.

- Offer a unique style of learning experience in Vermont
  - Focused
  - Hands-on
  - Applied

# Continuing Education & Workforce Development Mission

*Provide accessible, career-focused education for life-long success.*

- Unique learning experience to Vermont
  - Accessible, Focused, hands-on, applied learning
  - Instructors who are experts in their fields
  - Design and deliver workforce education & training to a wide variety of professions and professionals
    - Customized workshops
    - Trainings or credit courses that lead to certifications
      - Industry Recognized Credentials (IRC)
      - Microcredentials
      - Licensure
    - Degree programs
    - Open enrollment, online, non-credit trainings
    - Internships
    - Testing Site

# Who We Serve

- Healthcare Facilities
- State agencies
- Non-profits
- Small businesses
- Manufacturing
- Service Industries
- Educators
- Municipal governments
- Builders and contractors
- Transportation/ Infrastructure
- Individuals interested in gaining a new life skill
  - Personal and/or professional development

- ✓ Customized & Online
- ✓ GET
- ✓ IRC's
- ✓ Internships
- ✓ Micro credentials
- ✓ Testing Center

# OFFERINGS

## AGRICULTURE & FOOD SYSTEMS

- ArcGIS/GPS
- Diversified AG
- Meat Cutting
- Natural Resource Management
- Water Quality
- Welding

## ENGINEERING TRAININGS

- Advanced Manufacturing Apprenticeship
- CNC Machining
- Customized Training
- Industrial Maintenance
- Programmable Logic Controllers
- Solidworks
- Welding

## ONLINE TRAININGS

- Accounting and Finance
- Business / Project Management
- Computer Science / Applications
- Construction and Trades
- Design and Composition
- Health and Fitness
- Healthcare and Medical
- Hospitality
- IT – Application and Science
- Language and Arts
- Law and Legal
- Teaching and Education
- Writing and Publishing

## BUSINESS TRAININGS

- Collaborative Coaching
- Communication Skills
- Customer Service
- Emerging Leaders
- Emotional Intelligence
- Employee Engagement
- Managing Conflict
- Proficiency-Based Leadership
- SHRM Learning Systems
- Strategic Leadership
- Supervisor & Manager Training

## ELECTRICAL & PLUMBING TRAININGS

- Electrical Code Updates
- Exam Preparation
- Vermont Department of Labor Registered Apprentice Program

## CAREER & TECHNICAL TEACHER EDUCATION PROGRAM

- For new, secondary Career & Technical Education Teachers

## CUSTOMIZED CERTIFICATES

- For companies to support and develop technical needs

## GREEN TRAININGS

- Building Performance Certification
- HVAC
- Solar PV - Intro to Advanced
- Wastewater Rules, Systems, Soils
- Wetland Delineation

## HEALTHCARE TRAININGS

- Clinical Medical Assistant
- Coding / Billing
- Medical Terminology
- Online CNE's
- Pharmacy Tech
- Phlebotomy



**VERMONT TECH**  
CONTINUING EDUCATION & WORKFORCE DEVELOPMENT

**RANDOLPH CENTER CAMPUS**  
124 Admin Drive, PO Box 500  
Randolph Center, VT 05061

**WILLISTON CAMPUS**  
72 Helena Drive, Suite 110  
Williston, VT 05495

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# Statistics

- 3,200 people served statewide
  - Excludes border states, Northern New England, Canada, and mid-west states
- 700+ Apprentices - LPN, Manufacturing, Electrical & Plumbing Apprentices
  - 40 classes statewide; 144 graduates annually
- 60+ courses/trainings offered to employers
  - Credit: GE Aviation; Nolato GW; GS Precision; GlobalFoundries
  - Noncredit: FabTech; Brattleboro Memorial Hospital; NRG; Keurig: Dynaplas; U.S. Immigration
- Career & Technical Teacher Education Program
  - 61+ teachers
  - Interdisciplinary Bachelor of Science degree
- SWFI (Strengthening Working Families Initiative)
  - Continuation of \$4 million Advanced Manufacturing training grant
  - 600+ people served
- New apprenticeship programs (Apprenticeship Expansion Grant)
  - Advanced Manufacturing, Industrial Maintenance, LPN, Airframe Maintenance, Broadband
- Ag Institute Transformation (in progress)
- Summer session/ Career exploration for HS/MS
  - 212 students enrolled

## WEATHERIZATION & HOME PERFORMANCE

### HVAC

This course will prepare students for an entry-level career in the HVAC/R industry by providing hands-on guidance for service, repair, and solutions. By course completion, students will be ready to pass all 17 HVAC Excellence Employment Ready Certificates, the EPA 608, and the NATE Ready to Work Certificate. Students will also receive a voucher for the HVAC Excellence Employment Ready Certificate exam and EPA 608 Certification exam.



### BPI PROFESSIONAL CERTIFICATE TRAINING

Building Performance Institute (BPI) certifications demonstrate a level of knowledge and expertise that potential clients look for and can help you land new work. In addition, many federal, state, and utility initiatives require BPI certifications for contractor participation in energy efficiency projects. Vermont Tech offers three BPI certification trainings: Building Analyst, Envelope Professional, and Heating.

### BPI CONTINUING EDUCATION

Every three years, BPI certified Individuals must renew their certification and earning continuing education credits can aid this process. We offer a variety of continuing education classes that will get you the credits you need to bring you up-to-speed and maintain accreditation in the field.

### INFRARED CAMERA

Attempting to diagnose building thermal issues without Infrared Thermography is a lot like throwing darts blindfolded. You might hit the mark by accident, but you won't really know why. Learn what you need to know to begin to incorporate this fascinating and critical tool into your weatherization projects so you can see what's going on inside the structure you're working on. Vermont Tech's two-day Infrared Camera training provides a thorough introduction to and in-depth training on using Infrared Thermography as part of a building weatherization audit.

### COMBUSTION ANALYSIS FOR RESIDENTIAL HEATING SYSTEMS

Residential heating system performance is a key factor in a home energy audit. Understanding both the fundamentals of how heating systems work and how to analyze them are key to helping your clients know what they have, how well it works, and what

their options are for reducing energy use. (2-day training)

8 BPI CONTINUING EDUCATION CREDITS

### SUCCESSFUL SALES AND MARKETING FOR HOME PROFESSIONALS

This one-day entertaining and informative sales seminar will advance you on the art of persuasion. It is designed for anyone who wishes to increase his or her sales. It deals with prospecting, building a network, the interview, the presentation, answering prospects concerns, selling your price, dealing with competitor give-aways, closing, and after-sale service to get referrals. This course is designed for business owners, sales professionals, sales managers, general managers, and anyone else engaged in selling.

2.67 BPI CONTINUING EDUCATION CREDITS

### WEATHERIZATION CREW CHIEF

Leading a team is hard work, but the Weatherization Crew Chief position is a particularly demanding one. As the technology of home retrofitting becomes more complex, so does the role and responsibilities of the Crew Chief. This two-day interactive training will provide discussion, demonstrations, and "real-world" scenarios designed for newly hired and experienced Home Performance Crew Supervisors. For the company owner, CEO or administrator, this training can help you evaluate your policies and procedures, staff assignments, and job descriptions.

8 BPI CONTINUING EDUCATION CREDITS



### BPI TEST CENTER

Do you need to take your online or field exams for BPI certification or recertification? If so, we have experienced proctors that are certified to carry out testing for a variety of certifications on a regular basis.

Using current examples and exercises, this class will bring you up-to-date in this fast changing, competitive field.

### SOLAR HOT WATER

The push for solar hot water systems is on! This two-day Introduction to Solar Hot Water workshop will give you a solid foundation, covering how solar hot water systems work, installation basics, and the equipment required. Course format will include both classroom training and applied learning.

### NABCEP ENTRY-LEVEL TEST CENTER

The NABCEP Entry-Level exam is the first step for anyone looking to gain a national industry credential and just beginning in the solar field.



permitting, trouble shooting, and advanced design concepts. This training is a continuation of our Introduction to Solar PV training.

### SOLAR PV UPDATE

This one-day class will cover current technology in Solar PV systems, 2014 National Electrical Code, safety and best practices.

## RENEWABLE ENERGY

### INTRODUCTION TO SOLAR PV

This five-day introductory course will prepare you to work at an entry-level position in the solar industry and will provide you with the knowledge to take the North American Board of Energy Practitioners (NABCEP) PV Entry Level Exam. The 40-hour program combines lecture and discussion, in-class and out-of-class exercises, and hands-on activities.

### ADVANCED SOLAR PV

This 5-day course will offer you the next step toward gaining education requirements needed to apply for the NABCEP Installer certification. This training will cover more in-depth topics such as project management,

## CIVIL ENGINEERING

### READING THE LANDSCAPE

Join us in a day filled with investigation and discovery as you learn how geology, climate, plants, animals, and human history come together to form the intricate mosaic of ecosystems that define the Vermont landscape. We'll use the knowledge gained from reading aerial photography and topographic maps, studying soil and bedrock maps, and identifying plants and animals to predict which of the 80 Vermont natural community types might be found on a nearby property.

QUALIFIES FOR 2 VET DEC NONSOIL CREDITS

### SILTY SANDS AND WHY ARE THEY HERE

Sandy silts, silty sands, and gravelly clay - which happens where and why? Improve your soil identification skills and expand your knowledge of soil physical properties. This one-day training will cover soil morphology, techniques for field soil identification, soil texture identification using the Vermont Tech soils library, remote soil data via GIS, NRCS ANR soil classification systems for wetlands, wastewater, and engineering; and Vermont soil formation.

QUALIFIES FOR 2 VET DEC SOIL CREDITS

### WETLANDS DELINEATION

In this 40-hour training, you will learn how to properly identify the key factors that determine wetlands, based in part on the U.S. Army Corps of Engineers Wetlands Delineation Manual, 2012 Supplement for Northeast Region, and the most recent National Wetland Plant List and NRCS Hydric Soils guidance. Federal regulations, State regulations and appropriate permitting in relation to wetlands will also be covered. This certificate training offers professional experience and applied field experience.

QUALIFIES FOR 8 VET DEC NONSOIL & 8 SOIL CREDITS

### HIGH STRENGTH WASTEWATER

Are systems for restaurants, supermarkets, and convenience stores giving you trouble? Typically when they fail, the designer often replaces it with an in-kind type of system that is not adequate for these wastewater applications. This course describes the parameters that should be used for troubleshooting and designing commercial high-strength wastewater (HSW) systems.

QUALIFIES FOR 6 VET DEC NONSOIL CREDITS

### MICROBIOLOGY

Microorganisms play a critical role in the transformation, processing, and treatment of wastewater. In addition, numerous types of disease-causing bacteria, viruses, protozoa, and worms may be present in wastewater effluent. This training will instruct you about the variety of microorganisms that are present in wastewater and the dynamic and interactive relationships that occur in onsite wastewater systems and in the soil environment.

QUALIFIES FOR 4 VET DEC NONSOIL CREDITS

### ON-SITE WASTEWATER TEST PIT PRACTICE

This one-day training will incorporate limited lecture on soils, hydrology, and Vermont septic design regulations in the morning, with field practice in identifying soil layers, texture, and redoximorphic features in the afternoon. Participants will be led through a test pit evaluation by the instructor, then work in teams to complete one to two test pits under the guidance of the instructor. Participants will also complete at least one test pit evaluation on their own.

### INTRODUCTION TO GIS/GPS

In this two-day training, participants will gain an understanding of fundamental geospatial concepts which they will then apply by learning how to use online mapping applications, consumer-grade GPS receivers, and QGIS open source GIS software. QGIS will be used to explore and display geospatial data, to



create new geospatial data, to perform simple geospatial analysis, and to compose basic maps appropriate for printing or publishing. Participants will develop a mapping question or project that they will explore and build on throughout the training.

QUALIFIES FOR 6 VET DEC NONSOIL CREDITS

### INTRODUCTION TO ARCGIS

With this three-day training, participants will learn how to use ESRI's ArcGIS 10.0 software to explore and display geospatial data, to create new geospatial data and include it in their map projects, to perform geospatial analyses, to find and acquire free and public GIS data, and to compose basic maps appropriate for printing or publishing. Participants will develop a mapping question or project that they will explore and build on throughout the course.

QUALIFIES FOR 9 VET DEC NONSOIL CREDITS

## ALTERNATIVE FUEL VEHICLES

### HYBRID & ELECTRIC VEHICLE

Increase in fuel costs every year have contributed to a national trend in popularity of hybrid and electric cars. This growth creates a demand for the maintenance, service, and repair of hybrid vehicles as well as an understanding of the risks and remedies associated with responding to emergencies involving these types of vehicles. We offer trainings that will build skills through hands-on applied-learning techniques and some class lecture.

### BIODIESEL

Any diesel engine on the road today can use biodiesel fuel. This two-day training, designed for those seriously interested in biodiesel fuel, will describe engine systems, biodiesel blends, and biodiesel production.

### COMPRESSED NATURAL GAS

Several auto manufacturers make natural gas-powered vehicles available to the consumer today. The need for qualified technicians to service and maintain these vehicles is growing rapidly. This training is designed for the professional technician, automotive student, fleet drivers and managers. It will teach you safety service procedures, vehicle systems, and the nature of gaseous fuels.

## HEALTH & SAFETY

### OSHA 10 CONSTRUCTION

This two-day training is intended to provide building-trade workers with information about how to recognize, avoid and prevent job-related hazards, as well as provide information on employee rights, employer responsibilities, and how to file a complaint. The training covers a variety of construction safety and health hazards which a worker may encounter at a construction site and will emphasize hazard identification, avoidance, control and prevention.

### EPA LEAD RRP INITIAL AND REFRESHER

If you are a contractor, carpenter, plumber, or electrician who works on homes built before 1978, you must be certified according to the EPA's Lead Renovation, Repair and Painting (RRP) Rule. Vermont Tech Green Trainings offers both Lead RRP Initial and refresher training that will certify you to meet the law. These trainings will instruct you in what you need to know to protect yourself and your customers from the dangers of lead paint and lead dust.

# Related Programs – Learn and EARN

## HVACR

- Certified Tech
- Tech–entry
- Controls/  
Building  
Automation  
Systems
- Field  
Simulations

## Plumbing Apprenticeship

## Electrical Apprenticeship

- LEED
- BPI
- SOLAR
- SAFETY
- Certified  
Indoor Air  
Quality  
Manager

## DEGREE PROGRAMS:

- ARCHITECTURAL & BUILDING ENGINEERING TECHNOLOGY – AS, BS
- ELECTRICAL ENGINEERING TECHNOLOGY – AE, BS
- CONSTRUCTION MANAGEMENT – AS, BS
- ELECTROMECHANICAL ENGINEERING – BS
- RENEWABLE ENERGY – BS
- CIVIL/ ENVIRONMENTAL ENGINEERING – AS
- GENERAL ENGINEERING TECHNOLOGY - AS

# Related Programs

- HVAC/R - 14
  - HVACR Controls/Building Automation Systems
  - HVAC/R Certified Technician
  - HVAC/R Simulations for Field Technicians
  - HVAC/R Technician
- Plumbing Apprenticeship
- Electrical Apprenticeship
- BPI Training
- Leadership in Energy and Environmental Design (LEED)
- Certified Indoor Air Quality – 6
- Home inspection -1
- Certified Quality – 5

# CARES ACT WORKFORCE

- 47 laptops were distributed
- welding equipment for 32 students was provided
- Wrap-around services like support for childcare, transportation and course supplies.

Number of students	Number of classes
277	337

ADDISON	12
BENNINGTON	8
CALEDONIA	8
CHITTENDEN	72
FRANKLIN	6
Grand Isle	4
LAMOILLE	12
ORANGE	9
ORLEANS	8
RUTLAND	17
WASHINGTON	35
WINDHAM	16
WINDSOR	16

The most popular courses were:

- Accounting/ Accounts Payable
- Medical Terminology
- Welding (limited class size)
- Excel
- Digital Analytics
- Autocad
- Certified Indoor Air Quality
- **HVAC 14 +11**
- Phlebotomy
- Project management (PMP Certification)
- Start your own online business
- Certified Quality Improvement Specialist
- C++
- Python 3

# Employer Partners - Sampling

- Central Vermont Medical Center (CVMC)
- GE Aviation
- GS Precision, Inc.
- Benoit Electric
- VT Creamery
- Shaw's
- GlobalFoundries
- Brattleboro Memorial Hospital (BMH)
- Nolato GW
- Fujifilm Dimatix (bordering state)
- IVEK Corporation
- Rhino Foods
- Keurig Dr. Pepper
- Perrigo Co.
- Chroma Technology
- CUDS - Consolidated
- Omni Medical Systems
- Barry Callebaut
- Lane Press
- Hazelett Corporation
- PC Construction
- Champlain Cable
- Chittenden Solid Waste District (CSWD)
- Fab-Tech, Inc.
- Cad Cut, Inc.
- LEDdynamics
- CTE Centers (Career & Technical Education)
- U.S. Immigration & Customs
- Darn Tough
- Husky
- Ski VT
- NRG



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