

# Career Opportunities: MiTEC HVAC Instructor (1811)

Requisition ID 1811 - Posted 12/22/2020 - Remote/Virtual - Administrative - Full-Time

MPHI is a Michigan-based and nationally engaged, non-profit public health institute. We are a team of teams, process and content experts, dedicated to building *A world where tomorrow is healthier than today!*

**Title:** MiTEC HVAC Instructor

\$75,000 - \$80,000 / Posted thru: 2-7-21

**Employee Name:** TBD

**Supervisor:** Tom Andrews, Deputy Director

**Purpose:** This position will serve as a HVAC Technical Instructor reporting to the Deputy Director to conduct HVAC centered building science technical training for the Michigan Training and Education Center (MiTEC). The HVAC Technical Instructor is part of a dynamic technical weatherization team that provides superior learning opportunities to professionals in the home performance, residential, and construction industries. MiTEC provides students with in-person classroom training, field training, and online training opportunities.

## Duties and Responsibilities:

- Provide classroom and field training at partner facilities, meeting the requirements of the training contract outlined in the DOE State Plan and IREC accreditation requirements.
- Trains others to perform HVAC safety and efficiency inspections, implement energy efficiency improvements and guide HVAC system retrofits.

- Develop curriculum and provide instruction to students online, in the classroom and in the field using innovative, effective, and measurable methodologies.
- Coordinating and managing logistics for delivery of on-site training courses.
- Creating technical documents to support curriculum and implementation of various weatherization and energy efficiency programs.
- Providing technical support to the Michigan WAP network, staff, students, the public, and industry stakeholders on energy efficiency and home performance topics.
- Familiarity with the Weatherization Assistance Program rules and regulations, Standard Work Specifications (SWS), the Michigan Weatherization Field Guide, and Michigan Weatherization monitoring processes.
- Represent MiTEC at national, state, and local events, conferences, meetings, and committees.

#### **Qualifications/Requirements:**

**Education:** Possession of a bachelor's degree or equivalent experience in the HVAC trades or education thereof, in building science or related fields, or the mechanical side of the Weatherization Assistance Program.

**Experience:** A minimum of two years of progressively more responsible work experience in your related field.

#### **Important Skills and Characteristics:**

- Proven experience as a Technical Instructor is helpful.
- Industry certifications such as NATE, BPI, Lead RRP, and OSHA are helpful.
- Strong written and verbal communication skills.
- Collaborative, positive, team-oriented attitude coupled with ability to work independently and solve problems.

## HVAC/Mechanical

- The successful candidate for this position will be able to demonstrate knowledge and experience in the following HVAC/mechanical skill sets:
  - Michigan Mechanical License preferred but not required.
  - Working knowledge of components and operation of various forced air heating systems and fuel types, boilers, space heaters, solid fuel appliances, air conditioners and heat pumps.
  - Understanding of static pressure, combustion analysis, duct sizing and leakage testing, and proper performance and commissioning of HVAC systems.
  - Understanding of operation and/or venting issues related to residential domestic water heaters.
  - Ability to understand and learn problem solving solutions related to Combustion Appliance Zone (CAZ) testing, pressure balancing, and Zone Pressure Diagnostics (ZPD).
  - Ability to understand installation and application of the ASHRAE 62.2 Standard.
  - Familiarity with a variety of HVAC related diagnostic equipment. (Ex: combustion analyzer, manometers, draft measuring instruments, thermometers, psychrometers, anemometer, combustible gas leak detector and refrigeration gauges... etc.).
  - Ability to become familiar with specialized diagnostic equipment. (Ex: blower door, digital micro-manometer, air-flow meter, duct pressurization device, pressure pan, CO analyzers, and infrared camera... etc.).
  - Working knowledge of the NFPA, MRC and appropriate State & local codes.

**Work Environment, Mobility, and Physical Requirements:** This position involves performance of various diagnostic tests, inspections, and demonstrations; requiring the ability to carry equipment weighing up to 50 pounds. Performing fieldwork involves use of ladders and extensive navigation in and around worksites, buildings, attics, crawlspaces, and other locations. Therefore, HVAC Technical Instructors must possess physical dexterity, endurance, and balance to accomplish this work safely

and effectively. This position may involve viewing a CRT or VDT screen 25% to 75% of the time and the use of other standard office environment components. Must be proficient with Microsoft Office Suite, smartphones, tablets, and web technology. This position will require a HVAC Technical Instructor to use a mobile work environment, including the use of a home office, satellite locations, and other spaces as needed, to increase responsiveness and decision-making speed, resolve internal issues faster, and increase productivity.

**Travel:** Travel throughout the state to the training center satellite locations and partner facilities will be required. In addition, travel to conferences and other state and out-of-state events may be required.

#### **RESPONSIBILITY FOR THE WORK:**

**Training Plans:** An Instructor must implement the approved training curriculum and coursework to provide high quality programs to ensure MiTEC is competitive and efficient. This includes staying within the approved operational budgets, maintaining training schedules and offerings, tracking student progress, conducting innovative field trainings, conferences, and webinars.

**Training:** HVAC Technical Instructor must make sure the courses cover the needs of the students and that the desired principles, techniques, and skills are being taught in a manner that engages the student in problem solving and critical thinking. This includes fostering a 'culture of learning' within MiTEC.

**Evaluate Results of Training:** Identifying areas of course improvement to ensure students are adequately learning the desired skills is essential. Instructors will respond appropriately to student evaluations and feedback for improvement purposes. Regular course evaluation is necessary and required. This includes updates on regulations, standards, and the field guide.

**Research Training Methods:** A HVAC Technical Instructor will constantly

be on the lookout for new technology, implementation improvements, training opportunities, innovative labs, and training props to provide more effective and cost-effective ways to teach technical skills. This includes maintaining communication with the BCAEO staff, to recognize new issues and plan for additional training.

**IMPACT ON PROJECTS, SERVICES AND OPERATIONS:** MiTEC will provide technical expert instruction and assistance to Weatherization professionals, home professionals, builders, contractors, developers, architects, and others. MiTEC will focus on building science coursework to support the Weatherization Assistance Program's (WAP) comprehensive technical trainings and certifications outlined in the Quality Work Plan that establishes a benchmark for quality home energy upgrades, released by U.S. Department of Energy (DOE). Both comprehensive and specific training will be conducted. Comprehensive training is occupation-specific training aligned to the Job Task Analysis for each occupation in the weatherization field. Specific training addresses acute deficiencies in the field as needed. Training will foster engagement, innovation, quality work practices, enhance performance, teach energy efficiency conservation measures, health and safety techniques, and ensure student success through hands-on training opportunities by high quality certified instructors and classroom innovations.

A HVAC Technical Instructor has a direct impact on the success of MiTEC by ensuring high quality work standards are performed by certified Weatherization Professionals.

#### **REQUIRED COMMUNICATION**

<b>Contact Person/Group</b>	<b>Frequency</b>	<b>Purpose</b>
Tom Andrews Director	Daily/As Needed	MiTEC Deputy
Ray Judy	Daily/As Needed	MiTEC Director
MiTEC Instructors	Daily/As Needed	Support
MiTEC Program Assistants	Daily/As Needed	Support

Kris Schoenow  
Executive Director

As Needed/Requested    BCAEO

“For purposes of employment standards, this classification is “Exempt” from the overtime provisions of the Fair Labor Standards Act.”

MPHI works with you to promote health for everyone. Together, we will build ***a world where tomorrow is healthier than today!***

MPHI is an EEO/AA employer that participates with e-verify.