

Portal to New Jobs in Home Weatherization

Expanding training opportunities in the weatherization of buildings will accelerate learning and provide a direct path for many Americans to find jobs in the clean energy field. The National Weatherization Training Portal (NWTP), which is now in the final stages of testing, features multi-media, interactive, self-paced training modules. While this training portal will not replace the need for formal, hands-on-training, it will enhance or augment the training conducted across the country.

DOE's National Weatherization Training Portal

The National Weatherization Training Portal (NWTP), currently in beta testing, is a virtual campus offering online courses, manuals, videos, and interactive simulations in 3D. The NWTP courses cover basic and advanced building sciences and weatherization through a flexible and adaptive learning platform. Coursework can be customized to meet the needs of individuals seeking a career in the fast-growing weatherization industry and of current professionals—from energy auditors to field technicians.

By advancing through the self-paced NWTP curriculum, students prepare themselves to pursue field training and various industry certifications available through community and private colleges, state agencies, or one of the many Weatherization Assistance Program training centers located across the nation.

Enrollment is easy. In just minutes, students are ready to learn and use the self-paced National Weatherization



Retrofitting homes to make them more efficient is saving millions of dollars in energy costs and creating thousands of jobs across the country.

Training Portal. The NWTP tracks each student's progress and creates a record of the student's training accomplishments. The training units can be easily integrated into the curricula of industrial training facilities. Visit the portal at: trainingportal.ee.doe.gov

About the System

The NWTP uses open-source systems and accessible standards and software (Ilias learning management system and Google's O3D). This approach allows the broader weatherization community, including the established network of local weatherization providers, to contribute to the future development of this resource.

The NWTP learning management system, being developed by the U.S. Department of Energy, will provide the following:

- Web-based system that is easy to use for both students and trainers
- Adaptive learning system that tracks and tailors courses based on user progress
- Easy-to-access, online system that creates, stores, and maintains training curriculum
- Immersive, online training that is cost effective and allows content to be reused and repurposed by developers and trainers.

During the next stage of NWTP development, trainers will be able to create and add their own courses to the open-source learning management system. For more information on the system or to learn more about collaborating with the U.S.

Department of Energy through open source, please contact:

NWTP.Webmaster@EE.Doe.Gov

Courses

Courses available on the NWTP will address building science at all levels—from the role of pressure diagnostics in ensuring safe indoor air quality to proper techniques for installing various cost-effective, energy-saving measures. Courses provide an individualized learning experience that adapts to the needs of each student. Training support can be tailored to weatherization workers at all skill levels and positions, including crew member, crew chief, auditor, and trainer.

Our first available course, “Installer Fundamentals,” outlines weatherization basics and teaches the importance of ventilation. The course includes specially developed interactive modules and access to existing training materials developed within the weatherization industry.

New features and training content will be added to the platform over the next year and a half. Other courses currently in development include the following:

Introduction to the Owner

Trainees will gain useful communication skills and learn ways to explain the weatherization process to the homeowner.



House as a System

Trainees will understand the concept of weatherization, common performance problems in homes, and the role of diagnostics in verifying that the expected results are achieved.

Residential Building Envelope

Trainees will learn about structural integrity, moisture control, and a variety of other issues related to weatherizing a residential home.

HVAC

Trainees will learn how to diagnose and repair heating, ventilation, and air conditioning systems found in a home.

Blower Door Testing

Beginning with the basics, trainees will learn the theory behind blower door testing, become familiar with the equipment, and learn proper set-up and maintenance procedures. This course will include interactive modules in which trainees can select the appropriate tools and conduct single-point blower door tests, perform zone pressure diagnostics, and determine dominant duct leakage in model homes.



Diagrams and interactive simulation tools help students master weatherization theory and techniques.

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