

## **INTERNATIONAL GROUND SOURCE HEAT PUMP ASSOCIATION**

312 S. 4<sup>th</sup> Street, Suite 100  
Springfield, Illinois 62701 USA  
igshpa.org • 1-800-626-4747 • info@igshpa.org



### **IGSHPA Residential Service Technician Basic Training**

(rev240826)

#### **Course Description**

This specialized course aims to equip existing professional HVAC residential service technicians which are interested in expanding their knowledge and skills required for servicing ground source heat pump systems. Additionally, architects, home builders, consultants, HVAC equipment manufacturers, distributors, rep agencies, mechanical engineers, trenching/water well drilling/drilling contractors, government agencies, public utilities, private utilities, and rural electric cooperatives, trade unions or trade related organizations can also benefit from the training. Students will learn about specialty tool requirements to diagnose, troubleshoot, repair and verify proper ground source heat pump (GSHP) unit, accessories and heat transfer fluid and system performance, which is crucial for system operation, system efficiency, long system life, customer satisfaction and safety. Many federal/provincial/state, utility and ground source heat pump manufactures may require this recognized professional certification for their programs.

#### **Learning Outcomes**

Upon completion of this course, each participant should be able to:

- Understand and use essential service specialty tools and procedures to provide routine maintenance and diagnostic tests and repairs on residential water source/ground source heat pump applications
- Apply good service practices for system waterside service and diagnostics (closed/open Loop applications)
- Diagnose and troubleshoot both packaged and split system indoor units
- Diagnose and troubleshoot ECM blowers
- Utilize “best practices and principles” related to the refrigeration system
- Troubleshoot and service-related system items beyond the unit
- Verify unit and the complete system operational performance and efficiency

#### **Prerequisites**

To be eligible for the IGSHPA Residential Service Technician Basic Training course, candidates must have a minimum high school education, basic problem solving, communication and computer skills along with multiple years (2 or more) of direct field experience related to servicing residential/commercial HVAC and Refrigeration or an industry recognized HVAC training certificate, degree or license.

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### **Required Texts and Materials**

Publications and materials must be purchased online 6 weeks in-advance using <https://igshpa.org/shop/> (non-Member or Member Price options)

- IGSHPA Residential Service Tech Student Guide
- ANSI/CSA/IGSHPA – C448 Standard
- Residential Service Tech Testing Fee - Final Exam (completed electronically on-line after the course by student, open book, open notes, 2 Hour time limit. 2 tests attempt limits.)
- Calculator (brought and supplied by student)

### **Certification:**

Participants who successfully complete the course, complete, and pass the final exam (on-line) will with an 80% or higher score will receive a professionally recognized certification from The International Ground Source Heat Pump Association (IGSHPA).

### **Instructional Time/Policies and Expectations**

A minimum of 8 hours of instructor led training in-person or on-line.

Course Registration should be completed 6 weeks in advance of the training date using the IGSHPA/Training & Events Calendar. Call the IGSHPA office @ (212) 212-2112 for more information.

See the link: <https://igshpa.org/calendar/>

Attendees must have 100% course attendance and purchase the Residential Service Tech Testing Fee to be eligible for the on-line Final Exam.