

COURSE CATALOG

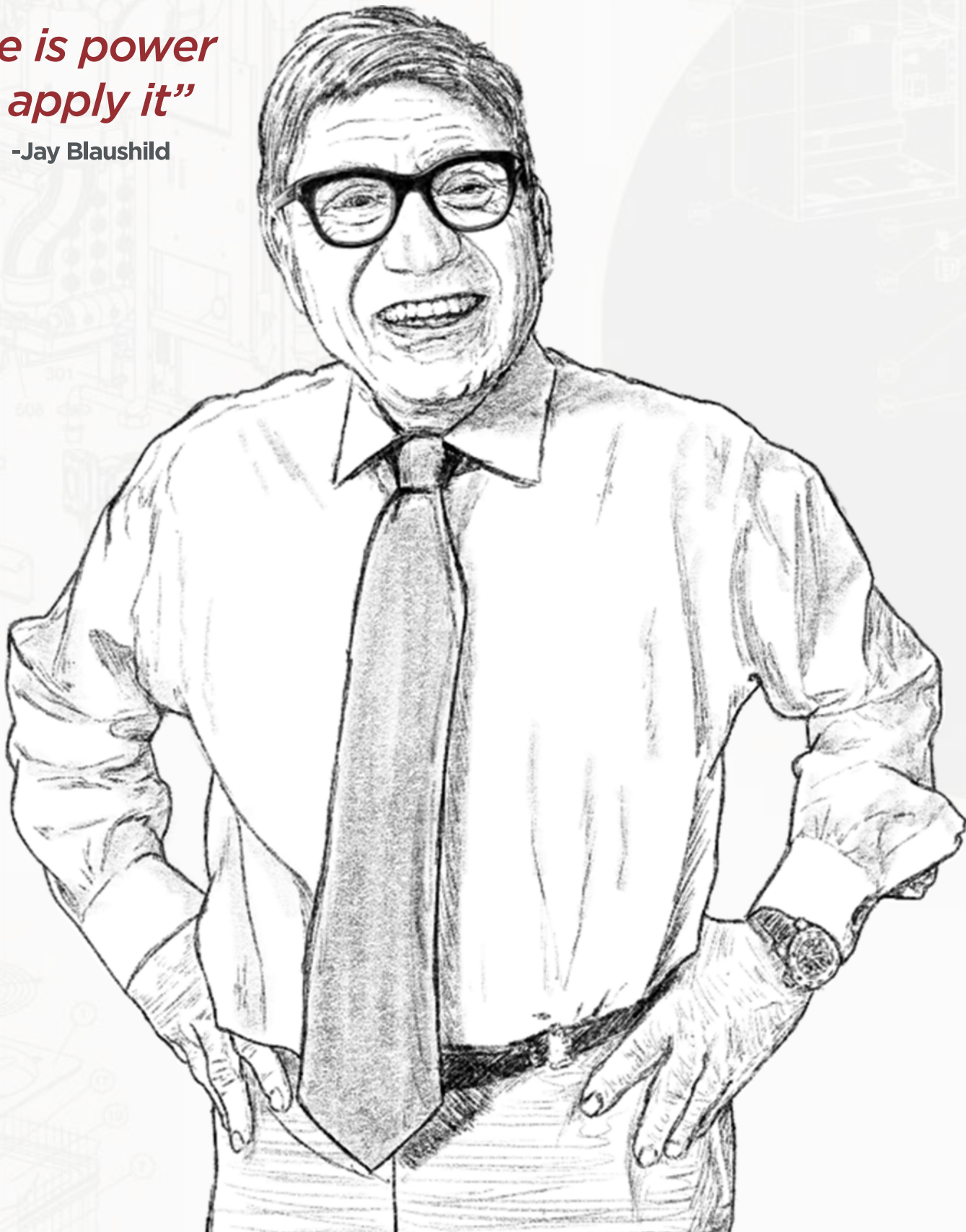


famous-supply.com/training

FALL/WINTER 2026

*“Knowledge is power
when you apply it”*

-Jay Blaushild



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Famous University is built for contractors and industry professionals who want training that **delivers real results**, not just certificates. Our **industry-leading** HVAC, plumbing, and hydronics education combines hands-on labs, live virtual classes, and real equipment training, so you and your team are ready for the job, not just the exam.

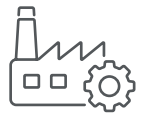
Famous University Membership helps you train more while spending less, unlocking **unlimited or discounted training**, free 608 Refrigerant Certification seats, Build-A-Tech discounts, speaker series access, and on-site training options. With right-sized membership tiers, you get **practical education**, real savings, and a smarter way to keep your business competitive.

TRAINING TYPES INCLUDE:



Famous University Learning Pathways

Instructor-led HVAC, Plumbing, and Hydronics courses developed by our Training Team, combining classroom instruction with hands-on learning.



Manufacturer & Vendor-Led Training

Factory-authorized instruction focused on product installation, operation, commissioning, maintenance, troubleshooting, and the latest equipment technologies.



Industry Certifications

Earn or renew credentials including EPA Section 608, Backflow Prevention, CSST Gas Piping, and other industry-recognized certifications.



Continuing Education (CEUs)

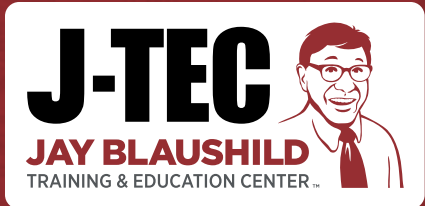
State-approved courses that help licensed professionals maintain credentials while building knowledge of codes, regulations, and emerging technologies.



Third-Party Industry Experts

Specialized training presented by leading organizations, consultants, and subject matter experts covering technical, business, code, and emerging industry topics.

No matter your experience level or learning objective, Famous University offers a learning pathway that helps individuals grow their skills and companies develop stronger, more capable teams.



HANDS-ON TRAINING FOR THE TRADES

J-TEC is a 25,000 sq. ft. state-of-the-art training facility for Famous University, built for HVAC, plumbing, and hydronics professionals. Experience firsthand how J-TEC's technology-focused labs bridge the gap between theory and the jobsite.

THE J-TEC ADVANTAGE

- **3 Classrooms**
Technical theory, code updates, & product education
- **12 Hands-on specialty training labs**
Live equipment and manufacturer-supported systems
- **CEU accredited courses**
Simplified path to license renewal
- **Technology-focused curriculum**
Aligned with industry and manufacturer standards
- **Expert speakers**
Industry leaders shaping the future of the trades
- **Product & technical symposiums**
Trade shows with manufacturers and industry peers
- **Leadership & business conferences**
Strategic sessions for industry owners & managers
- **Multi-purpose Legacy Event Room**
300+ seat venue for industry events
- **Combined 500+ years of training experience**
Seasoned professionals teaching what works
- **Take your first class for FREE**
Call us to redeem a complimentary training for two



Explore the training schedule & register today!

Scan the QR Code or visit
famous-supply.com/contractor-training.

DISTANCE DISCOUNT

90+ miles from J-TEC? You may qualify for a 25% membership discount! See details online.

QUESTIONS?

Call our J-TEC team at 216-238-4820.



FAMOUS UNIVERSITY / J-TEC TRAINERS

MEET THE FAMOUS UNIVERSITY / J-TEC TEAM

Behind every class, lab, and training experience is a team of **seasoned industry professionals** committed to your success. The Famous University team brings decades of real-world experience across HVAC, plumbing, hydronics, and building systems. Our instructors aim to deliver **hands-on education**, expert guidance, and practical solutions with both field technicians and company owners in mind.

From instructors and technical specialists to training coordinators and support staff, our team is here to help you build skills, earn certifications, and **stay ahead in a rapidly evolving industry**.



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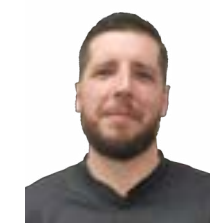
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INTRODUCING THE FALL/WINTER 2026 TRAINING SEASON

The Fall/Winter 2026 Training Season offers a diverse portfolio of learning pathways by discipline, manufacturer-led product education, continuing education (CEU) opportunities, industry certifications, and specialized courses presented by respected third-party industry experts.

J-TEC delivers courses that **support every stage of a contractor’s professional development** and give them the resources to become valuable HVAC, plumbing, and hydronics technicians.

Famous University learning pathways are designed to align with the season and what technicians will be exposed to in real-world settings.



Have a class suggestion or a manufacturer you would like to see?
Scan the QR code to submit your suggestions for future trainings.

HOW TO SIGN UP

Fill out our simple online form or call the J-TEC team to get get started with Famous University. Those who have attended J-TEC classes already have an account! Contact the J-TEC team for your login information. See page 60 for more information on our membership levels and a la carte options.

WITH AN ACCOUNT, YOU CAN:

- Access the training dashboard for your organization
- Assign a “Super User” to manage training for all associates in your company
- View training history and suggested learning pathways
- Obtain completion certificates
- Bulk enrollment for sessions
- View ompetency records



qr.codes/IWQktn

Creating a Famous University account is easy!

Your organization’s account must be created by the **main point of contact for training**, who will be designated as the organization’s **Super User**. The Super User will manage associate accounts, training registrations, permissions, course history, and certificates for your organization.



Explore the training schedule & register today!

famous-supply.com/contractor-training

Questions? Our Famous University and J-TEC teams are here to help.
216-238-4820 | famousuonlinetraining@famous-supply.com



FINDING COURSES THAT FIT

Look for the following icons on our course listings to determine which courses are right for you.

SKILL LEVELS



Beginner

- New to the trade
- Building the fundamentals



Intermediate

- Some time in the field
- Ready to expand skillset



Advanced

- Seasoned professionals
- Sharpening specialized skills

Courses showing multiple skill levels are designed to apply to a range of experience.

COURSE FORMAT



Classroom

Lecture-style learning. All you need is a notepad and pen.



Specialty Lab

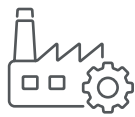
Hands-on training on live equipment. Come ready with gloves, closed-toe shoes, safety glasses, and basic hand tools.



Combined Classroom & Lab

Part lecture, part hands-on. Come with a notepad and pen plus your lab gear.

MANUFACTURER & VENDOR-LED TRAINING



Factory-authorized instruction focused on product installation, operation, commissioning, maintenance, troubleshooting, and the latest equipment technologies.

Beckett Burner: National Education Program

B I A HVAC | 2 Sessions: **SEP 22, NOV 3 | 8AM-4PM**



Dunkirk/Pennco Residential Steam Boiler Installation

I Hydronics | 2 Sessions: **SEP 22 | 9AM-12PM, 1-4PM**

Dunkirk Royal Condensing Boiler Installation/Service

I Hydronics | 2 Sessions: **SEP 23 | 9AM-12PM, 1-4PM**



Dunkirk Commercial Boiler Installation

I Hydronics | 1 Session: **SEP 24 | 8AM-4PM**

The Unico System Installation and Troubleshooting

I HVAC | 2-Day Session: **OCT 5-6 | 8AM-4PM**



Spirotherm Hydronic System Performance

How Air and Dirt Influence Efficiency, Reliability, and Longevity

I Hydronics | 1 Session: **OCT 7 | 9AM-3PM**



Taco Factory Training

I Hydronics | 1 Session: **DEC 1 | 9AM-3PM**



Midea EVOX & Ductless Systems Installation, Application, and Service of Inverter Systems

I HVAC | 2-Day Session: **DEC 16-17 | 8AM-4PM**



INDUSTRY CERTIFICATION COURSES



Specialized training presented by leading organizations, consultants, and subject matter experts covering technical, business, code, and emerging industry topics.

Backflow Certification Lab

B Plumbing | 3-Day Session: **NOV 4-6 | 8AM-4PM**

Backflow Testing & Recertification Lab

I A Plumbing | 4 Sessions: **SEP 18, OCT 8, NOV 16, DEC 3 | 8AM-4PM**

EPA 608 Refrigerant Certification (Type I II III & Universal)

B HVAC | 2 Sessions: **NOV 9, DEC 7 | 8AM-4PM**

CSST Gastite Certification

B Plumbing | 1 Session: **OCT 22 | 11AM-12PM**

Backflow Certification and Recertification are not included in Famous University Membership.

CEU OPPORTUNITIES



Keep your knowledge sharp and your license requirements on track. Join us at J-TEC for monthly CEU Days, three 2-hour courses per day designed to build real, practical industry knowledge while helping you earn the continuing education credits you need.

CEU DAYS AT J-TEC

- Held the 2nd and 3rd Wednesday of every month
- 2nd Wednesday: HVAC-focused topics
- 3rd Wednesday: Plumbing-focused topics
- Three 2-hour sessions each day
- Register for one, two, or all three

ZOOM TUESDAYS

- Join online to get your credits from anywhere
- Virtual sessions are offered every Tuesday
- Classes range from 1-2 hours

GOOD TO KNOW

- Courses range from beginner to advanced
- CEUs count toward both HVAC and Plumbing licenses, no matter which topic you choose
- Valid for OCILB and City of Pittsburgh license renewal
- Open to everyone, no license credits required. Come to learn, sharpen your skills, or expand your knowledge
- Full class topics and details are coming soon online





Specialized HVAC training presented by leading organizations, consultants, and subject matter experts covering technical, business, code, and emerging industry topics.

NCI Commercial Air Balancing

I A 3-Day | 24hr

Commercial comfort and airflow problems become solvable when technicians can measure pressure, temperature, and airflow, make controlled adjustments, and prove the result with a professional report.

This three-day NCI certification course equips HVAC professionals and facility teams to test and balance light-commercial HVAC systems, including kitchen exhaust and make-up air applications.

The course begins with pressure, temperature, and airflow fundamentals, instrument use, test locations, and repeatable field procedures. Participants connect each measurement to the specific system condition or adjustment it is intended to evaluate.

The program progresses into airside testing and adjustment, fan performance, fan-law relationships, pulley changes, supply and return distribution, economizer fundamentals, and common field obstacles that prevent systems from delivering design airflow.

Participants use balancing as both a commissioning service and a diagnostic tool. The final work product is a clear, professional report that documents initial conditions, adjustments, final readings, deficiencies, and the results delivered to the customer.

Designed for: field technicians, field supervisors/leads, property maintenance technicians, multifamily building maintenance technicians, HVAC contractors

DEFINED OUTCOMES	WHY IT MATTERS
Measure pressure, temperature, and airflow Select appropriate instruments and test locations, obtain repeatable readings, and record initial system conditions.	Reliable balancing decisions begin with measurements that accurately represent system performance.
Connect tests to specific repairs Use measured conditions to identify airflow restrictions, fan-performance issues, distribution problems, and corrective actions.	Testing should lead to a defined system adjustment or repair—not a report full of disconnected numbers.
Apply fan laws and adjustment principles Relate fan speed, airflow, pressure, and power, then evaluate pulley or operating adjustments within safe equipment limits.	Fan adjustments can improve system balance, but only when their effect on pressure, power, and equipment operation is understood.
Balance commercial air distribution Test and adjust supply, return, outdoor-air, and exhaust paths to improve delivered airflow and system performance.	A complete balance addresses the airside system as an interacting network rather than isolated grilles.
Evaluate kitchen exhaust and make-up air Apply testing and balancing fundamentals to kitchen exhaust, make-up air, and building-pressure relationships.	Poor coordination can create comfort, odor, draft, door-operation, ventilation, and combustion-safety problems.
Produce a professional balancing report Document design information, initial readings, adjustments, final results, deficiencies, and recommendations in a customer-ready format.	A clear report proves the work performed, supports accountability, and helps turn measured findings into corrective projects.

COST: \$1200 DATES: OCT 13-15

NCI Combustion Performance & Carbon Monoxide Safety

I A 3-Day | 24hr

Combustion equipment cannot be called safe or efficient by appearance alone—ambient CO, flue-gas, draft, temperature, and operating measurements reveal what the system is actually doing.

This three-day NCI certification course is designed for owners, managers, service and installation leaders, service and maintenance technicians, and installers who work with fuel-fired HVAC equipment.

The course gives participants a structured process for evaluating combustion performance and carbon monoxide safety. It begins with ambient CO measurement, common source identification, and the actions required when readings indicate an existing or potential hazard.

Participants learn where and how to test flue gases and draft, then use measured carbon monoxide, oxygen, temperature, and pressure values to evaluate equipment operation. The focus is on applying the complete diagnostic sequence rather than relying on a single reading or visual inspection.

Hands-on testing and problem solving connect safety findings to corrective action, delivered efficiency, equipment performance, liability reduction, and customer communication. An optional certification exam is offered on the final day.

Tools Required: calculator

Designed for: installers, managers, executives/owners, property maintenance technicians, multifamily building maintenance technicians

COST: \$1,095 DATES: DEC 1-3

DEFINED OUTCOMES	WHY IT MATTERS
Measure ambient carbon monoxide Use an appropriate instrument and NCI protocol to evaluate ambient CO in the work area and occupied space.	Ambient testing helps identify hazards that may not originate from the appliance under immediate service.
Select the correct response to ambient CO Interpret measured conditions and follow the prescribed safety, notification, shutdown, evacuation, or escalation steps.	A consistent response protocol protects occupants, technicians, and the contractor when elevated CO is discovered.
Identify CO sources and test locations Recognize common CO sources and determine appropriate combustion, flue-gas, draft, and ambient measurement locations.	Results are meaningful only when the technician understands what is being measured and where the sample should be taken.
Measure flue-gas conditions Measure carbon monoxide, oxygen, and temperature in flue gas using properly prepared combustion-analysis equipment.	Combined measurements provide a clearer picture of combustion quality than any single value by itself.
Measure and interpret draft pressure Evaluate draft at the appropriate locations and relate pressure conditions to venting, combustion air, and equipment operation.	Improper draft can contribute to spillage, unstable combustion, CO production, and poor equipment performance.
Tune and document measured performance Use the complete test sequence to identify corrective actions, verify improvement, and document safety and delivered-efficiency results.	Measured before-and-after performance supports safer operation, better customer communication, and defensible service recommendations.



ACCA Residential Design for a Quality Installation (Manuals J®, S®, T®, and D®)

I 3-Day | 24hr

Quality residential HVAC installation begins with quality design—accurate loads, appropriate equipment, effective air distribution, and ducts that can deliver the required airflow.

This three-day, in-person ACCA certificate program is designed for contractors, technicians, design and utility personnel, wholesalers, instructors, energy-program staff, licensing officials, code officials, and others who want a practical understanding of residential HVAC design.

The course follows ACCA's step-by-step design process. Participants begin with site-survey information and Manual J load calculations, then use Manual S and actual equipment performance data to select equipment that matches the home's heating and cooling requirements.

Manual T concepts connect room air delivery, outlets, throw, spread, and comfort to the distribution strategy. Manual D then turns the room-by-room airflow requirements into a duct system with appropriate paths, fittings, friction, velocity, and pressure relationships.

The design work is tied back to ACCA's Quality Installation framework so participants can see how design assumptions affect field installation, commissioning, documentation, comfort, efficiency, callbacks, and customer expectations.

Tools Required: notepad, pen, a laptop rather than a tablet, access to microsoft excel

Designed for: field technicians, installers, sales team/comfort consultants, managers, executives/owners, field supervisors/leads, those looking to improve industry knowledge

DEFINED OUTCOMES	WHY IT MATTERS
Build an accurate Manual J load calculation Gather defensible site-survey inputs, apply appropriate design conditions and construction data, and evaluate room-by-room heating and cooling loads.	Every downstream decision depends on the accuracy of the load calculation; bad inputs create bad equipment and duct choices.
Select equipment using Manual S Use design loads and OEM performance data to evaluate sensible, latent, heating, and cooling capacity at the project's actual design conditions.	Nominal size alone does not prove that equipment can meet the home's load or humidity-control needs.
Apply Manual T air-distribution concepts Relate room airflow, supply-outlet selection, location, throw, spread, return-air strategy, and occupant comfort to the system design.	Delivering the correct CFM is not enough if air enters the space with poor pattern, velocity, or distribution.
Design a residential duct system with Manual D Establish available static pressure, select design friction rate, assign fittings, size ducts, and evaluate velocity and pressure losses along critical paths.	The distribution system must be capable of delivering the airflow assumed by the equipment and room-load design.
Integrate the design into a Quality Installation Connect Manuals J, S, T, and D to ACCA Quality Installation requirements, field setup, commissioning, verification, and documentation.	A complete design gives installers measurable targets and creates a basis for confirming system performance.
Communicate and document the design Prepare calculations, selections, duct information, assumptions, and project records that can be reviewed by the installer, customer, program, or code official.	Clear documentation makes the design usable, reviewable, and less dependent on undocumented field decisions.



COST: \$1,695 DATES: NOV 3-5



Famous University’s structured learning pathway is designed to develop confident and capable HVAC professionals.

Whether someone is new to the industry or looking to advance their expertise, the curriculum builds knowledge in a logical progression, starting with the fundamentals of combustion and furnace startup before advancing into furnace maintenance, electrical theory, brazing, and system-specific installation, diagnostics, and troubleshooting across unitary, ductless, and inverter-driven equipment. Participants can progress from learning the basics of HVAC to developing the skills and confidence needed to independently install, service, troubleshoot, and commission HVAC systems in the field.



Combustion Theory and Lab

B **I** 4hr

Build combustion safety awareness, analyzer confidence, and hands-on testing skills technicians need to understand combustion performance, carbon monoxide concerns, and proper field measurement practices.

This 4-hour class combines a 2-hour combustion theory lecture with a 2-hour hands-on lab. Designed for technicians who work with gas-fired furnaces, boilers, or water heaters, the course explains how combustion works, why carbon monoxide forms, why venting and combustion air matter, and how proper testing supports safety, efficiency, and professional service.

Participants will review key combustion measurements including O2, CO, CO2, stack temperature, draft, excess air, and combustion efficiency. The class also covers analyzer care, probe placement, test locations, common poor-combustion conditions, and the difference between combustion efficiency and AFUE.

Through guided lab work, participants will perform a combustion test on a condensing furnace, use a manometer to observe gas pressure, and see how changes in gas pressure affect combustion readings.

This is where combustion theory becomes real field capability—when technicians understand what the analyzer is showing, they can test more safely, interpret results more accurately, and know when to correct or escalate a condition.

Tools Required: manometer for checking gas pressure, thermometer, combustion analyzer if available

Designed for: field technicians, installers, field supervisors/leads

DEFINED OUTCOMES	WHY IT MATTERS
Explain basic combustion theory Understand complete versus incomplete combustion and the relationship between heat, fuel, oxygen, excess air, and combustion by-products.	Technicians need to understand what combustion is before they can safely test or interpret fuel-burning equipment.
Recognize carbon monoxide hazards Learn how CO forms, why it is dangerous, and why proper testing and escalation are critical.	CO is odorless, colorless, tasteless, and poisonous, making accurate testing essential for customer and technician safety.
Identify key combustion measurements Review O2, CO, CO2, stack temperature, draft, excess air, and combustion efficiency.	Accurate measurements help technicians determine whether equipment is operating safely and efficiently.
Use a combustion analyzer with more confidence Practice analyzer setup, probe placement, basic care, filters, sensors, water traps, and reading interpretation.	Reliable test results depend on proper analyzer use and proper test setup.
Perform a combustion test on a condensing furnace Connect classroom theory to live readings during guided hands-on lab practice.	Hands-on practice helps technicians build confidence before applying the process in the field.
Observe gas pressure and combustion changes Use a manometer to see how gas pressure can affect combustion readings and equipment operation.	This reinforces why adjustments must be made carefully and according to manufacturer specifications.
Document and communicate findings Record readings, recognize questionable results, and explain findings professionally.	Clear documentation supports customer trust, follow-up decisions, and professional liability protection.

COST: \$225

DATES: SEP 29, OCT 7, OCT 20, OCT 27, NOV 17



Scan QR code to register for training or call 216-238-4820
*Training details subject to change.

Furnace Startup:
Safe, Accurate Gas
Furnace Commissioning

B I [book icon] [wrench icon] 4hr

Give your team the startup process they need to commission gas furnaces with confidence—not guesswork. This 4-hour, beginner-to-intermediate class combines classroom instruction with hands-on lab work to help participants properly startup newly installed residential gas furnace equipment.

Designed for anyone selling, installing, or starting up newly installed equipment, this course focuses on the key checks and measurements that confirm safe operation, proper airflow, correct gas input, and reliable system performance. Participants will learn what to verify before firing a furnace, how to check gas pressure, how to measure temperature rise, and how to check duct static pressure.

Through hands-on practice in the residential labs, attendees will perform a furnace startup using single-stage and two-stage furnace equipment. The class helps technicians connect classroom concepts to real startup procedures so they can identify issues early, document readings accurately, reduce callbacks, and improve customer satisfaction.

This is where furnace startup becomes a repeatable field process—when technicians understand what to check, how to measure it, and how to confirm the furnace is operating safely, they can complete startups more consistently and avoid preventable service issues.

Tools Required: manometer, multimeter, thermometer
Designed for: field technicians, installers, field supervisors/leads, those looking to improve industry knowledge
Prerequisites: ability to use basic hand tools and a multimeter

COST: \$225 DATES: SEP 29, OCT 20, NOV 10

DEFINED OUTCOMES	WHY IT MATTERS
Identify key checks before starting a furnace Understand what must be verified before startup begins.	Pre-start checks help prevent unsafe operation and catch installation issues before the equipment is fired.
Check gas pressure correctly Learn how to use a manometer to verify gas pressure during startup.	Correct gas pressure is critical for safe operation, proper input, and reliable furnace performance.
Measure temperature rise Learn how to measure return and supply air temperatures and compare the result to the furnace rating plate.	Temperature rise helps confirm proper airflow and heat transfer.
Check duct static pressure Learn how to measure duct static pressure and recognize airflow concerns.	Static pressure readings help identify restriction, duct issues, or airflow problems that can lead to callbacks.
Perform a furnace startup in the lab Apply classroom learning on single-stage and two-stage furnace equipment.	Hands-on practice builds confidence so participants can apply the process immediately in the field.

Furnace Maintenance

B I [book icon] [wrench icon] 4hr

Give your team the process they need to perform furnace maintenance with consistency—not guesswork. This 4-hour, Beginner to intermediate-level class combines classroom instruction with hands-on lab work to build a practical maintenance workflow for existing residential furnace systems.

Designed for HVAC technicians, service technicians, maintenance technicians, installers moving into service, and field leads, this course focuses on what changes after equipment has been operating in the field. Participants will learn how to identify dirt, wear, restriction, drainage issues, electrical deterioration, changing readings, fault history, customer complaints, and safety red flags.

Through classroom discussion and hands-on lab practice, attendees will learn how to use customer history, prior service records, manufacturer data, and measured readings to determine whether a furnace is operating normally, needs maintenance, or requires additional diagnosis. The focus is on inspecting before cleaning, preserving as-found evidence, performing authorized maintenance tasks, measuring key readings, documenting findings, and knowing when to escalate.

This is where furnace maintenance becomes professional field judgment—when technicians understand how to inspect, clean, measure, compare, document, and communicate, they stop treating maintenance as a quick filter change and start building a useful record of system condition over time.

Tools Required: basic hand tools, multimeter
Designed for: field technicians, installers, property maintenance technicians, multifamily building maintenance technicians, field supervisors/leads
Prerequisite: Furnace Startup (suggested)

COST: \$225 DATES: OCT 7, OCT 27, NOV 24

DEFINED OUTCOMES	WHY IT MATTERS
Follow a consistent furnace maintenance workflow Use customer history, baseline review, as-found inspection, authorized maintenance, system operation, measurement, documentation, and communication.	A repeatable workflow prevents missed steps and creates a more complete maintenance visit.
Inspect before cleaning Record and photograph abnormal conditions before disturbing evidence, cleaning components, or resetting faults.	Cleaning too quickly can hide clues related to comfort complaints, safety concerns, or system deterioration.
Perform authorized furnace maintenance tasks Check filters, burner areas, flame sensors, blower compartments, condensate traps and drains, wiring, accessories, and reassembly.	Maintenance should improve system condition without damaging components or masking problems.
Recognize maintenance red flags Identify concerns such as gas odor, elevated ambient CO, soot, flame rollout evidence, unsafe venting, blocked intake or exhaust, severe restriction, burnt wiring, and repeated fault codes.	Red flags require the technician to stop, document, and escalate instead of treating the visit as routine.
Measure temperature rise and static pressure Use supply and return temperatures, the furnace rating-plate range, return static, supply static, and total external static pressure to evaluate system condition.	Measured readings provide evidence of airflow, restriction, and heat-transfer concerns.
Verify flame signal and electrical condition Review flame-signal trends, grounding, polarity, wiring condition, voltage, amp draw, heat damage, and loose connections.	Many maintenance issues appear as changing readings before they become no-heat calls.
Apply hands-on maintenance skills in the lab Practice inspection, maintenance, measurement, and documentation on furnace training equipment.	Hands-on repetition builds confidence so technicians can apply the process immediately in the field.
Document and communicate findings clearly Record customer concerns, work performed, actual readings, photos, comparison to prior data, escalation decisions, and customer explanation.	Clear documentation creates a useful service record for the customer, company, and next technician.

Intro to Heat Pumps

B 2hr

Build the foundational heat pump knowledge, system operation understanding, and component recognition skills needed to support residential heat pump installation, maintenance, service, and customer conversations.

This 2-hour beginner-level class is designed for technicians, installers, and support associates who need a stronger understanding of how heat pumps operate in cooling, heating, and defrost modes. Participants will review the basic refrigeration cycle, key heat pump components, system differences, compressor types, reversing valve operation, auxiliary heat, emergency heat, balance point, defrost operation, and basic control-board functions.

The course focuses on what makes a heat pump different from a standard cooling system or gas furnace. Instruction connects refrigeration-cycle knowledge to heat pump-specific operation, including how refrigerant flow changes, how the reversing valve changes system function, how the outdoor coil behaves in heating mode, and why defrost and supplemental heat are critical to performance.

This is where heat pump theory becomes practical system understanding - when participants understand how the system changes between cooling, heating, and defrost, they can better support installation, maintenance, troubleshooting conversations, and customer questions.

Designed for: field technicians, installers, field supervisors/leads, multifamily building maintenance technicians, property maintenance technicians

DEFINED OUTCOMES	WHY IT MATTERS
Explain basic heat pump operation Learn how heat pumps move heat in both cooling and heating modes using the refrigeration cycle.	Heat pumps do not create heat the same way electric resistance or gas systems do, so understanding heat transfer is essential.
Identify major heat pump components Review the compressor, indoor coil, outdoor coil, metering device, reversing valve, accumulator, bi-directional filter drier, sensors, defrost board, and auxiliary heat components.	Component recognition helps technicians understand system operation and communicate clearly.
Understand the reversing valve Learn how the reversing valve changes refrigerant flow for cooling, heating, and defrost operation.	The reversing valve is central to heat pump operation and can lead to incorrect service decisions if misunderstood.
Compare cooling, heating, and defrost modes Review what happens to refrigerant flow, coil function, outdoor fan operation, auxiliary heat, and controls during each mode.	Heat pump service requires knowing which mode the system is in and what should be happening.
Understand defrost basics Review why frost forms, how defrost begins and terminates, and how time-temperature or demand defrost controls are used.	Defrost is normal operation, but abnormal frost patterns or failed defrost can indicate system or control issues.
Explain balance point and supplemental heat Learn how outdoor temperature, building heat loss, heat pump capacity, auxiliary heat, and emergency heat interact.	This helps technicians and support associates explain comfort complaints and heat pump performance in colder weather.
Recognize basic control-board and electrical concepts Review anti-short-cycle delay, low-voltage protection, pressure switch monitoring, sensors, fault storage, soft lockouts, hard lockouts, and introductory compressor/capacitor testing concepts.	Understanding board logic and basic electrical evidence prepares participants for future heat pump troubleshooting.

Brazing Fundamentals for HVAC/R Technicians

B 4hr

Master one of the most critical skills in HVAC/R installation—creating strong, leak-free connections that hold up in the field. This 4-hour, hands-on beginner course is designed for contractors, technicians, and business owners who want to build real confidence in brazing techniques that directly impact system performance, reliability, and callback reduction.

This class takes participants step-by-step through the complete brazing process—from safety and setup to proper joint completion and pressure testing. You'll learn how to safely work with high-pressure fuel cylinders, properly prepare copper tubing, and apply multiple brazing methods using industry-standard equipment.

Participants will work with different fuel systems (oxy/acetylene, turbo torch, MAP gas) and complete multiple brazed joints across a variety of materials and positions. The course emphasizes proper preparation, heat control, nitrogen purging, and clean joint practices—ensuring connections meet real-world field expectations and hold under pressure.

This is where installation quality is built—when technicians understand how to properly prepare, heat, and complete a braze, they can create leak-free connections, prevent failures, and ensure systems perform the way they're designed to. By the end of this class, participants will have the confidence to complete brazing work safely, correctly, and to field standards.

Designed for: field technicians, installers, property maintenance technicians, multifamily building maintenance technicians, field supervisors/leads

DEFINED OUTCOMES	WHY IT MATTERS
Work safely with brazing equipment and fuel systems Understand safe handling and setup of oxygen, acetylene, MAP/propane, and nitrogen tanks, along with proper PPE use.	Safety is critical when working with high-pressure gases and open flame—reducing risk to technicians and job sites.
Properly prepare copper tubing for brazing Cut, deburr, clean, bend, flare, and swage copper tubing using best practices.	Most leaks and failures are caused by poor preparation—not bad brazing technique.
Select the correct materials for the job Understand the difference between brazing and soldering and how to choose the correct rods, alloys, and flux.	Using the wrong materials leads to weak joints, leaks, and system contamination
Set up and use different brazing systems Work with oxy/acetylene, turbo torch (B-tank), and MAP gas systems.	Different job conditions require different tools—techs need flexibility in the field.
Apply proper brazing techniques Control heat, maintain joint integrity, and complete brazes in multiple positions (horizontal, vertical, downward).	Proper technique ensures strong, durable connections that hold over time.
Complete professional-quality brazed and flared connections Perform copper-to-copper, copper-to-brass, and specialty connections, along with proper flare fittings.	These are the most common connection types in real HVAC/R systems.
Verify work through pressure testing Pressurize systems with nitrogen and confirm all joints are leak-free.	If it doesn't hold pressure, it doesn't leave the jobsite—this is where quality is proven.
Follow proper cleanup and equipment handling procedures Safely shut down, store, and maintain brazing equipment.	Protects equipment, ensures safety, and extends tool life.

COST: \$119 DATES: DEC 8, DEC 15

COST: \$249 DATES: SEP 30, OCT 21, NOV 18, DEC 16

Electrical for HVAC Level I: Foundations for Safe, Accurate Troubleshooting

B 2-DAY | 16hr

Give your team the electrical knowledge they need to diagnose issues with confidence—not guesswork. This 16-hour (2-day), beginner-level class combines classroom instruction with hands-on lab work to build a strong foundation in how electricity works and how it applies to the field.

Designed for contractors, technicians, and business owners, this course covers the fundamentals of electrical systems, including voltage, amperage, resistance, and circuit behavior. Participants will learn how to properly use essential tools such as a multimeter and clamp-on amp meter, while gaining the skills needed to test components, troubleshoot circuits, and make accurate electrical diagnoses.

Through 12 hands-on lab exercises using custom-built training boards, attendees will apply what they’ve learned in real-world scenarios. The focus is on giving technicians the confidence to safely and correctly troubleshoot electrical issues they encounter every day on the job.

This is where electrical knowledge becomes real capability—when technicians understand how to measure, test, and troubleshoot circuits, they can diagnose problems faster, avoid misdiagnosis, and fix systems right the first time. By the end of this class, participants will move from uncertainty to confidence when working with electrical systems.

Tools Required: multimeter, clamp-on amp meter, wire stripper, crimp tool (Klein 1005 or equivalent)
Designed for: field technicians, installers

DEFINED OUTCOMES	WHY IT MATTERS
Understand how electricity works in real-world applications Learn the relationship between voltage, amperage, and resistance.	Provides the foundation needed to safely work on and troubleshoot electrical systems.
Properly use a multimeter and clamp-on amp meter Measure voltage, current, and resistance accurately.	Accurate measurements are critical to diagnosing electrical problems correctly.
Understand and work with series and parallel circuits Learn how circuits are built and how electricity flows through them.	Most electrical systems are based on these configurations—understanding them is key to troubleshooting.
Troubleshoot electrical circuits using a structured approach Identify issues within series and parallel circuits through hands-on practice.	Reduces guesswork and improves diagnostic speed and accuracy.
Test and evaluate common electrical components such as capacitors Learn how to safely check components for proper operation.	Prevents unnecessary part replacement and ensures correct repairs.
Apply hands-on troubleshooting skills in real-world scenarios Complete 12 lab exercises simulating field conditions.	Builds confidence so technicians can apply skills immediately on the job.
Work more safely and confidently around electrical systems Understand proper testing and handling techniques.	Reduces risk and improves overall job safety.

Electrical for HVAC Level II: Systematic Troubleshooting & Diagnostics

I 3-DAY | 24hr

Take electrical troubleshooting beyond the basics and give technicians the confidence to diagnose HVAC heating and cooling issues with a structured, accurate approach. This 24-hour intermediate class is delivered over three 8-hour sessions and combines classroom instruction with hands-on lab work using electrical training boards, actual furnace diagrams, and residential HVAC equipment.

Designed for field technicians, installers, and service professionals who already have a basic understanding of electricity, this course builds on foundational electrical concepts and moves into applied HVAC troubleshooting. Participants will strengthen their ability to read wiring diagrams and schematics, test components properly, follow sequence of operation, and diagnose electrical issues in gas furnace and air conditioning systems.

Through hands-on lab activities, attendees will work with advanced electrical lab boards, test compressors, contactors, capacitors, and related components, create a running gas furnace on a lab board, use a Resideo spark box, and practice testing and setting a gas valve. The focus is on helping technicians connect what they see on a diagram to what is happening in the equipment.

This is where electrical knowledge becomes field troubleshooting capability—when technicians understand how circuits, components, safeties, and controls work together, they can diagnose problems faster, avoid unnecessary part replacement, and make more accurate service decisions.

Tools Required: multimeter, wire cutters, wire strippers, crimpers, thermostat screwdriver
Designed for: field technicians, installers, multifamily building maintenance technicians

DEFINED OUTCOMES	WHY IT MATTERS
Read and use HVAC electrical diagrams Work from actual furnace diagrams and schematics to understand how circuits are built and how equipment operates.	Electrical diagrams are essential troubleshooting tools, and technicians need to know how to use them in the field.
Test common HVAC electrical components Practice testing compressors, contactors, capacitors, ignition components, and related electrical parts.	Proper testing helps technicians identify the actual failure instead of guessing or replacing unnecessary parts.
Build and operate a gas furnace circuit on a lab board Create a running gas furnace on an electrical training board and connect wiring decisions to sequence of operation.	Hands-on circuit building helps technicians understand how controls, safeties, and loads work together.
Troubleshoot heating and cooling systems through electrical controls Apply electrical troubleshooting practices to gas furnace and air conditioning systems using lab boards and residential training equipment.	Many HVAC problems are electrical in nature, so technicians need a structured process for finding where the system stops and why.
Use ignition and gas valve training components Work with a Resideo spark box and practice testing and setting a gas valve as part of the lab application.	This connects electrical operation to safe heating system performance and improves confidence with ignition-related service issues.
Apply skills to real equipment scenarios Use advanced electrical lab boards and residential HVAC equipment to practice diagnosing realistic field problems.	Lab practice builds confidence so technicians can apply the process immediately on service calls.
Improve overall HVAC electrical diagnostic confidence Connect diagrams, meters, components, lab boards, and equipment operation into one repeatable troubleshooting approach.	A structured approach reduces diagnostic time, improves accuracy, and helps technicians make better service decisions.

COST: \$795 DATES: SEP 9-10, OCT 13-14

COST: \$995 DATES: SEP 22-24, OCT 27-29

Breeze33 Unitary Systems:
Installation and Service
Fundamentals

I A 6hr

Build complete confidence working with Breeze33 unitary systems by learning how to install, commission, service, and troubleshoot equipment with a structured, field-ready approach. This 6-hour class is designed for contractors, installers, service technicians, sales associates, and support teams who want a stronger understanding of how Breeze33 unitary systems operate and how to support them from setup through diagnostics.

This course covers the full equipment workflow, starting with proper installation practices and moving into startup, commissioning, service checks, and troubleshooting. Participants will learn what to verify during installation, how to confirm proper operation, and how to recognize common issues before they lead to callbacks or customer complaints.

Rather than treating installation and service as separate skills, this class connects both sides of the job. Participants will learn how installation decisions impact system performance, how startup measurements help verify equipment operation, and how a structured troubleshooting process helps identify problems faster and more accurately in the field.

This is where Breeze33 unitary system knowledge becomes field capability—when participants understand how the system should be installed, how it should operate, and how to diagnose issues when performance changes, they can deliver more reliable installs, more efficient service, and fewer repeat calls.

Tools Required: basic hand tools, multimeter
Designed for: field technicians, installers, property maintenance technicians, multifamily building maintenance technicians

COST: \$295
DATES: OCT 8, NOV 5

Table with 2 columns: DEFINED OUTCOMES, WHY IT MATTERS. Rows include: Understand Breeze33 unitary system operation, Apply proper installation best practices, Commission systems with a structured process, Identify common service issues quickly, Use troubleshooting methods that reduce guesswork, Connect installation quality to long-term performance, Build confidence supporting Breeze33 unitary customers.

Ductless IQ:
Install, Diagnose, Repair

I A 6hr

Build complete confidence working with ductless mini-split systems, from proper installation practices through advanced troubleshooting, repair, and system validation.

This 6-hour in-person specialty lab course is designed for HVAC technicians, installers, and field supervisors/leads who want to strengthen their ability to install, diagnose, repair, and support ductless systems in real-world applications.

This course provides a comprehensive look at ductless system performance, covering the full workflow from installation to service—including proper setup, commissioning, system operation, diagnostic thinking, troubleshooting scenarios, and repair practices. Participants will learn how ductless systems operate in the field and how installation quality, wiring, piping, refrigerant practices, controls, and system communication affect long-term performance.

Rather than focusing only on product familiarity, this class emphasizes field-ready skill development. Participants will work through practical service concepts that help them diagnose issues efficiently, identify root causes, correct faults, and validate that the system is operating properly before leaving the job.

This is where ductless knowledge becomes start-to-finish field capability—when technicians understand how to install with precision, diagnose with structure, and repair with confidence, they become better prepared to handle ductless systems from the first step through final verification.

Tools Required: basic hand tools, multimeter
Designed for: field technicians, installers, field supervisors/leads

COST: \$295
DATES: SEP 24, OCT 22, NOV 12

Table with 2 columns: DEFINED OUTCOMES, WHY IT MATTERS. Rows include: Understand ductless system operation, Apply proper installation practices, Diagnose ductless system issues efficiently, Identify root causes of system faults, Correct ductless system faults, Validate proper system operation, Build confidence handling ductless systems from start to finish.

Inverter Intelligence:
EVOX & Breeze33 System
Operation & Diagnostics

I 6hr

Step into the future of HVAC with a focused look at inverter-driven systems, featuring Midea EVOX and Breeze33 equipment. This intermediate-level, 6-hour in-person specialty lab course is designed for HVAC technicians, installers, and support associates who want to better understand how advanced inverter systems operate, adapt, and deliver improved efficiency and comfort.

This course provides a practical overview of inverter system performance, covering the essential building blocks of system operation—including system logic, component interaction, control strategies, fault recognition, and diagnostic approach. Participants will learn how inverter-driven equipment behaves differently from traditional HVAC systems and how to interpret what the system is communicating through operation, performance, and fault information.

Rather than focusing only on product features, this class emphasizes how the equipment operates in the field and why understanding system behavior is critical for accurate service and support. Participants will review Midea EVOX and Breeze33 equipment while learning how to verify proper operation, identify issues, and apply a more confident diagnostic process.

This is where inverter system knowledge becomes practical service capability—when technicians understand how the system thinks, adapts, and responds, they stop guessing and start building real confidence with advanced HVAC equipment. By the end of this class, participants will have the knowledge needed to support better installation, service, troubleshooting, and customer conversations around today’s inverter-driven systems.

Tools Required: basic hand tools, multimeter
Designed for: field technicians, installers, field supervisors/leads

COST: \$295
DATES: OCT 1, OCT 29, DEC 3

Table with 2 columns: DEFINED OUTCOMES, WHY IT MATTERS. Rows include: Understand how inverter-driven HVAC systems operate, Identify key J Series EVOX and Breeze33 system components, Explain how system logic and controls affect performance, Interpret system behavior and performance indicators, Identify faults and apply a diagnostic approach, Verify proper system operation, Build confidence supporting advanced inverter equipment.

MagicPak Through-the-Wall HVAC: Application, Installation & Best Practices

B I A 2.5hr

Give your team the through-the-wall HVAC knowledge they need to support MagicPak applications with confidence—not guesswork. This 2.5-hour, beginner-to-advanced class combines classroom instruction with lab exposure to build a practical understanding of the MagicPak platform, model lineup, application opportunities, installation considerations, and replacement best practices.

Designed for HVAC contractors, maintenance technicians, and property maintenance professionals, this course focuses on how MagicPak through-the-wall package units are used in residential and multi-family settings. Participants will learn how these units compare to conventional split systems, how to identify existing MagicPak or similar models, and what should be considered during installation, replacement, or retrofit conversations.

Through classroom discussion and lab review, attendees will connect product knowledge to real field scenarios, including common applications, basic installation practices, platform updates, current industry standard requirements, and customer support questions. The class helps participants recognize where MagicPak fits, how to speak about the product more accurately, and how to support contractors or property managers with better recommendations.

This is where MagicPak product knowledge becomes real application confidence—when participants understand how to identify, apply, and support through-the-wall HVAC equipment, they can reduce misapplication, improve customer conversations, and support better installation and replacement decisions.

Designed for: field technicians, installers, field supervisors/leads, property maintenance technicians, multifamily building maintenance technicians

COST: \$99
DATES: SEP 30, OCT 28, NOV 18, DEC 16

Table with 2 columns: DEFINED OUTCOMES, WHY IT MATTERS. Rows include: Understand the MagicPak through-the-wall HVAC platform, Explain the advantages of through-the-wall package units, Identify existing MagicPak or similar models, Recognize basic installation and retrofit considerations, Understand product updates and current requirements, Build confidence supporting MagicPak customers, Earn J-TEC MagicPak Training Certification.

MagicPak Through-the-Wall HVAC: Troubleshooting Lab

B I A 3.5hr

Give your team the hands-on MagicPak experience they need to work through installation, startup, operation, teardown, and troubleshooting with confidence—not guesswork. This 3.5-hour, beginner-to-advanced hands-on lab uses live-fire training models and a cooling chassis to help participants connect product knowledge to real equipment behavior.

Designed for HVAC contractors, maintenance technicians, and property maintenance professionals, this lab focuses on practical exposure to MagicPak through-the-wall package units. Participants will observe and practice key field tasks using four live-fire MagicPak models and one cooling chassis available for demonstration and skill-building.

Through guided lab practice, attendees will review installation considerations, startup procedures, normal equipment operation, teardown, component access, and troubleshooting scenarios. The lab can be adjusted based on attendee needs, experience level, and technical focus, making it useful for both newer participants and experienced technicians who want more direct exposure to the equipment.

This is where MagicPak platform knowledge becomes field troubleshooting confidence—when participants understand how the equipment starts, operates, comes apart, and responds to common service conditions, they can support customers more effectively and make better troubleshooting decisions.

Designed for: field technicians, installers, field supervisors/leads, property maintenance technicians, multifamily building maintenance technicians

DEFINED OUTCOMES	WHY IT MATTERS
Identify key MagicPak equipment and components Gain hands-on exposure to live-fire MagicPak models and a cooling chassis.	Direct equipment exposure helps participants understand the platform beyond classroom discussion.
Understand installation and startup considerations Review installation details and startup procedures using actual training equipment.	Seeing the process in a lab setting helps reinforce proper field practices and reduce startup-related issues.
Observe normal equipment operation Review how MagicPak equipment operates under live-fire conditions.	Understanding normal operation helps participants recognize abnormal conditions during service or troubleshooting.
Review teardown and component access Observe how internal components are accessed and how the unit is laid out for service.	Equipment familiarity improves technician confidence and helps reduce hesitation during field service.
Troubleshoot common MagicPak issues Work through instructor-led troubleshooting demonstrations and common field scenarios.	Hands-on troubleshooting practice helps participants build a more structured approach to diagnosing problems.
Connect classroom learning to live equipment Apply MagicPak platform knowledge to model examples, equipment behavior, and service conversations.	Lab-based learning reinforces technical knowledge and prepares participants to better support customers and field situations.
Build confidence working with MagicPak equipment Increase product and technical knowledge through guided equipment exposure.	Greater technical confidence leads to stronger customer support, more accurate field conversations, and better troubleshooting decisions.
Earn J-TEC MagicPak Training Certification Complete the required classroom and lab portions of the training.	Certification confirms that participants completed the training and were introduced to key MagicPak application, operation, and troubleshooting concepts.

COST: \$199 DATES: SEP 30, OCT 28, NOV 18, DEC 16



Famous University’s structured learning pathway is designed to develop confident and capable hydronics professionals.

Whether someone is new to the industry or looking to advance their expertise, the curriculum builds knowledge in a logical progression, starting with the fundamentals of heat transfer and system operation before advancing into piping design, boiler service, troubleshooting, commissioning, and hands-on system application. Participants can progress from learning the basics of hydronics to developing the skills and confidence needed to independently install, service, troubleshoot, and commission hydronic systems in the field.



Theory of Hydronics

B 4hr

Give your team the hydronic foundation they need before working on boilers, piping, pumps, or system troubleshooting. This 4-hour beginner-level classroom course is designed for contractors, technicians, and business owners who want a clear, big-picture understanding of how hydronic systems operate and deliver heat.

Participants will review the essential building blocks of hydronic performance, including boilers, pumps, water flow, heat transfer, air elimination, and major system components. The class focuses on how these pieces work together to move heat efficiently through a building.

Rather than focusing on memorization, this course emphasizes system behavior and why hydronic systems work the way they do. Participants will build the foundation needed for piping, design, troubleshooting, commissioning, and hands-on lab work.

This is where everything starts—when technicians understand how water moves, how heat is transferred, and how system components interact, they stop guessing and start building real confidence in the field.

Designed for: field technicians, installers, field supervisors/leads, executives/owners

DEFINED OUTCOMES	WHY IT MATTERS
Understand how hydronic systems transfer heat Learn how water carries heat from the boiler to the load and back.	This provides the foundation for understanding comfort and system performance.
Identify boilers, pumps, and key components Recognize major system components and understand their role in operation.	Component awareness helps technicians navigate systems confidently in the field.
Explain how pumps and flow work Understand how water moves through piping and how flow affects performance.	Flow issues are one of the most common causes of poor hydronic performance.
Understand basic heat transfer principles Learn how heat moves from hot to cold and how that affects system behavior.	Heat transfer explains why systems heat unevenly or inefficiently.
Recognize the role of air in hydronic systems Understand how air affects circulation, noise, and efficiency.	Air-related issues are frequent sources of service calls and system complaints.
Build a foundation for advanced hydronic training Connect theory to the systems technicians will see in the field.	A strong foundation prepares participants for piping, troubleshooting, and lab application.

COST: \$80

DATES: OCT 13, OCT 27, NOV 17, DEC 8



Scan QR code to register for training or call 216-238-4820
*Training details subject to change.

Boiler Tear Down & Cleaning Part 1

B 1hr

Give your team the inspection and testing foundation they need before taking a boiler apart. This 1-hour beginner-level classroom session is designed for contractors, technicians, and business owners who want a clearer process for boiler clean-and-check work and service evaluation.

Participants will walk through a real-world boiler service workflow, starting with safety, system shutdown, leak checks, pressure verification, expansion tank evaluation, venting inspection, and combustion awareness. The class also introduces the key components technicians need to inspect before moving into teardown and cleaning.

This session sets the foundation for Boiler Tear Down & Cleaning Parts 2 and 3 by helping participants understand what to look for, what to test, and how to recognize conditions that affect safety, reliability, and performance.

This is where proper boiler service begins - before turning a wrench, technicians need to understand how to inspect, evaluate, and diagnose the system with a clear process instead of guesswork.

Designed for: field technicians, installers, field supervisors/leads, managers

Prerequisite: Theory of Hydronics

DEFINED OUTCOMES	WHY IT MATTERS
Perform a structured boiler inspection Follow a clean-and-check workflow that includes leak checks, pressure verification, venting inspection, and system operation review.	A consistent process reduces missed issues and helps prevent callbacks.
Evaluate pressure and expansion tank performance Understand how system pressure and expansion tank condition affect boiler operation.	Pressure-related issues are common sources of repeat service calls and customer complaints.
Inspect critical safety components Review the role of relief valves, PRVs, backflow devices, gas regulators, pilots, burners, and gaskets.	Safety components must be understood before technicians can evaluate system risk and reliability.
Assess venting for performance and safety Recognize venting concerns such as blockages, material issues, and improper installation.	Venting problems can reduce efficiency and create serious safety hazards.
Understand combustion and gas supply basics Review the basic relationship between gas pressure, combustion verification, and burner operation.	Combustion awareness supports safer operation and more accurate service decisions.
Prepare for hands-on teardown and cleaning Learn what should be inspected and evaluated before disassembly begins.	Better preparation helps technicians clean with purpose and identify problems early.

Boiler Tear Down & Cleaning Part 2

A 1hr

Give your team the hands-on service practice they need to move from understanding boiler maintenance to actually performing it. This 1-hour advanced lab is designed for technicians, contractors, and business owners who want to build real confidence with boiler teardown, cleaning, and component evaluation.

Participants will work with live equipment in the Boiler and Hydronics Labs to perform guided teardown and cleaning procedures. The lab focuses on internal component inspection, system condition evaluation, proper cleaning methods, and recognizing the difference between normal wear and signs of failure.

This session helps technicians connect classroom service concepts to real equipment so they can identify issues earlier, clean with purpose, improve performance, and prevent future failures.

This is where boiler knowledge becomes service skill—when technicians get hands-on experience with real boilers, they build the confidence to service equipment correctly instead of hesitating in the field.

Tools Required: basic hand tools

Designed for: field technicians, installers, field supervisors/leads, managers

Prerequisite: Boiler Tear Down & Cleaning Part 1

DEFINED OUTCOMES	WHY IT MATTERS
Perform guided boiler teardown and cleaning Safely disassemble key components and apply proper cleaning techniques.	Hands-on repetition builds consistency and technician confidence during real service work.
Inspect for common failure points and wear Identify conditions such as leaks, cracks, expansion issues, soot buildup, and improper sizing concerns.	Catching problems early helps reduce breakdowns, emergency calls, and repeat visits.
Evaluate key boiler components Assess burners, pilots, and related system components for proper condition and operation.	Better component evaluation improves diagnostic accuracy and reduces unnecessary part replacement.
Recognize combustion and performance indicators Identify visual signs that point to inefficiency, improper operation, or system concerns.	Technicians who recognize performance clues can address root causes instead of surface symptoms.
Apply proper cleaning techniques Understand what needs to be cleaned, how to clean it, and why it matters to operation.	Proper cleaning directly supports performance, efficiency, and equipment life.
Build confidence performing boiler service Connect teardown, inspection, cleaning, and component evaluation into one practical service process.	Confidence in the lab helps technicians work more effectively and professionally in the field.

COST: \$50 DATES: OCT 13, NOV 17

COST: \$75 DATES: OCT 13, NOV 17

Boiler Tear Down & Cleaning Part 3

A  1hr

Give your team the final service step they need to bring a boiler back online correctly after teardown and cleaning. This 1-hour advanced lab is designed for experienced technicians, contractors, and business owners who want to verify safe, efficient, and reliable operation before the service call is complete.

Participants will reassemble boiler components, review the full sequence of operation, and test systems under live conditions. The lab uses steam, 80% efficient, and 90% boiler equipment to connect service work to real startup and performance verification procedures.

This session focuses on making sure the boiler not only runs, but runs correctly. Participants will evaluate operation, identify performance issues, and confirm the system is service-ready before leaving the jobsite.

This is where service becomes performance—anyone can clean a boiler, but advanced technicians know how to reassemble it, start it, verify operation, and stand behind the job.

Tools Required: basic hand tools, manometer, combustion analyzers

Designed for: field technicians, installers, field supervisors/leads, managers

Prerequisites: Boiler Tear Down & Cleaning Parts 1 and 2

DEFINED OUTCOMES	WHY IT MATTERS
Reassemble boiler components correctly Ensure parts are properly installed, sealed, and ready for operation after service.	Correct reassembly prevents leaks, repeat callbacks, and post-service operating issues.
Run and understand the full sequence of operation Follow the boiler through startup, operation, cycling, and shutdown.	Sequence knowledge helps technicians identify problems immediately instead of after leaving the job.
Test for safe and optimal performance Verify system operation, efficiency, and function under live conditions.	Performance testing confirms the boiler is operating correctly before the job is complete.
Identify startup and operating issues Recognize signs of improper combustion, control issues, imbalance, or performance concerns.	Finding problems during startup allows technicians to correct them on-site and reduce callbacks.
Commission boilers for service-ready operation Confirm the system meets expected performance standards and manufacturer intent.	A service-ready system delivers higher-quality work and improves customer confidence.
Complete the boiler service process confidently Connect teardown, cleaning, reassembly, startup, and verification into one complete workflow.	Technicians who complete the full process are better prepared to stand behind their work.

Steam Heating Principles

B  3hr

Give your team the steam heating foundation they need before troubleshooting, piping, or servicing steam systems. This 3-hour beginner-level classroom course is designed for contractors, technicians, and business owners who want a clear understanding of steam system operation, performance, and design fundamentals.

Participants will break down how steam is generated, how it moves through a system, and how condensate returns to the boiler to complete the cycle. The class connects pressure, temperature, heat transfer, steam, air, and water to the way systems behave in the field.

The course also introduces key real-world concepts including EDR, system sizing, venting, traps, piping design, and condensate return. The focus is on helping participants understand what drives comfort, efficiency, noise, and system longevity.

This is where steam finally makes sense—when participants understand how steam, air, and water work together, troubleshooting and service decisions become easier, faster, and more predictable.

Designed for: field technicians, installers, field supervisors/leads, managers

DEFINED OUTCOMES	WHY IT MATTERS
Explain steam system operation from start to finish Understand how steam is generated, distributed, condensed, and returned to the boiler.	Knowing how the system should work is the foundation for diagnosing problems.
Understand pressure, temperature, and heat transfer Apply concepts such as heat movement, pressure flow, and boiling point to real systems.	These concepts explain why steam systems behave the way they do.
Identify the role of steam, air, and water Review how air removal, steam delivery, and condensate return affect operation.	Most steam problems start when these three elements are out of balance.
Recognize one-pipe and two-pipe system differences Understand how system design affects control, efficiency, and troubleshooting approach.	System type changes what technicians should look for in the field.
Understand basic steam sizing and EDR Learn how radiation and load relate to system output and performance.	Proper sizing is critical to comfort, efficiency, and system reliability.
Identify piping and design factors that affect performance Review pitch, material selection, and condensate return considerations.	Many steam issues originate from improper piping or installation practices.

COST: \$75 DATES: OCT 13, NOV 17

COST: \$70 DATES: OCT 20, NOV 24

Steam System Troubleshooting

I 4hr

Give your team the troubleshooting process they need to diagnose steam system issues with confidence. This 4-hour intermediate hands-on lab is designed for contractors, technicians, and business owners who want to solve the problems that cause noise, uneven heating, inefficiency, and repeat callbacks.

Participants will work through real system scenarios using a from-the-boiler-out approach. The lab focuses on how pressure, airflow, steam movement, and condensate return affect system performance and how those conditions point to root causes.

Attendees will evaluate key components including steam traps, air vents, near-boiler piping, and system controls while applying sequence of operation and pressure differential concepts to real-world troubleshooting.

This is where troubleshooting becomes predictable—when technicians understand how steam, air, water, and pressure move through a system, they can stop guessing and fix problems right the first time.

Designed for: field technicians, installers, field supervisors/leads, managers
Prerequisite: Steam Heating Principles

DEFINED OUTCOMES	WHY IT MATTERS
Diagnose issues using pressure differentials and system behavior Understand how pressure moves through the system and how it affects performance.	This supports faster, more accurate diagnoses and reduces unnecessary part replacement.
Evaluate steam traps and air vents Identify improper operation and how it affects heat distribution and balance.	Faulty traps and vents are leading causes of uneven heat and repeat service calls.
Understand sequence of operation and system cycles Follow the system from thermostat call through boiler operation and cycling.	Sequence knowledge makes it easier to locate exactly where failures occur.
Identify condensate return issues Recognize how improper return conditions affect noise, efficiency, and reliability.	Poor condensate return can cause water hammer, flooding, and system damage.
Recognize piping and installation problems Identify concerns such as wet steam, improper headers, and poor system layout.	Many recurring steam issues are caused by installation problems, not failed components.
Apply a structured troubleshooting process Work through common steam problems using a logical, repeatable approach.	A structured process reduces guesswork and builds technician confidence.

Piping Basics

I 1hr

Give your team the piping foundation they need before designing, installing, or troubleshooting hydronic systems. This 1-hour intermediate classroom session is designed for contractors, technicians, and business owners who want a clear understanding of boiler piping fundamentals, flow behavior, and temperature delivery.

Building on Theory of Hydronics, this class focuses on how water carries heat through a system and how piping decisions affect performance. Participants will review how flow, pressure, resistance, and temperature work together to deliver comfort.

The course connects hydronic concepts to field decisions, helping participants understand why simple piping mistakes can create inefficiency, uneven heat, poor comfort, and repeat service calls.

This is where hydronics starts to make sense—when participants understand how water, heat, and flow interact, piping decisions become more intentional and system performance becomes more predictable.

Designed for: field technicians, installers, field supervisors/leads, managers
Prerequisite: Theory of Hydronics

DEFINED OUTCOMES	WHY IT MATTERS
Understand how boiler piping delivers heat Learn how water flow and temperature work together to move heat through the system.	This helps technicians understand comfort delivery and why performance issues occur.
Explain how flow and pressure impact performance Review how water moves through piping and how resistance affects system delivery.	Flow and pressure awareness reduces confusion when diagnosing heating issues.
Recognize how piping layout affects operation Understand how system design influences heat delivery, balance, and efficiency.	Poor piping layout is a common cause of uneven heat and inefficient operation.
Understand temperature delivery basics Learn how different temperature requirements affect hydronic system operation.	Temperature knowledge supports better decisions when working with different applications.
Apply piping fundamentals to field scenarios Connect classroom concepts to common service and installation situations.	Practical understanding helps reduce guesswork on service calls.
Build a foundation for advanced hydronic training Prepare for additional work in piping design, zoning, commissioning, and troubleshooting.	A stronger foundation makes advanced hydronic topics easier to understand and apply.

COST: \$345 DATES: OCT 20, NOV 24

COST: \$50 DATES: OCT 27, DEC 8

Piping Multiple Boilers Zones & Temperatures

I 1hr

Give your team the design understanding they need to pipe systems that perform instead of systems that create callbacks. This 1-hour intermediate classroom session is designed for contractors, technicians, and business owners who want to better understand multiple boilers, zoning, and multi-temperature hydronic applications.

Participants will build on foundational hydronic knowledge to understand how multi-zone and multi-temperature systems perform in the field. The course breaks down primary/secondary piping, hydraulic separation, point of no pressure change, pumps, valves, and flow rates.

The class also reviews how to integrate different temperature loads such as radiant, baseboard, and snowmelt while avoiding design mistakes that create short cycling, inefficiency, and premature equipment failure.

This is where hydronic knowledge becomes system design—when participants understand flow, temperature, and pressure interaction, they can build systems that run efficiently, balance properly, and perform long-term.

Designed for: field technicians, installers, field supervisors/leads, managers
Prerequisite: Theory of Hydronics

DEFINED OUTCOMES	WHY IT MATTERS
Design multi-zone and multi-temperature systems Understand how to distribute heat across different applications and system demands.	Better system design improves comfort, efficiency, and customer satisfaction.
Apply primary/secondary piping and hydraulic separation Review how to separate boiler and system loops for proper operation.	Hydraulic separation helps prevent flow conflicts and stabilize system performance.
Correctly apply the point of no pressure change Understand how pressure affects circulator performance and system stability.	Proper PONPC application reduces imbalance and reliability issues.
Select pumps and valves for proper flow Use system requirements and flow concepts to make better component decisions.	Correct flow ensures heat is delivered efficiently throughout the system.
Manage multiple temperature requirements Learn how to integrate radiant, baseboard, snowmelt, and specialty loads using mixing strategies.	Proper temperature control prevents overheating, improves efficiency, and protects equipment.
Avoid design issues that cause short cycling Recognize micro-zoning, improper load matching, and other common design mistakes.	Avoiding these issues reduces callbacks and extends equipment life.

Primary/Secondary Piping Design

I 1hr

Give your team the flow-control knowledge they need to design hydronic systems that operate predictably. This 1-hour intermediate classroom course is designed for contractors, technicians, and business owners who want to understand when and how to apply primary/secondary piping.

Building on Theory of Hydronics, this class introduces the fundamentals of hydraulic separation and how primary and secondary loops work together to manage flow, temperature, and system demand. Participants will learn how proper piping strategies allow system loops to operate independently.

The course focuses on real-world application, helping participants understand how primary/secondary piping can prevent flow conflicts, improve system stability, and support efficient boiler operation.

This is where flow control becomes system control—when participants understand how to separate and manage system loops, they can build systems that perform the way they were designed to perform.

Designed for: field technicians, installers, field supervisors/leads, managers
Prerequisite: Theory of Hydronics

DEFINED OUTCOMES	WHY IT MATTERS
Understand when to use primary/secondary piping Learn how separating system loops improves performance and stability.	This prevents flow conflicts that can lead to inefficiency and system issues.
Explain how primary and secondary loops work together Review how the boiler loop and system loop interact while operating independently.	This helps technicians maintain proper flow under changing demand.
Understand hydronic flow behavior Apply concepts such as pressure differential, flow paths, and resistance.	Flow follows the path of least resistance, and understanding this helps prevent uneven heating.
Recognize the role of circulators and flow rates Understand how pumps move water through primary and secondary loops.	Proper flow is required to deliver heat efficiently throughout the system.
Identify common application mistakes Recognize improper piping layouts, flow imbalances, and design concerns.	Identifying mistakes early reduces callbacks and improves long-term reliability.
Apply design concepts to real systems Connect piping strategy to system performance, operation, and troubleshooting.	Practical application builds confidence when designing or evaluating hydronic systems.

COST: \$50 DATES: OCT 27, DEC 8

COST: \$50 DATES: OCT 27, DEC 8

Boiler Commissioning

A 3hr

Give your team the commissioning process they need to prove boiler performance with confidence, not guesswork. This 3-hour advanced hands-on lab is designed for experienced service technicians, contractors, and business owners who want to verify that a boiler is operating safely, efficiently, and according to manufacturer intent.

Participants will move beyond installation and basic service by working with live equipment to test and verify key performance conditions. The lab focuses on combustion, flow rates, make-up air, system efficiency, startup procedures, programming, and performance verification using the tools technicians rely on in the field.

Through hands-on practice in the Boiler Lab, attendees will use manometers, combustion analyzers, and diagnostic tools to walk through real-world commissioning procedures. The focus is on helping technicians verify the system is set up correctly before leaving the jobsite.

This is where boiler service becomes proof of performance—when technicians can confirm combustion, flow, programming, and system operation, they move beyond “it runs,” and know how to prove it runs right.

Tools Required: basic hand tools, manometer, combustion analyzer

Designed for: field technicians, installers, field supervisors/leads, managers

DEFINED OUTCOMES	WHY IT MATTERS
Perform full boiler commissioning Use proper tools and procedures to verify system operation during startup and commissioning.	Ensures the system is set up correctly before leaving the jobsite and helps reduce costly callbacks.
Verify combustion and optimize performance Measure combustion values, evaluate efficiency, and confirm safe burner operation.	Proper combustion setup improves safety, efficiency, equipment life, and customer confidence.
Evaluate flow, make-up air, and system performance Review the operating conditions that affect heat delivery, efficiency, and reliability.	Identifying performance concerns early helps prevent comfort issues and repeat service calls.
Program and configure boilers correctly Apply setup requirements based on the system design and manufacturer guidance.	Correct programming helps the boiler respond properly to demand and operate efficiently.
Identify and correct startup performance issues Recognize signs of improper setup, inefficiency, combustion issues, or system imbalance.	Correcting problems during commissioning prevents future breakdowns and customer complaints.
Confirm the boiler is service-ready Verify the system is operating to expected standards before the job is complete.	Final verification protects the contractor reputation and supports long-term customer satisfaction.

COST: \$255 DATES: NOV 10, DEC 15

Hydronic System Design & Piping Lab

A 4hr

Give your team the hands-on hydronic application practice they need to turn system design concepts into field capability. This 4-hour advanced lab is designed for contractors, technicians, and business owners who want to improve piping accuracy, system design decisions, and performance verification.

Participants will work directly with live equipment to pipe boiler systems, integrate multiple zones and temperature requirements, and configure multi-boiler applications. The lab also reinforces point of no pressure change, pump and valve selection, system flow, and common design challenges.

Through hands-on practice, attendees will connect hydronic theory to real piping, pumps, valves, and operating systems. The focus is on helping participants reduce callbacks, improve comfort, increase efficiency, and deliver better system performance.

This is where hydronic expertise moves beyond theory—when technicians can build, evaluate, and troubleshoot live systems, they are better prepared to design and service systems that perform in the field.

Designed for: field technicians, installers, field supervisors/leads, managers

Prerequisites: Boiler Commissioning, one or more of: Piping Multiple Boilers Zones & Temperatures, Piping Basics, Primary/Secondary Piping Design

COST: \$345 DATES: NOV 10, DEC 15

DEFINED OUTCOMES	WHY IT MATTERS
Pipe single and multiple boiler systems Gain hands-on experience building piping configurations that support proper boiler operation and heat distribution.	Proper piping is the foundation of system performance and helps prevent inefficiency and callbacks.
Design zoned systems with flow and temperature control Work with systems that serve multiple zones and temperature requirements.	Proper zoning improves comfort, reduces energy use, and helps the system operate as intended.
Apply the point of no pressure change Understand where and why the expansion tank and circulators should be located.	Correct PONPC application reduces air problems, poor circulation, and system imbalance.
Select and apply pumps and valves Review how component selection affects flow rates, heat delivery, and performance.	Incorrect pump or valve selection can cause poor comfort, short cycling, and premature equipment wear.
Integrate multiple zones, temperatures, and boiler configurations Work through applications that balance different loads and operating conditions.	Modern hydronic systems often require multiple temperature strategies and coordinated equipment operation.
Troubleshoot hydronic design and piping issues Identify and correct flow, piping, zoning, and installation problems in a lab setting.	A structured troubleshooting approach reduces callbacks and builds field confidence.

Scan QR code to register for training or call 216-238-4820
*Training details subject to change.

Famous University’s structured learning pathway is designed to develop confident and capable plumbing professionals.

Whether someone is new to the industry or looking to advance their expertise, the curriculum builds knowledge in a logical progression, starting with the fundamentals of fixture installation and material handling before advancing into water heater selection, installation, and troubleshooting, along with code-based system design for venting, drainage, and gas sizing. Participants can progress from learning the basics of plumbing to developing the skills and confidence needed to independently install, service, troubleshoot, and size plumbing systems in the field.



Residential Gas Water Heater Selection, Installation and Troubleshooting

B I A [wrench icon] 8hr

Give your team the product knowledge, installation awareness, gas appliance understanding, and troubleshooting confidence needed to select, install, diagnose, and support residential gas water heaters with less guesswork.

This 8-hour beginner-to-advanced course is designed for contractors, technicians, installers, apprentices, and sales associates who want a stronger understanding of residential gas water heaters—from product selection through field diagnostics.

The course is organized into three practical phases. Phase 1 focuses on brand overview, model knowledge, construction, design differences, and product selection so participants can better match the right residential gas water heater to the customer and application. Phase 2 moves into installation requirements, including manufacturer-recommended procedures, plumbing requirements, gas sizing, venting, electrical considerations, tools, test equipment, installation best practices, and common mistakes to avoid. Phase 3 shifts into hands-on troubleshooting and diagnostics, where participants work with controls, meters, gas pressure testing, and diagnostic examples to identify whether an issue is related to installation, operation, controls, gas supply, venting, electrical requirements, or plumbing conditions.

This is where residential gas water heater knowledge becomes practical field capability—when participants understand product selection, installation requirements, gas supply, venting, controls, and troubleshooting, they can reduce callbacks, avoid misdiagnosis, and support customers more confidently.

Tools Required: multimeter, gas manometer, inspection camera if available

Designed for: field technicians, installers, executives/owners, field supervisors/leads

Prerequisites: basic plumbing, gas appliance, and electrical safety awareness recommended

DEFINED OUTCOMES	WHY IT MATTERS
Understand residential gas water heater construction Review how residential gas water heaters are built, how model families differ, and what key components do.	Helps participants make better product recommendations and understand what they are installing, servicing, or supporting.
Select the proper water heater for the application Evaluate customer needs, application conditions, model options, and installation considerations to match the correct residential gas water heater to the job.	Proper selection helps prevent performance issues, customer dissatisfaction, misapplication, and unnecessary product returns.
Identify installation requirements Review manufacturer-recommended procedures for plumbing, gas sizing, venting, electrical requirements, setup, and common installation mistakes.	Incorrect installation is a common cause of water heater performance problems, safety concerns, nuisance issues, and callbacks.
Understand gas sizing, venting, and electrical considerations Learn why proper gas supply, venting, combustion air, electrical connections, and installation conditions are critical to safe and reliable operation.	Residential gas water heaters must be installed under the right conditions to perform safely, consistently, and efficiently.
Use tools and test equipment correctly Practice using a multimeter, gas manometer, and inspection camera where applicable to verify field conditions and support service decisions.	Accurate measurements help technicians confirm conditions with evidence instead of guessing or replacing parts unnecessarily.
Troubleshoot common residential gas water heater issues Use controls, meters, gas pressure readings, diagnostic examples, and a structured process to identify installation, operation, gas, venting, electrical, or plumbing concerns.	A consistent troubleshooting process reduces misdiagnosis, unnecessary part replacement, repeat service calls, and customer frustration.
Build confidence supporting residential customers Connect product knowledge, installation requirements, and troubleshooting practice to real residential water heater scenarios.	Better understanding leads to stronger customer conversations, more accurate recommendations, and improved field support.

COST: \$149

DATES: SEP 10, OCT 29



Scan QR code to register for training or call 216-238-4820
*Training details subject to change.

Commercial High-Efficiency & Atmospheric Gas-Fired Water Heaters Selection, Installation and Troubleshooting

B I A [Icon] 8hr

Give your team the product knowledge, installation awareness, application understanding, and diagnostic confidence needed to select, install, diagnose, and support commercial high-efficiency and atmospheric gas-fired water heaters with less guesswork.

This 8-hour beginner-to-advanced course is designed for contractors, technicians, installers, apprentices, and sales associates who want a stronger understanding of commercial gas-fired water heaters—from product selection through field diagnostics.

The class is organized into three connected phases. Phase 1 focuses on brand overview, model knowledge, and product selection so participants can understand commercial water heater construction, compare high-efficiency and atmospheric designs, and match the correct product to the application. Phase 2 focuses on installation requirements, procedures, tools, and test equipment, including plumbing requirements, gas sizing, venting, electrical considerations, and common installation mistakes. Phase 3 moves into hands-on troubleshooting and diagnostics, where participants work with controls, meters, gas pressure testing, fault conditions, and structured diagnostic scenarios.

Through hands-on troubleshooting practice, attendees will learn how installation, operation, controls, gas supply, venting, electrical requirements, and plumbing conditions can all affect commercial gas water heater performance. The course helps participants connect product selection and installation details to real field issues so they can identify problems more accurately and support customers more effectively.

This is where commercial gas water heater knowledge becomes field confidence—when participants understand model differences, installation requirements, gas supply, venting, controls, and diagnostic process, they can support safer installations, reduce misdiagnosis, and make stronger customer recommendations.

Tools Required: multimeter, gas manometer, inspection camera, if available

Designed for: field technicians, installers, field supervisors/leads, executives/owners

COST: \$249 DATES: SEP 24, DEC 10

DEFINED OUTCOMES	WHY IT MATTERS
Understand commercial gas-fired water heater construction Review how commercial high-efficiency and atmospheric gas-fired water heaters are built, how different models function, and what separates one design from another.	Helps participants make better product recommendations and understand what they are installing or servicing.
Compare high-efficiency and atmospheric models Learn the basic differences in operation, application, installation requirements, venting considerations, and performance expectations.	Understanding the difference helps prevent misapplication and supports better product selection.
Select the proper commercial water heater for the application Evaluate customer needs, application conditions, capacity requirements, and model differences to match the correct commercial gas-fired water heater to the job.	Proper selection helps prevent performance issues, customer dissatisfaction, and unnecessary product returns.
Identify installation requirements Review manufacturer-recommended procedures for plumbing, gas sizing, venting, electrical requirements, setup, and installation best practices.	Commercial gas water heaters require correct installation conditions to operate safely, efficiently, and reliably.
Verify gas supply, venting, and electrical conditions Use the correct test equipment and field checks to understand whether gas supply, venting, electrical, or plumbing conditions are affecting operation.	Many commercial water heater problems are caused by installation or application conditions, not the equipment itself.
Use tools and test equipment correctly Practice using a multimeter, gas manometer, and inspection camera where applicable to verify field conditions and support diagnostic decisions.	Accurate measurements help technicians diagnose with evidence instead of guessing.
Troubleshoot common commercial gas water heater problems Use controls, meters, gas pressure readings, fault conditions, and structured diagnostic thinking to identify installation, operation, gas supply, venting, electrical, or plumbing issues.	A consistent process reduces misdiagnosis, unnecessary part replacement, and repeat service calls.
Build confidence supporting commercial customers Connect product knowledge, installation requirements, tool use, and troubleshooting practice to real customer and field scenarios.	Better understanding leads to stronger customer conversations, more accurate recommendations, and improved field support.

Residential Electric Water Heater Selection, Installation and Troubleshooting

B I A [Icon] 4hr

Give your team the product knowledge, installation awareness, electrical understanding, and diagnostic confidence needed to select, install, diagnose, and support residential electric water heaters with less guesswork.

This 4-hour beginner-to-advanced course is designed for contractors, technicians, installers, apprentices, and sales associates who want a stronger understanding of residential electric water heaters - from product selection through field diagnostics.

The class is organized into three focused phases. Phase 1 builds brand overview, model knowledge, construction awareness, component recognition, and product selection skills so participants understand how to match the right residential electric water heater to the application. Phase 2 moves into installation requirements, manufacturer-recommended procedures, plumbing requirements, electrical requirements, amperage, voltage, circuit and wiring considerations, required tools, and common installation mistakes. Phase 3 shifts into hands-on troubleshooting and diagnostics, where participants work with controls, heating elements, thermostats, meters, and test equipment to practice a structured service process.

This is where residential electric water heater knowledge becomes practical field capability—when participants understand selection, installation requirements, electrical conditions, and component testing, they can reduce guesswork, avoid unnecessary part replacement, and support better customer outcomes.

Tools Required: multimeter, inspection camera if available

Designed for: field technicians, installers, field supervisors/leads, executives/owners

COST: \$99 DATES: OCT 8

DEFINED OUTCOMES	WHY IT MATTERS
Understand residential electric water heater construction Review how residential electric water heaters are built, how model families differ, and how key components such as controls, heating elements, thermostats, tanks, and electrical connections support operation.	Helps participants make better recommendations and understand what they are installing or servicing.
Select the proper electric water heater for the application Evaluate customer needs, capacity requirements, model differences, and application conditions to match the correct residential electric water heater to the job.	Proper selection helps prevent performance issues, customer dissatisfaction, and unnecessary product returns.
Identify installation and electrical requirements Review manufacturer-recommended plumbing and electrical procedures, including amperage, voltage, circuit sizing, wiring considerations, and installation best practices.	Correct installation and electrical supply are critical to safe, reliable, and consistent water heater operation.
Use tools and test equipment correctly Practice using a multimeter and available test equipment to verify voltage, amperage, continuity, controls, thermostats, and heating element operation.	Accurate measurements help technicians diagnose with evidence instead of guessing.
Test common electric water heater components Learn how to evaluate heating elements, thermostats, controls, voltage, amperage, wiring, and related electrical conditions during troubleshooting.	Component testing helps technicians find the actual cause of the issue and avoid unnecessary replacement.
Troubleshoot common residential electric water heater issues Use a structured diagnostic process to identify whether the issue is related to installation, operation, electrical supply, elements, thermostats, controls, or plumbing conditions.	A consistent process reduces misdiagnosis, unnecessary part replacement, and repeat service calls.
Build confidence supporting residential customers Connect product knowledge, installation requirements, electrical testing, and hands-on troubleshooting practice to real customer and field scenarios.	Better understanding leads to stronger customer conversations, more accurate recommendations, and improved field support.

Commercial Electric Water Heater Selection, Installation and Troubleshooting

B I A [multimeter icon] [wrench icon] 4hr

Give your team the product knowledge, installation awareness, electrical understanding, and diagnostic confidence needed to select, install, troubleshoot, and support commercial electric water heaters with less guesswork.

This 4-hour beginner-to-advanced course is designed for contractors, technicians, installers, apprentices, sales associates, and support teams who want a stronger understanding of commercial electric water heaters—from product selection through field diagnostics.

The class is organized into three focused phases. Phase 1 covers brand overview, model knowledge, construction, design differences, and product selection for commercial applications. Phase 2 moves into manufacturer-recommended installation requirements, including plumbing requirements, amperage, voltage, wiring considerations, circuit requirements, tools, and test equipment. Phase 3 is a hands-on troubleshooting and diagnostics lab where participants work with controls, heating elements, thermostats, meters, and test equipment to diagnose common commercial electric water heater issues using a structured process.

Through classroom instruction and lab practice, attendees will learn how commercial electric water heaters are built, how model families are matched to specific commercial applications, and how installation conditions can affect performance, reliability, safety, and callbacks.

This is where commercial electric water heater knowledge becomes field capability—when participants understand product selection, installation requirements, electrical conditions, and component testing, they can make better recommendations, reduce misdiagnosis, and support commercial customers more confidently.

Tools Required: multimeter, inspection camera if available

Designed for: field technicians, installers, executives/owners, property maintenance technicians

Prerequisites: basic plumbing knowledge and electrical safety awareness recommended

COST: \$149 DATES: OCT 22

DEFINED OUTCOMES	WHY IT MATTERS
Understand commercial electric water heater construction Review how commercial electric water heaters are built, how model families differ, and how key components such as controls, heating elements, thermostats, tanks, and electrical connections support operation.	Helps participants make better product recommendations and understand what they are installing, servicing, or supporting.
Select the proper model for the application Evaluate commercial customer needs, capacity requirements, application conditions, and model differences to match the correct commercial electric water heater to the job.	Proper selection helps prevent performance issues, customer dissatisfaction, misapplication, and unnecessary product returns.
Identify installation and electrical requirements Review manufacturer-recommended installation procedures, plumbing requirements, amperage, voltage, wiring, circuit considerations, and common installation mistakes.	Incorrect installation or electrical supply is a common cause of poor performance, nuisance issues, safety concerns, and callbacks.
Use tools and test equipment correctly Practice using meters and test equipment to verify voltage, amperage, controls, heating elements, thermostats, and related electrical conditions.	Accurate measurements help technicians diagnose with evidence instead of guessing or replacing parts unnecessarily.
Troubleshoot common commercial electric water heater issues Use a structured diagnostic process to determine whether an issue is related to installation, operation, controls, electrical supply, elements, thermostats, or plumbing conditions.	A consistent troubleshooting process reduces misdiagnosis, shortens diagnostic time, and helps prevent repeat service calls.
Test components and verify findings Apply hands-on diagnostic practice to evaluate heating elements, thermostats, controls, voltage, amperage, and fault conditions.	Component testing helps confirm the actual cause of the problem and supports more accurate repair decisions.
Build confidence supporting commercial customers Connect product knowledge, installation requirements, electrical testing, and troubleshooting practice to real customer and field scenarios.	Better understanding leads to stronger customer conversations, more accurate recommendations, and improved field support.

Heat Pump Water Heaters: Selection, Installation and Troubleshooting

B I A [multimeter icon] [wrench icon] 4hr

Give your team the product knowledge, installation awareness, electrical understanding, application knowledge, and troubleshooting confidence needed to select, install, diagnose, and support heat pump water heaters.

This 4-hour beginner-to-advanced course is designed for contractors, technicians, installers, apprentices, and sales associates who want a stronger understanding of heat pump water heaters—from product selection through field diagnostics.

Participants will learn how heat pump water heaters are constructed, how they use surrounding air and electrical components to heat water, and how different models are selected for specific applications. The class also covers plumbing, amperage, voltage, wiring, location, clearance, air movement, condensate management, and venting options.

Through hands-on troubleshooting practice, attendees will work with controls, meters, and test equipment to diagnose performance concerns, operating mode issues, fault conditions, and installation-related problems using a structured process.

This is where heat pump water heater knowledge becomes real application confidence—when participants understand the equipment, the installation environment, and the diagnostic process, they can prevent misapplication, reduce callbacks, and support customers more effectively.

Tools Required: multimeter, inspection camera if available

Designed for: field technicians, installers, field supervisors/leads, property maintenance technicians, multifamily building maintenance technicians

Prerequisites: basic plumbing and electrical safety awareness recommended

COST: \$99 DATES: OCT 8, OCT 22

DEFINED OUTCOMES	WHY IT MATTERS
Understand heat pump water heater operation Review how heat pump water heaters use surrounding air, electrical components, and controls to heat water.	Understanding operation helps participants explain the product clearly and recognize when the application is appropriate.
Select the proper model for the application Evaluate customer needs, installation location, electrical requirements, available air, and application conditions.	Proper selection helps prevent performance issues, customer dissatisfaction, and unnecessary product returns.
Identify key installation requirements Review manufacturer-recommended procedures for plumbing, electrical supply, amperage, voltage, condensate, clearance, and venting or ducting options.	Poor location, airflow, or electrical setup can reduce efficiency, create nuisance faults, and cause callbacks.
Recognize location and airflow concerns Learn how surrounding air, clearances, room size, and optional venting affect water heater performance.	Heat pump water heaters depend on their environment, so application conditions matter as much as product selection.
Use tools and controls during diagnostics Practice using meters, control information, and test equipment to evaluate operating modes and fault conditions.	A structured diagnostic process helps technicians verify what is happening before replacing parts.
Support customer conversations with confidence Connect product knowledge, installation conditions, and troubleshooting practices to real residential and light commercial scenarios.	Better understanding leads to clearer recommendations, stronger customer trust, and improved field support.

Tankless Gas-Fired Water Heater Residential/Commercial Selection, Installation and Troubleshooting

B I A 8hr

Give your team the product knowledge, installation awareness, application understanding, and troubleshooting confidence needed to select, install, diagnose, and support residential and commercial tankless gas-fired water heaters.

This 8-hour beginner-to-advanced course is designed for contractors, technicians, installers, apprentices, and sales associates who want a stronger understanding of tankless gas-fired water heaters—from product selection through field diagnostics.

Participants will learn how tankless gas-fired water heaters are constructed, how on-demand water heating works, and how residential and commercial applications affect product selection. The class also covers plumbing, gas sizing, venting, electrical requirements, water flow, water quality, condensate considerations, tools, and test equipment.

Through hands-on troubleshooting practice, attendees will work with controls, fault conditions, gas pressure testing, meters, and diagnostic examples to build a structured approach to common tankless service issues.

This is where tankless water heater knowledge becomes real application confidence—when participants understand selection, installation conditions, gas supply, venting, water quality, and diagnostics, they can prevent misapplication, reduce callbacks, and support customers more effectively.

Tools Required: multimeter, gas manometer, inspection camera if available

Designed for: field technicians, installers, field supervisors/leads, multifamily building maintenance technicians, property maintenance technicians

Prerequisites: basic plumbing, gas appliance, and electrical safety awareness recommended

COST: \$99 DATES: OCT 15, NOV 19

DEFINED OUTCOMES	WHY IT MATTERS
Understand tankless gas water heater operation Review how tankless gas-fired water heaters heat water on demand and how key components support operation.	Understanding operation helps participants explain the product clearly and recognize when the application is appropriate.
Select the proper tankless model Evaluate customer needs, usage requirements, residential or commercial application conditions, and installation requirements.	Proper selection helps prevent performance issues, customer dissatisfaction, and unnecessary product returns.
Identify installation requirements Review manufacturer-recommended procedures for plumbing, gas sizing, venting, electrical requirements, water quality, and condensate considerations.	Tankless systems require correct application and installation conditions to operate safely, efficiently, and reliably.
Recognize application issues Learn how water flow, usage demand, gas supply, venting, water quality, and installation location affect tankless performance.	Many tankless complaints are application-related, so identifying the real issue helps avoid misdiagnosis.
Use tools, controls, and fault information Practice using a multimeter, gas manometer, controls, fault codes, and diagnostic steps to evaluate common service concerns.	A structured process helps technicians verify conditions before replacing parts.
Build confidence supporting tankless customers Connect product knowledge, installation requirements, and troubleshooting practice to real residential and commercial scenarios.	Better understanding leads to clearer customer conversations, more accurate recommendations, and improved field support.

Plumbing Materials in Action: Cut, Press, Thread & Connect

B 8hr

Give new plumbing associates the material knowledge and hands-on tool exposure they need to work more confidently with common piping systems. This beginner-level course combines classroom instruction with lab practice to introduce the materials, tools, and joining methods used throughout the trade.

Designed for new hires, early-career technicians, apprentices, and associates who support plumbing customers or handle plumbing materials, this course covers copper, plastic piping materials, and black pipe. Participants will learn where each material is commonly used, how it is prepared, and why one material or joining method may be selected over another.

Through hands-on lab stations, participants will practice basic material handling, cutting, pressing, threading, expanding, crimping, soldering or brazing awareness, and safe tool use. The class introduces tools such as ProPress, MegaPress, torches, threaders, expansion tools, crimp tools, tubing cutters, wrenches, and pipe wrenches.

This is where product knowledge becomes trade familiarity. When participants understand materials, tools, and joining methods, they can work more safely, support customers more effectively, and build the foundation needed for future plumbing installation and service work.

Tools Required: service tools, work boots, safety glasses, gloves

Designed for: field technicians

COST: \$395 DATES: OCT 8

DEFINED OUTCOMES	WHY IT MATTERS
Identify common plumbing materials Recognize copper, plastic piping materials, black pipe, and where they are commonly used.	Technicians and associates need to know what they are working with before they can install, handle, sell, or explain it.
Understand basic material applications Learn why one material may be selected over another based on the job or application.	Application knowledge helps participants make better field and customer-support decisions.
Prepare materials for installation Practice basic cutting, handling, setup, and preparation steps.	Proper preparation supports cleaner work and fewer mistakes during joining or assembly.
Practice common joining methods Gain exposure to pressing, threading, expanding, crimping, and torch-based work.	Hands-on practice builds confidence with tools and methods used in the trade.
Work safely with tools and materials Review safe handling practices around pipe, tubing, heat, sharp edges, and connection tools.	Early safety habits reduce risk and support long-term success in the trades.
Build confidence through lab stations Rotate through stations using materials, tools, and sample connections.	Direct practice helps new associates move beyond terminology and begin building real capability.

Everything and the Kitchen Sink: Hands-On Plumbing Lab

B 4hr

Give new technicians practical kitchen sink experience before they are expected to perform the work in a customer’s home. This 4-hour, beginner-level lab builds hands-on confidence with common residential kitchen sink installations, service parts, drain connections, and leak-checking practices.

Designed for new hires and field technicians, this course focuses on the key parts of a kitchen sink assembly, including drop-in basins, faucets, supply lines, angle stops, disposals, drain lines, dishwasher connection awareness, cartridges, grid strainers, P-traps, and air admittance valve applications.

Through guided lab practice using a kitchen sink training cart, participants will install and connect a kitchen sink basin, faucet, water supply, disposal, and drain assembly while also practicing basic repair and service tasks such as cartridge replacement, drain cleaning, and leak verification.

This is where kitchen sink knowledge becomes practical installation confidence. When technicians understand each connection point and how the full assembly works together, they can reduce leaks, avoid callbacks, and complete kitchen sink work more professionally.

Tools Required: service tools, work boots, safety glasses, gloves

Designed for: field technicians, installers, multifamily building maintenance technicians, property maintenance technicians

DEFINED OUTCOMES	WHY IT MATTERS
Install a drop-in kitchen sink basin Practice placing, securing, and preparing a drop-in kitchen sink basin for connection.	Proper basin placement and setup support a clean, stable, leak-resistant installation.
Install and connect a kitchen faucet Mount a kitchen faucet and connect it to the water supply.	Correct faucet installation and supply connections help prevent leaks and customer callbacks.
Install angle stops and supply lines Work with supply-side connections that are commonly replaced during kitchen sink work.	Supply connections are common failure points and must be installed and checked correctly.
Install a disposal and connect drain lines Practice disposal installation basics and kitchen sink drain line connections.	Drain and disposal connections must be installed correctly to prevent leaks, odors, and drainage issues.
Recognize venting and AAV concerns Review signs that a sink may not be properly vented and where air admittance valve awareness applies.	Poor venting can contribute to slow drainage, odors, and repeat customer complaints.
Check completed work for leaks Verify connections after installation, replacement, or repair.	Leak checking protects the customer's home and reduces return visits.

COST: \$225 DATES: SEP 24, NOV 19

Bathroom Fixtures Boot Camp: Install, Repair, & Troubleshoot

B 4hr

Give new technicians the hands-on bathroom fixture experience they need before performing the work in a customer’s home. This 4-hour, beginner-level lab builds confidence with common residential bathroom fixtures, service parts, installation practices, and clean work habits.

Designed for new hires and field technicians, this course focuses on the fixtures and repairs technicians are most likely to encounter in a residential bathroom group: water closets, vanity sinks, vanity faucets, shower valve components, cartridges, supply lines, angle stops, P-traps, and fixture drain lines.

Through guided lab practice using a bathroom group training cart, participants will install, replace, and repair common components while learning how to keep the work area clean, verify proper operation, and recognize when a fixture can be repaired instead of fully replaced.

This is where bathroom fixture knowledge becomes real jobsite confidence. When technicians understand how fixtures, service parts, water connections, and drains work together, they can complete common bathroom service tasks more safely, cleanly, and consistently.

Tools Required: service tools, work boots, safety glasses, gloves

Designed for: field technicians, installers, property maintenance technicians, multifamily building maintenance technicians

COST: \$225 DATES: OCT 1, DEC 10

DEFINED OUTCOMES	WHY IT MATTERS
Install and replace common bathroom fixtures Practice working with water closets, vanity sinks, vanity faucets, and shower valve-related components.	Bathroom fixtures are common residential service items, and technicians need confidence installing and replacing them correctly.
Replace common service parts Work with cartridges, fill valves, flush valves, angle stops, supply lines, P-traps, and related fixture parts.	Many fixture issues can be solved with targeted repair instead of full fixture replacement.
Clear bathroom fixture drains Use a toilet auger and plumbing snake for basic bathroom fixture drain-cleaning practice.	Drain cleaning is a frequent service task that must be handled cleanly and professionally.
Understand brand and part differences Recognize that different fixture brands may use different parts, cartridges, and service approaches.	Brand familiarity helps reduce confusion in the field and supports better customer service.
Maintain a clean work area Practice setup, cleanup, and organized work habits while completing fixture tasks.	Clean work habits improve safety, efficiency, professionalism, and customer satisfaction.
Build hands-on fixture confidence Use repeated practice on the bathroom group cart to reinforce installation and repair skills.	Hands-on repetition helps beginners build confidence before working independently in a home.

Toilet Troubleshooting Boot Camp: Install, Repair & Restore

B 4hr

Give new technicians the hands-on water closet experience they need before performing toilet installation and service work in a customer’s home. This 4-hour, beginner-level lab builds confidence with water closet styles, removal, replacement, common service parts, leak checking, and clean work habits.

Designed for new hires, apprentices, and field technicians, this course focuses on common residential water closet tasks, including turning off the water, removing water from the fixture, using proper lifting techniques, removing an existing water closet, assembling a new fixture, replacing service parts, and checking completed work.

Participants will practice with a water closet cart and related materials, including fill valves, flush valves, supply lines, angle stops, wax rings, ferrules, a ferrule puller, wet/dry vac, toilet auger, and step-by-step instructions. The class reinforces both replacement and repair options so technicians understand when service may be appropriate.

This is where toilet troubleshooting becomes practical field confidence. When technicians understand how water closets are installed, serviced, and verified, they can reduce leaks, improve customer trust, and approach common toilet issues with a cleaner, more professional process.

Tools Required: service tools, work boots, safety glasses, gloves
Designed for: field technicians, installers, field supervisors/leads

COST: \$225 DATES: SEP 10, NOV 12

DEFINED OUTCOMES	WHY IT MATTERS
Identify water closet styles and service parts Become familiar with different water closet styles, manufacturers, and common serviceable components.	Recognizing differences helps technicians support customers more effectively in the field.
Safely remove and replace a water closet Practice shutting off water, removing water, lifting correctly, removing the fixture, and setting a replacement.	Safe removal and replacement prevents injury, water damage, fixture damage, and installation mistakes.
Assemble a new water closet Practice basic fixture assembly and preparation before installation.	Proper assembly supports correct operation and reduces leaks and callbacks.
Replace common repair parts Work with fill valves, flush valves, supply lines, angle stops, wax rings, and related parts.	Many toilet issues can be repaired without replacing the entire fixture.
Use a toilet auger properly Review how and when to use a toilet auger for basic water closet service.	Proper auger use helps address stoppage concerns safely and effectively.
Check completed work for leaks and operation Verify proper operation after installation or service.	Final checks protect the customer’s home and reduce return visits.
Maintain a clean work area Practice clean, organized work habits throughout the lab.	Clean work habits improve safety, professionalism, and the customer experience.

Residential Plumbing: Fixture Installation Boot Camp

B 8hr

Give new technicians the fixture installation practice they need before performing common residential work in the field. This 8-hour, beginner-level hands-on lab builds confidence with water closets, kitchen sinks, faucets, vanity fixtures, bathtub and shower fixture awareness, supply connections, drain connections, and leak checking.

Designed for new hires, new plumbing technicians, apprentices, and early-career field technicians, this course uses dedicated training carts, including a bathroom group cart, water closet cart, and kitchen sink cart. Participants will practice installing and replacing common residential fixtures in a controlled training-center environment.

Participants will install multiple water closet styles, set a drop-in kitchen sink, connect a kitchen faucet and disposal, work with vanity fixtures, connect water supply and drain lines, and use common materials such as wax rings, supply lines, angle stops, thread sealant, Teflon tape, and putty.

This is where fixture knowledge becomes practical installation capability. When technicians understand how fixtures connect, seal, drain, and operate, they can perform cleaner installations, check their work correctly, and reduce preventable leaks and callbacks.

Tools Required: service tools, work boots, safety glasses, gloves
Designed for: field technicians, installers, field supervisors/leads

COST: \$449 DATES: DEC 17

DEFINED OUTCOMES	WHY IT MATTERS
Install multiple styles of water closets Practice installing and replacing standard, elongated, and ADA water closets.	Water closet installation is a common residential task, and technicians need confidence with different fixture styles.
Understand fixture installation components Work with wax rings, supply lines, angle stops, replacement valves, and water closet connections.	Knowing how components work together helps reduce leaks, callbacks, and installation mistakes.
Install kitchen sink components Set a drop-in kitchen sink, connect a faucet, and review disposal connection basics.	Kitchen sink installations require careful sealing, supply connection, drain connection, and leak checking.
Install common bathroom fixtures Practice vanity sink, vanity faucet, and bathtub or shower fixture installation awareness.	Bathroom fixtures are core residential plumbing tasks that must be completed cleanly and consistently.
Connect fixtures to water and drain lines Practice making supply and drain connections on training carts.	Correct connections are essential for proper fixture operation and leak prevention.
Check completed work for leaks Verify each installation after connection and operation.	Leak checking protects the customer’s home and reduces return visits.
Build confidence through repetition Rotate through multiple fixture installation tasks.	Hands-on repetition helps beginners build proficiency before working independently.

Residential Plumbing: Gas Load Calculations & Sizing for Modern Appliance Installations

I 3hr

Give your team the gas load calculation and sizing knowledge they need to verify residential gas systems before modern appliance installations. This 3-hour, intermediate-level lecture-based course helps participants evaluate whether existing or new gas piping can support the connected appliance load.

Designed for field technicians, installers, supervisors, sales teams, comfort consultants, contractors, and associates, this course focuses on natural gas and liquid propane load calculations, gas line sizing, appliance demand, and the application issues that occur when older piping systems are asked to serve newer high-demand equipment.

Participants will learn how modern appliances, including tankless water heaters, high-efficiency furnaces, and other gas-fired equipment, can change the total gas demand of a home. The class also supports education connected to Gastite CSST installation and certification when applicable.

This is where gas sizing becomes verified application knowledge. When technicians and sales teams understand connected load, appliance demand, and piping capacity, they can prevent performance issues, reduce callbacks, and explain gas line upgrades more clearly to customers.

Tools Required: calculator

Designed for: field technicians, installers, field supervisors/leads

COST: \$119 DATES: OCT 22

DEFINED OUTCOMES	WHY IT MATTERS
Calculate residential gas demand Learn how to calculate connected load using natural gas and liquid propane examples.	Proper demand calculations help determine whether the gas system can support the appliances installed in the home.
Size gas lines for new or upgraded equipment Evaluate gas requirements and determine appropriate line sizing for appliance installations.	Incorrect sizing can cause appliances to operate poorly when multiple loads run at the same time.
Recognize undersized existing gas systems Understand why older gas piping may not support modern appliance loads.	Many performance problems are caused by gas systems that were not sized for new equipment demand.
Understand modern appliance impact Review how equipment changes such as tankless water heaters or furnace upgrades affect total load.	The appliance may be correct, but the gas supply must be evaluated first.
Explain gas sizing needs to customers Connect gas line sizing to safety, reliability, and appliance performance.	Clear explanations help build trust and support better installation decisions.
Prepare for Gastite CSST application Review education connected to Gastite CSST installation and certification where applicable.	Product knowledge and certification support proper application and installation practices.

Plumbing Venting Made Practical: Code, Sizing & System Layout

I 4hr

Give your team the vent code knowledge and system layout confidence they need to understand how plumbing vent systems are designed, sized, installed, and repaired. This 4-hour, intermediate-level classroom course connects venting principles to practical code application.

Designed for plumbing technicians, installers, supervisors, sales associates, and contractors, this course reviews venting principles, code requirements, system identification, common vent configurations, sizing, field drawings, and code-based installation and repair practices.

Participants will learn how venting supports proper drainage system operation and how to navigate relevant sections of the Plumbing Code. The course also focuses on identifying vent system types, interpreting vent configurations, reading and developing basic field drawings, and applying code requirements to new construction, renovation, and service work.

This is where vent code becomes practical system understanding. When participants understand why venting matters, how vents function, and how code guides vent layout and sizing, they can make better field decisions and communicate more clearly with inspectors, coworkers, and customers.

Designed for: field technicians, installers

COST: \$149 DATES: OCT 29

DEFINED OUTCOMES	WHY IT MATTERS
Navigate plumbing vent code sections Learn how to locate and review relevant Plumbing Code requirements related to venting.	Code navigation helps participants make accurate, compliant decisions instead of guessing.
Understand venting principles Review how vents support proper drainage operation and trap seal protection.	Vents are essential to drainage performance, not just a code requirement.
Identify vent system types Learn how to recognize common vent systems and configurations.	Correct identification is the first step before making installation, repair, or code decisions.
Interpret vent layouts Review common vent configurations and how they connect to drainage systems.	Misreading a vent layout can lead to improper repairs, failed inspections, and performance issues.
Size vent systems correctly Apply basic code-based approaches to vent sizing.	Incorrect sizing can affect system performance and code compliance.
Read and develop field drawings Practice interpreting and creating simple vent layout drawings.	Clear drawings improve communication with coworkers, supervisors, inspectors, and customers.

Sanitary Drainage Made Practical: Code, Fittings & System Sizing

I 4hr

Give your team the sanitary drainage code knowledge and fitting application confidence they need to make better installation decisions. This 4-hour, intermediate-level classroom course connects Ohio Plumbing Code requirements to real residential and commercial drainage systems.

Designed for plumbing technicians, installers, supervisors, sales associates, contractors, and product specialists, this course reviews sanitary drainage code interpretation, fitting selection, Drainage Fixture Units, fixture loads, sizing decisions, and common areas of confusion in drainage applications.

Participants will review code requirements and apply them to real-world examples, including why certain fittings are used, why some fittings are not permitted or recommended, and how connected fixtures affect drainage system sizing. The course may also include a manufacturer-led discussion from Zurn focused on code provisions and installation considerations.

This is where drainage code becomes practical field confidence. When participants understand how fittings, DFUs, fixture loads, and sizing tables work together, they can support better installations, reduce rework, and communicate more clearly with inspectors, contractors, and customers.

Designed for: field technicians, installers, field supervisors/leads

DEFINED OUTCOMES	WHY IT MATTERS
Understand sanitary drainage code requirements Review key Ohio Plumbing Code requirements related to drainage systems.	Code understanding supports correct, consistent, and compliant installations.
Interpret code language more confidently Move beyond simply reading code and begin applying requirements to field conditions.	Better interpretation leads to better installation and support decisions.
Apply requirements to residential and commercial systems Connect drainage code to different system types and fixture loads.	System size, use, and installation conditions can vary widely between applications.
Select drainage fittings appropriately Review why certain fittings are used in specific drainage applications.	Correct fitting selection supports flow, code compliance, and long-term system performance.
Understand DFUs and sizing Learn how fixture loads and Drainage Fixture Units influence pipe sizing.	DFUs are foundational to verifying whether a drainage system can serve connected fixtures.
Recognize common confusion points Review areas where drainage code is commonly misunderstood or misapplied.	Addressing confusion reduces mistakes, failed inspections, and inconsistent field practices.
Connect manufacturer guidance to code application Use manufacturer insight and examples to reinforce code-compliant drainage decisions.	Manufacturer guidance helps connect products and fittings to proper application.



COST: \$149 DATES: DEC 2

BUILD-A-TECH PROGRAM OVERVIEW
HVAC Technician Development

JANUARY 2027
Scheduled launch

141 HOURS
Total instruction

2 DAYS/WEEK
Nine-week schedule

The Build-A-Tech program is an entry-level HVAC service technician development pathway designed for new technicians, technician helpers, and associates preparing to move into field service roles. The program will combine classroom instruction, hands-on laboratory work, simulations, and practical assessments.

Participants will develop skills in workplace and jobsite safety, customer communication, HVAC/R fundamentals, diagnostic tools, electrical systems and schematics, gas furnaces, combustion and venting, airflow and psychrometrics, refrigeration, heat pumps, system maintenance, brazing, and structured troubleshooting. The program will also include OSHA 10 training, EPA Section 608 certification preparation and testing, an introduction to Manual J load calculations, and training on communicating service findings and value to customers.



FAMOUS UNIVERSITY MEMBERSHIP BENEFITS

PARTICIPANT OUTCOMES

- Work safely and professionally in HVAC service environments
- Identify major HVAC system components and explain how they operate
- Use diagnostic tools, electrical meters, and wiring diagrams safely and effectively
- Perform routine maintenance on furnaces, air handlers, air-conditioning systems, and heat pumps
- Apply a structured process to diagnose common electrical, heating, cooling, airflow, and refrigeration problems
- Complete basic recovery, evacuation, charging, and brazing activities safely
- Communicate service findings, recommended solutions, and customer value clearly and professionally
- Earn or make progress toward OSHA 10 and EPA Section 608 credentials
- Demonstrate job readiness through laboratory sign-offs, written assessments, and a final capstone evaluation

WHY IT MATTERS

Build-A-Tech will create a consistent pathway for developing entry-level technicians into safe, capable, and customer-focused HVAC technicians. By combining technical knowledge with extensive hands-on practice, the program will help participants move beyond guesswork and parts-changing toward a disciplined, measurement-based approach to service and troubleshooting.

The program will help strengthen the technician pipeline, improve field readiness, reinforce consistent safety and service standards, and reduce the time required for new technicians to become productive. It will also support better customer experiences by developing technicians who can diagnose problems accurately, document their findings, and communicate recommendations with confidence.

Expert Speaker Series

- Hear from respected leaders and innovators in the trades
- Topics cover industry trends, business growth, leadership, and the future of the trades
- Walk away with fresh perspectives and practical strategies

Product & Technical Symposiums

- Mini trade shows connecting manufacturers, factory reps, and trade professionals
- Explore new products and technologies at tabletop displays
- Join focused technical sessions and live demonstrations
- Network with peers, suppliers, and industry experts

Leadership & Business Conferences

- Dealer meetings, leadership gatherings, and industry-focused events
- Business and technology driven conference sessions
- Learn directly from industry experts in a professional, modern setting

Classroom & Lab Rental

- Book private training sessions
- Select from our full class catalog
- Individualized learning tailored to your goals and needs

Space Rental

- Legacy Event Room, seats up to 300
- Classroom space, seats up to 60
- Perfect for company meetings, conferences, and celebrations

**Scan here or see
the next page to view
membership options**



famous-supply.com/famous-university-enrollment

Questions? Our Famous University and J-TEC teams are here to help.
216-238-4820 | famousuonlinetraining@famous-supply.com

FAMOUS UNIVERSITY MEMBERSHIP

Famous University Membership gives you and your team practical training, certifications, and **leadership resources** to run a stronger, more efficient business. Whether you're in the truck every day or managing a growing team, you get **flexible access to hands-on training** and real-world education without overpaying for extras you don't need.

Members gain access to J-TEC's hands-on labs, **in-person and virtual training**, included certifications, and exclusive events. Higher tiers unlock on-site training and facility access to help standardize your operation and scale with confidence.

Membership Levels

- **Founders & Elite:** Maximum access for larger teams and training-driven companies
- **Premier & Pro:** High-value options for small-to-mid-size companies
- **A La Carte:** Pay-as-you-go access for occasional training or events

Automatic Annual Renewal

Your enrollment will automatically renew on an annual basis unless cancelled prior to the renewal date. You may cancel at any time before renewal to avoid charges.

Questions?

Tell us your company size and goals, we'll help you choose the right tier.

Emily Black
J-TEC Customer Experience Manager
eblack@famous-supply.com
216-903-5171

2026 Introductory Offer!	Jay Blaushild Founders	
	\$1,500 per month	
	\$2,500/month	
Specialty Labs Hands-On Labs, Half-Day, Full-Day, & Multi-Day Trainings	Unlimited FREE	Monthly Value \$2,000
Classes In-Person Classroom & Zoom Trainings	Unlimited FREE	Monthly Value \$1,000
Free Seminars	Unlimited FREE	
Speaker Series	6 FREE Tickets + Exclusive Private Reception with Speaker	Monthly Value \$200
Symposium & Expo Classes	Unlimited FREE	Annual Value \$100
Build-A-Tech	25% OFF First Four People	Annual Value \$3,000
608 Refrigerant Certification	4 FREE per Year \$99 / add'l person	Annual Value \$400
Customized Contractor Location Training	16 FREE Hours	Annual Value \$5,400
Leadership, Coaching & Culture Workshops	2 FREE Workshops	
Contractor Tool Discount (Milwaukee, Appion, UEi, & more)	Discounts Provided During Lab Training	
Classroom & Lab Rental Subject to Availability & Capacity	Unlimited FREE	Annual Value \$2,000
Legacy Event Center Room Rental 150-320 Capacity Subject to Availability	2 FREE Days	Annual Value \$4,000
Total Estimated Value	\$53,300	

Famous Elite		Famous Premier		Famous Pro		A La Carte
\$1,000 per month		\$500 per month		\$150 per month		\$0 per month
\$1,750/month		\$1,000/month		\$400/month		—
6 FREE / Month + 30% OFF Additional Labs	Monthly Value \$1,200	4 FREE / Month + 20% OFF Additional Labs	Monthly Value \$800	2 FREE / Month + 10% OFF Additional Labs	Monthly Value \$400	\$200 - \$750 / Lab
10 FREE / Month	Monthly Value \$500	5 FREE / Month	Monthly Value \$250	2 FREE / Month	Monthly Value \$100	\$35 - \$199 / Class
Unlimited FREE		Unlimited FREE		Unlimited FREE		Unlimited FREE
4 FREE Tickets	Monthly Value \$150	2 FREE Tickets	Monthly Value \$100	1 FREE Ticket	Monthly Value \$50	\$25 - \$75 / Ticket
Unlimited FREE	Annual Value \$50	Unlimited FREE	Annual Value \$50	\$25 / Class		\$50 / Class
25% OFF First Three People	Annual Value \$2,250	25% OFF First Two People	Annual Value \$1,500	25% OFF First Person	Annual Value \$750	\$5,000
3 FREE per Year \$99 / add'l person	Annual Value \$300	2 FREE per Year \$99 / add'l person	Annual Value \$200	1 FREE per Year \$99 / add'l person	Annual Value \$100	\$99 / Person
12 FREE Hours	Annual Value \$4,200	8 FREE Hours	Annual Value \$2,800	4 FREE Hours	Annual Value \$1,400	\$350 / Hour
—		—		—		—
Discounts Provided During Lab Training		Discounts Provided During Lab Training		Discounts Provided During Lab Training		Discounts Provided During Lab Training
6 FREE Days	Annual Value \$2,000	—		—		—
1 FREE Day	Annual Value \$2,000	—		—		—
\$33,000		\$17,650		\$7,475		\$ for \$

REGISTRATION GUIDELINES

Training season class schedules will be published in full prior to each training season. Class registrations close 4 days prior to the session date. CEU course registration close based on seat capacity for each course.

SESSION CAPACITIES

Maximum capacities are in place for J-TEC classes with specialty labs having a limited number of seats available.

A waitlist is maintained for classes that have reached capacity. Attendees will receive communication upon registration if they are waitlisted rather than admitted to the course. In instances where a spot opens up, the waitlisted attendee will be notified no less than 24 hours prior to the session

CANCELLATIONS

Class cancellations received less than 24 hours prior to the class will incur a \$50 fee. Class cancellation charges do not apply to attendees admitted from the waitlist.

DAY OF CLASS GUIDELINES

The J-TEC facility opens 30 minutes prior to scheduled sessions. Attendees must check in upon arrival and will be directed to the class. Attendees must bring any required tools listed in the course details. Coffee, water, and light snacks are provided in classrooms. Lunch is provided during courses that are scheduled through the time period of 11am-1pm.

RECEIVING CEU CREDITS

To receive CEU credit, attendees must be present and actively participate for the entire scheduled course, with one hour of classroom or online instruction equal to one CEU; one 10-minute break is permitted per hour. The classroom door will close 10 minutes after the scheduled start time, and attendees who arrive after that time, leave early, step out for phone calls, or do not actively participate due to phone use or other distractions will not receive CEU credit. CEU credit cannot be awarded for partial attendance—attendees must complete the full course, even if they need fewer CEU hours than the course provides.

CLASS REMINDERS

Class reminders are sent out 24 hours prior to the session. Reminders are sent to the attendee and manager name provided upon registration. Class reminders include instructions on locating the J-TEC facility and reminders of any tools required for the session.

INVOICING

J-TEC administers redemption of class credits and application of credits for Famous University Members. Non-members are invoiced on the session date.



Famous is proud to take a positive role in our communities. Together, we’ve provided over 1 million meals, supported affordable housing for 75 families, and, through children’s charities, have impacted hundreds of families in the surrounding communities of OH, PA, and WV.



5 REGIONAL DISTRIBUTION CENTERS

Cleveland RDC | 23

216-438-5000

5700 Lee Rd S.

Maple Heights, OH 44137

After Hours: 440-251-4755

Columbus RDC | 25

614-643-2377

711 Distribution Dr.

Columbus, OH 43228

After Hours: 614-582-7832

Sebring RDC | 29

330-938-6350

350 Courtney Rd.

Sebring, OH 44672

After Hours: 330-803-3492

Toledo RDC | 83

419-470-6590

4500 N Detroit Ave.

Toledo, OH 43612

After Hours: 419-764-5578

Youngwood RDC | 24

724-404-4021

72 E. Hillis St.

Youngwood, PA 15697

After Hours: 724-221-0149

38 BRANCHES | 5 KITCHEN, BATH, WINDOW & DOOR SHOWROOMS | 24 CLASSROOMS

Akron | 4

234-352-1166

166 N. Union St.

Akron, OH 44304

After Hours: 330-697-1085

Ashtabula | 13

440-992-2116

4625 Foster Ave.

Ashtabula, OH 44004

After Hours: 440-228-3603

Bedford Heights | 14

216-285-2900

26200 Richmond Rd.

Bedford Heights, OH 44146

After Hours: 330-219-7749

Bethel Park | 46

412-835-8043

3131 Industrial Blvd.

Bethel Park, PA 15102

After Hours: 412-639-5332

Brooklyn | 123

216-293-7798

8550 Brookpark Rd.

Brooklyn OH 44129

After Hours: 216-570-8974

Byesville | 18

740-421-4758

354 West Main

Byesville, OH 43723

After Hours: 740-398-8653

Canton | 12

330-456-4508

1215 McKinley Ave. SW

Canton, OH 44707

After Hours: 330-933-5598

Cleveland East | 20

216-881-5700

6420 Woodland Ave.

Cleveland, OH 44104

After Hours: 216-570-8974

Cleveland West | 21

216-529-1010

11200 Madison Ave.

Cleveland, OH 44102

After Hours: 216-570-8974

Columbus East | 19

614-294-3500

1356 Cleveland Ave.

Columbus, OH 43211

After Hours: 614-582-7832

Columbus West | 35

614-503-0875

4300 Roberts Rd.

Columbus, OH 43228

After Hours: 614-582-7832

Dayton | 84

937-242-6980

1054 Gateway Dr.

Dayton, Ohio 45404

After Hours: 937-242-6980

DuBois | 128

814-217-0050

302 Aspen Way

Dubois, PA 15801

After Hours: 814-591-4533

Erie | 39

814-314-1516

3003 Pittsburgh Ave.

Erie, PA 16508

After Hours: 814-243-5141

Fremont | 11

419-332-2636

641 South Front St.

Fremont, OH 43420

After Hours: 419-455-5996

Indianapolis | 73

317-576-4450

5501 W. Minnesota St.

Indianapolis, IN 46241

After Hours: 317-408-2274

Jamestown | 133

716-815-6450

2148 Allen St., Ext.

Falconer, NY 14733

After Hours: 716-388-6886

Johnstown | 126

814-304-1776

339 Walnut St.

Johnstown, PA 15901

After Hours: 814-999-5801

Lorain | 2

440-245-6874

125 East 20th St.

Lorain, OH 44052

After Hours: 440-654-3974

Mansfield | 7

419-524-0411

83 Smith Ave.

Mansfield, OH 44905

After Hours: 419-571-9953

Medina | 122

234-378-9505

160 Commerce Dr.

Medina, OH 44256

After Hours: 330-813-5210

Meadville | 136

814-806-3440

11320 Baco Rd.

Meadville, PA 16335

After Hours: 814-547-0404

Melwood | 44

412-622-8100

434 Melwood Ave.

Pittsburgh, PA 15213

After Hours: 412-310-8228

Mentor | 120

440-391-5000

7300 Industrial Park Blvd.

Mentor, OH 44060

After Hours: 440-479-3553

Mount Vernon | 85

740-263-4313

330 Commerce Drive

Mount Vernon, OH 43050

After Hours: 567-241-8073

New Kensington | 45

724-335-8343

419 Hileman Dr.

New Kensington, PA 15068

After Hours: 412-780-6461

Newark | 9

740-345-9617

25 South 11th St.

Newark, OH 43055

After Hours: 740-219-9623

North Hills | 47

412-366-3143

331 Rochester Rd.

Pittsburgh, PA 15237

After Hours: 412-737-3336

Sandusky | 10

419-625-5354

1341 Olds St.

Sandusky, OH 44870

After Hours: 419-656-0566

Sebring | 29

330-938-6350

350 Courtney Rd.

Sebring, OH 44672

After Hours: 330-803-3492

Steubenville | 3

740-282-0951

934 W. Adams St.

Steubenville, OH 43952

After Hours: 740-457-2436

Toledo | 15

419-478-0343

220 Matzinger Rd.

Toledo, OH 43612

After Hours: 419-392-2669

Uniontown | 8

724-437-9806

85 Pittsburgh St.

Uniontown, PA 15401

After Hours: 724-480-5847

Warren | 5

330-369-2563

2436 Niles Rd. SE

Warren, OH 44484

After Hours: 330-509-9437

Washington | 16

724-225-8330

1110 W Chestnut St.

Washington, PA 15301

After Hours: 330-604-7372

Wheeling | 6

304-232-3310

2300 Market St.

Wheeling, WV 26003

After Hours: 304-830-1324

Youngstown | 38

234-706-3525

886 E. Midlothian Blvd.

Youngstown, OH 44502

After Hours: 330-301-1040

Youngwood | 24

724-404-4021

72 E. Hillis St.

Youngwood, PA 15697

After Hours: 724-221-0149