



COURSE CATALOG 2022

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STEP TOWARDS
YOUR CAREER IN THE
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ΙR







## LEARN. APPLY. THRIVE.

#### Welcome to Virginia Technical Academy!

As the President and CEO of Virginia Technical academy (VTA), I am very excited to welcome you to our training program. I have personally developed the courses in our programs and have taught several of the HVAC, electrical and appliance repair classes for many years to ensure that your experience here at VTA will be meaningful and productive.



Whether you are enrolled in our day or evening courses, you will be challenged to learn and practice skills that will prepare you for your career in your trade. This is not a school for memorization, you will be encouraged to think on your own, and while it may be challenging, our instructors are here to help you through your studies.

Our courses are certified by the National Center for Construction Education and Research (NCCER) and when you complete our programs, you will be in the NCCER national registry where prospective employers can have access and place you in jobs!

Congratulations on deciding to pursue a career in the trades! It is a high demand field, and your future will hold many choices for you!

#### David Gillespie

President & Founder



HVAC, ELECTRICAL AND PLUMBING PREREQUISITE

**DURATION** 







# CORE CURRICULUM CC-100 Course

**COURSE OUTLINE** 

#### **OBJECTIVE OUTLINE OF TRAINING**

This course is a prerequisite for the Electrical, Plumbing, and HVAC programs and covers basic jobsite safety, proper use of PPE, introduction to tools, rigging, construction math, materials handling, reading construction drawings, and communication and employability skills.

- Basic Safety (Construction Site Safety Orientation)
- Introduction to Construction Math
- Introduction to Hand Tools
- Introduction to Power Tools
- Introduction to Construction Drawings
- Introduction to Basic Rigging
- Basic Communication Skills
- Basic Employability Skills
- Introduction to Material Handling









The CORE CURRICULUM COURSE is a prerequisite for HVAC, ELECTRICAL, PLUMBING, BUILDING/PROPERTY MAINTENANCE & MAJOR APPLIANCE REPAIR Programs.

Once completed, students can proceed with LEVELS 1, 2, 3 & 4.

## **HVAC** HV-2101 Course

**COURSE OUTLINE** 



**HVAC** 

**DURATION** 



#### **OBJECTIVE OUTLINE OF TRAINING**

This course covers the basic principles and fundamental operating concepts of heating, ventilating, air conditioning, refrigeration cycles, subcooling and superheat charging methods. The student will learn how to identify types of copper tubing and fittings, use of proper tools and equipment and introduction of common assembly and installation practices. Course also includes hands-on brazing and soldering skills, and EPA certification.

- Introduction to HVAC
- Trade Mathematics
- Basic Electricity
- Introduction to Heating
- Introduction to Cooling
- Introduction to Air Distribution Systems
- Basic Copper and Plastic Piping Practices
- Soldering and Brazing
- Basic Carbon Steel Piping Practices
- Covers Applicable Codes, and Standards

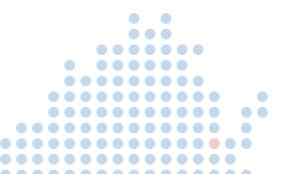














**COURSE OUTLINE** 

**HVAC** 

#### **DURATION**





#### **OBJECTIVE OUTLINE OF TRAINING**

A more detailed study on the different parts of a working HVAC/R system. Learn the theory and operations of induction motors, compressors, heat pumps, and metering devices. Learn about refrigerant safety and how to handle refrigerants. Includes 410-A Safety Certification Course and Exam.

- **Alternating Current**
- **Compressors**
- **Refrigerants and Oils**
- Leak Detection, Evacuation, Recovery, and Charging
- **Metering Devices**
- **Heat Pumps**
- **Basic Maintenance**
- **Chimneys, Vents, and Flues**
- **Sheet Metal Duct Systems**
- **Fiberglass and Flexible Duct Systems**
- **Commercial Airside Systems**
- **Air Quality Equipment**
- **Introduction to Hydronic Systems**
- **Covers Applicable Codes, and Standards**

## **HVAC** HV-2103 Course

**COURSE OUTLINE** 



**HVAC** 

#### **DURATION**



#### **OBJECTIVE OUTLINE OF TRAINING**

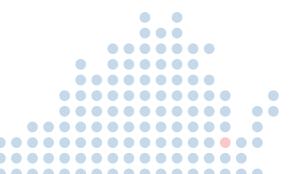
This course builds on the individual's knowledge of HVAC/R systems to cover troubleshooting on a variety of equipment, such as, control circuits and electric motors, cooling systems, heat pumps, gas and oil furnaces, and commercial refrigeration systems. Course also covers how to build good customer relations.

- Fasteners, Hardware, and Wiring Terminations
- Control Circuit and Motor Troubleshooting
- Troubleshooting Cooling
- **Troubleshooting Heat Pumps**
- Troubleshooting Gas Heating
- Troubleshooting Oil Heating
- Troubleshooting Accessories
- Zoning, Ductless, and Variable Refrigerant Flow Systems
- Commercial Hydronic Systems
- Fasteners, Hardware, and Wiring Terminations
- Steam Systems
- Retail Refrigeration System
- Customer Relations
- Covers Applicable Codes, and Standard











**COURSE OUTLINE** 

**HVAC** 

#### **DURATION**



**180 HOURS** 

# E **50%**



#### **OBJECTIVE OUTLINE OF TRAINING**

Learn the refinement side of HVAC/R. This course covers indoor air quality, energy conservation equipment, building management systems, air balancing, basic systems design and fundamentals of crew leadership. Includes Preparatory course for International Mechanical Code exam.

- Water Treatment
- Indoor Air Quality
- Energy Conservation Equipment
- Building Management Systems
- System Air Balancing
- System Startup and Shutdown
- Construction Drawings and Specifications
- Heating and Cooling System Design
- Commercial/Industrial Refrigeration Systems
- Alternative and Specialized Heating and Cooling Systems
- Fundamentals of Crew Leadership
- Covers Applicable Codes, and Standards





## **ELECTRICAL**

**EL-2101 Course** 

**COURSE OUTLINE** 



**ELECTRICAL** 

#### **DURATION**



#### **OBJECTIVE OUTLINE OF TRAINING**

This course is an introduction to the Electrical Profession, Electrical Theory, safety, tools, math, and materials used in the work. Course also covers an introduction to the National Electrical Code, distribution systems and materials.

- Orientation to the Electrical Trade, and Electrical Safety
- Introduction to Electrical Circuits, and Electrical Theory
- Introduction to the National Electrical Code
- Device Boxes
- Hand Bending
- Raceways and Fittings
- Conductors and Cables
- Basic Electrical and Construction Drawings
- Residential Electrical Services
- Electrical Test Equipment
- Covers Applicable Codes, and Standards











**COURSE OUTLINE** 

**ELECTRICAL** 

#### **DURATION**



**180 HOURS** 

### **OBJECTIVE OUTLINE OF TRAINING**

An introduction to AC/DC circuits and applications, lighting system installations, cableways, and controls systems.

- Alternating Current
- Motors: Theory and Application
- Electric Lighting
- Conduit Bending
- Pull and Junction Boxes
- Conductor Installations
- Cable Tray
- Conductor Terminations and Splices
- Grounding and Bonding
- Circuit Breakers and Fuses
- Control Systems and Fundamental Concepts
- Covers Applicable Codes, and Standards







## ELECTRICAL

**EL-2103 Course** 

**COURSE OUTLINE** 



**ELECTRICAL** 

#### **DURATION**



#### **OBJECTIVE OUTLINE OF TRAINING**

Learn how to calculate loads, distribution systems, and the practical applications of lighting, transformers, motors, motor controls, voice, data, and video. Includes instruction on how to install switchboards and switchgears, types of transformers and the components of commercial electrical services.

- Load Calculations Branch and Feeder Circuits
   Conductor Selection and Calculations
- Hazardous Locations
- Overcurrent Protection
- Distribution Equipment
- Transformers
- Commercial Electrical Services
- Motor Calculations
- Voice, Data, and Video
- Motor Controls
- Covers Applicable Codes, and Standards
- Practical Applications of Lighting











## ELECTRICAL EL-2104 Course

**COURSE OUTLINE** 

**ELECTRICAL** 

**DURATION** 



**180 HOURS** 





#### **OBJECTIVE OUTLINE OF TRAINING**

This course is designed to introduce the electrician to health care facilities and the reliable electrical systems and adequate backup power vital for the safety of patients. Learn generator load calculations, advanced controls motor operations, medium voltage, and advanced electronics, standby and emergency systems, fire alarm systems, and specialty transformers. Includes Preparatory course for National Electrical Code exam.

- Load Calculations Feeders and Services
- Health Care Facilities
- Standby and Emergency Systems
- Basic Electronic Theory
- Fire Alarm Systems
- Specialty Transformers
- Advanced Controls
- HVAC Controls
- Heat Tracing and Freeze Protection
- Motor Operation and Maintenance
- Medium-Voltage Terminations/Splices Special Locations
- Fundamentals of Crew Leadership
- Covers Applicable Codes, and Standards

## **PLUMBING**

PL-2101 Course

**COURSE OUTLINE** 



**PLUMBING** 

**DURATION** 



#### **OBJECTIVE OUTLINE OF TRAINING**

This course covers the basics of the plumbing trade, including care and use of tools, job safety, identifying different types of piping, fittings, and valves. Learn how to properly measure, cut, thread, join, and hang different types of piping, and how drain systems and water distribution systems work.

- Introduction to the Plumbing Profession
- Plumbing Safety
- Tools of the Plumbing Trade
- Introduction to Plumbing Math
- Introduction to Plumbing Drawings
- Plastic Pipe and Fittings
- Copper Tube and Fittings
- Cast-Iron Pipe and Fittings
- Carbon Steel Pipe and Fittings
- Introduction to Plumbing Fixtures
- Introduction to Drain, Waste, and Vent (DWV) Systems
- Introduction to Water Distribution Systems
- Covers Applicable Codes, and Standards







## PLUMBING PL-2102 Course

**COURSE OUTLINE** 

**PLUMBING** 

**DURATION** 



**180 HOURS** 







#### **OBJECTIVE OUTLINE OF TRAINING**

This course covers advanced math for the trade and includes how to lay out square corners, calculate simple and rolling offsets and offsets on parallel runs of pipe. Also learn how to install and test drain, waste, and vent (DWV) systems, how to read a set of construction drawings, do material takeoffs, install basic plumbing fixtures, and the associated valves, faucets, and components. Introduces techniques for safe handling of fuel gas and oil, proper installation/testing different water heaters.

- Plumbing Math Two
- **Reading Commercial Drawings**
- Structural Penetrations, Insulation, and Fire Stopping
- **Installing and Testing DWV Piping**
- **Installing Roof, Floor, and Area Drains**
- **Installing and Testing Water Supply Piping**
- **Types of Valves**
- **Installing Fixtures and Valves**
- **Installing Water Heaters**
- **Basic Electricity**
- **Fuel Gas and Fuel Oil Systems**
- **Covers Applicable Codes, and Standards**

## **PLUMBING**

PL-2103 Course

**COURSE OUTLINE** 



**PLUMBING** 

#### **DURATION**



#### **OBJECTIVE OUTLINE OF TRAINING**

Learn how to apply math for the trade, size and protect the water supply system, how to disinfect, filter and trouble-shoot water supply problems. Learn types of venting, how to install, diagnose and repair pumps, controls, and sumps in sewage and storm water removal systems. Includes introduction to compressed air systems.

- Applied Math
- Sizing and Protecting the Water Supply System
- **■** Potable Water Supply Treatment
- Types of Venting
- Sizing DWV and Storm Systems
- Sewage Pumps and Sump Pumps
- Corrosive-Resistant Waste Piping
- Compressed Air
- Service Plumbing
- Covers Applicable Codes, and Standards









## PLUMBING PL-2104 Course

**COURSE OUTLINE** 

**PLUMBING** 

**DURATION** 









#### **OBJECTIVE OUTLINE OF TRAINING**

Introduction to concepts and practices essential for competitive, successful plumbing businesses. Covers basic business accounting, project estimating, cost control and task organization. Also covers crew leadership skills, communication, delegating, problem solving, job site safety, project planning and scheduling. Also includes private water supply and waste disposal systems, medical gas, and vacuum systems. Includes Preparatory course for International Plumbing Code exam.

- **Business Principles for Plumbers**
- **Fundamentals of Crew Leadership**
- **Water Pressure Booster and Recirculation Systems**
- **Indirect and Special Waste**
- **Hydronic and Solar Heating Systems**
- Codes
- **Private Water Supply Well Systems**
- **Private Waste-Disposal Systems**
- **Swimming Pools and Hot Tubs**
- **Plumbing for Mobile Homes and Travel Trailer Parks**
- **Introduction to Medical Gas and Vacuum Systems**
- **Covers Applicable Codes, and Standards**

# BUILDING/PROPERTY MAINTENANCE

**MAINTENANCE BM-101 Course** 

A program that prepares individuals to apply technical knowledge and skills to keep a building functioning, and to service a variety of structures including commercial and industrial buildings and mobile homes. Includes instruction in the basic maintenance and repair skills required to service building systems, such as safety, carpentry,

plumbing, major appliances, and other mechanical systems.

**COURSE OUTLINE** 



BUILDING/PROPERTY MAINTENANCE

**DURATION** 



DUDATION

OHSA 10- Construction Safety

**OBJECTIVE OUTLINE OF TRAINING** 

- Wall Systems
- Drywall Finishing
- Doors and Door Hardware
- Appliance Repair and Replacement
- Installing Plumbing Fixtures and Valves
- Basic Employability Skills









## BUILDING/PROPERTY MAINTENANCE MAINTENANCE BM-102 Course

**COURSE OUTLINE** 

BUILDING/PROPERTY MAINTENANCE

#### **DURATION**



**150 HOURS** 

#### **OBJECTIVE OUTLINE OF TRAINING**

A program that prepares individuals to apply technical knowledge and skills to keep a building functioning, and to service a variety of structures including commercial and industrial buildings and mobile homes. Includes instruction in the basic maintenance and repair skills required to service building systems, such as air conditioning, heating, electrical, and other mechanical systems.

- Heating and Air Conditioning
- Residential Electrical Services
- Roofing Applications
- Exterior Finishing







## APPLIANCE REPAIR

### Major Appliance | MA-100 Course

**COURSE OUTLINE** 



**APPLIANCE REPAIR** 

#### **OBJECTIVE OUTLINE OF TRAINING**

A program that prepares individuals to apply technical knowledge and skills to repair, install, and service major gas, electric, and microwave consumer appliances such as stoves, refrigerators, dryers, water heaters, washers, dishwashers, and commercial units such as ice makers and coffee makers.

- Intro Module
- Electric and Gas Dryers
- Automatic Washers Top/Front Load
- Electric and Gas Ranges
- Dishwashers and Microwaves
- Domestic Refrigeration and Air Conditioning
- Ancillary Products
- Covers Applicable Codes, and Standards







640 HOURS









## FRIGERATION REPAIR

**Light Commercial Refrigeration HV-LC-302** Course **COURSE OUTLINE** 

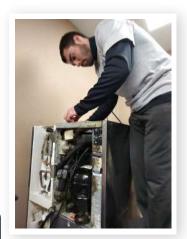
APPLIANCE REPAIR

#### **DURATION**



**120 HOURS** 





#### **OBJECTIVE OUTLINE OF TRAINING**

This course is designed to present a working foundation of refrigeration, covers several applications of light commercial walk-in freezers & reach in coolers, ice makers and domestic/commercial refrigerators, plus a basic knowledge of electrical troubleshooting and reading of schematic wiring diagrams.

- **Fundamentals of Refrigeration**
- **Metering Devices**
- **Refrigerant Flow and Components**
- Ice Machines: Troubleshooting, Charging, Servicing, and Preventive Maintenance
- Domestic Refrigerators and Freezers Flaring, **Swaging and Brazing Installing Commercial Equipment**
- Systems Troubleshooting
- Commercial Systems Components Diagnosis; **Troubleshooting, TXV Valves, and Charging**
- Servicing Commercial Systems and Perform Preventive Maintenance on Ice Machines
- Troubleshooting, Charge Unit, Service Unit, and Preventive Maintenance
- LOKRING Certification for Applying Fittings on Refrigeration Systems

### **HVAC** HV-201 Course



Learn basic skills and troubleshooting for repairing and maintaining HVAC/R systems. This course is designed to present a working foundation of heat pump, air conditioning and refrigeration theory and application. The student will also learn how to properly charge HVAC systems, subcooling and superheat. Course includes EPA 608 certification. Great course for building maintenance personnel.

DURATION

**HVAC** 

**TRAINING** 

**COURSES** 



- Refrigeration
- Tools & Supplies
- Tubing & Piping
- Equipment & Instruments for Refrigerant Handling & Services
- Working with Refrigerant
- Basic Electricity

## **HVAC**Electrical Controls HV-202 Course

This course is for the HVAC/R technician who wants a better understanding of the electrical components and how they work. Learn about electrical theory and safety. Learn how to read schematics and wiring diagrams and how electrical control devices work. Includes basic trouble-shooting methods. The mastery of this material will reduce downtime and expenses caused by equipment failures and increase the overall efficiency of operations in the facility.

- Electrical Safety and Theory
- The Operational Function of Electrical Control Devices
- Interpreting Schematics and Wiring Diagrams
- Troubleshooting Methods





### **HVAC** HV-203 Course

**DURATION** 



This course builds on HV-201 and HV-202 and provides a more hands-on experience to the previous two courses. Student will be given numerous projects to gain proficiency with residential air conditioning, air movement distribution and mechanical and electrical troubleshooting. Learn how to change out compressors, how to install systems with load calculations. PRE-REQUISITE: HV-201, HV-202.

- Residential Air Conditioning
- Air Movement Distribution
- Ventilation Theory
- Mechanical and Electrical Troubleshooting

## **HVAC**

### **Hydrocarbons HV-HC-304 Course**

This is a two-day course designed to introduce the student to the characteristics of flammable hydrocarbon refrigerants and how to handle and work with them. Includes instruction on Lokring technology with hands-on practice to use mechanical tube connections instead of brazing. Highly recommended for appliance technicians.

Students will participate in both classroom and hands-on training exercises to ensure mastery of the installation and servicing processes associated with LOKRING tube connections.

- Identify Uses of Hydrocarbons as Refrigerants
- Summarize Hydrocarbon Regulations and Standards
- Identify Refrigerant Properties and Safety
- Explain Servicing Procedures
- Summarize Various LOKRING Applications
- Assemble LOKRING Tube Connections

DURATION



## **HVAC**

## Sealed Systems HV-SS-305 Course

This one-day course will train the individual on proper procedures to access and repair sealed systems of refrigerators and freezers. Learn the basic refrigeration cycle and components, and how to recover, evacuate and charge systems. PRE-REQUISITE: EPA 608

- Review the Refrigeration Basic Cycle
- Accessing Sealed Systems
- Repairing Sealed System Components
- Recovery, Evacuation, and Charging Procedures
- Verifying System Operation

## **Intro Module** MA-101 Course

Course includes Osha 10 construction safety which covers a broad spectrum of valuable workplace health and safety topics that will familiarize you with OSHA Construction Standards. Student will learn to describe:

- Electrical Principles, and Household Wiring
- Utilize Electrical Test Equipment and Describe the Laws of Electromagnetism
- Identify Electric Motors
- Demonstrate Troubleshooting with Wiring Schematics
- Describe Solid State Components
- Build Power Supplies and Electrical Filter Systems
- Describe Sine Wave and Rectification
- Overview of Electrical, Mechanical, and Gas Codes as they Apply to Portable Appliances
- Covers Applicable Codes, and Standards











## Electric & Gas Dryers MA-102 Course

DURATION

This training course is designed to provide the skills and knowledge to correctly and efficiently diagnose and repair residential electric and gas dryers. Upon completion of the course students should be able to troubleshoot and trace wiring diagrams, understand the sequence of operation, properly use test equipment, and disassemble and reassemble dryers.

- Electric and Gas Dryer Installations.
- How to Service Dryers
- Diagnosis of Dryer Cycles
- Troubleshooting and Parts Look-Up
- Includes Electrical, Mechanical, and Gas Codes as they Apply to Dryers
- Covers Applicable Codes, and Standards



## Automatic Washers Top/Front Load MA-103 Course

This course is an operational overview of all types of washers, it provides basic and advanced washer technology, for both top-load and front load washers.

- **Explains Electric Washer Installation**
- How to Service Washers.
- Diagnosis of Wash Cycles
- Repair of Washers
- Troubleshooting and Parts Look-Up
- Covers Applicable Codes, and Standards

### Electric & Gas Ranges **MA-104** Course



This training course is designed to provide the skills and knowledge to correctly and efficiently diagnose and repair residential electric and gas ranges. Upon completion of the course students should be able to troubleshoot and trace wiring diagrams, understand the sequence of operation, properly use test equipment, and disassemble and reassemble ranges.

- **Explains Electric & Gas Installation**
- **How to Service Ranges**
- **Diagnosis of Ranges**
- **Repair of Ranges**
- **Troubleshooting and Parts Look-Up**
- Includes Electrical, Mechanical, and **Gas Codes as they Apply to Ranges**
- Covers Applicable Codes, and Standards

### **Dishwashers & Microwaves MA-105** Course

This training course is designed to provide the skills and knowledge to correctly and efficiently diagnose and repair residential dishwashers and microwaves. Upon completion of the course students should be able to troubleshoot and trace wiring diagrams, understand the sequence of operation, properly use test equipment, and disassemble and reassemble dishwashers and microwaves.

- **Explains Electric Dishwasher Installation**
- **How to Service Dishwashers**
- **Diagnosis of Wash Cycles**
- **Describes Microwave Installations**
- How to Perform Microwave Service
- **How to Perform Microwave Repairs**
- **Troubleshooting and Parts Look-Up**
- Covers Applicable Codes and Standards



**DURATION** 









# Domestic Refrigeration & Portable Air Conditioning MA-106 Course

**DURATION** 



This training course is designed to provide the skills and knowledge to correctly and efficiently diagnose and repair residential refrigeration and portable air conditioning. Students will be able to describe procedures, job safety, perform procedures, perform repair systems on hydrocarbons systems. Successful students will obtain CFC & Hydrocarbon refrigerant certification.

- Explains Sealed System Refrigeration, Portable Air Conditioning Principles, and Installations
- How to Service Domestic Refrigeration& Portable Air Conditioning
- Troubleshooting Electrical Electronics and Defrost System Circuit
- Parts Look-Up
- Brazing and LOKRING Connectors
- Covers Applicable Codes, and Standards

DURATION



## Ancillary Products MA-107 Course

This training course is designed to provide the skills and knowledge to correctly and efficiently diagnose and repair ancillary products. Students will learn the principles and operations of and be able to perform services on the following:

- Garbage Disposals
- Trash Compactors
- Electric Water Heaters
- Includes Electrical, Mechanical, and Gas Codes as they Apply to These Appliances
- Covers Applicable Codes, and Standards



## **Appliance Repair**

This is a three day, 40-hour course designed to present a working foundation of the six standard household appliances: dryers, washing machines, refrigerators, dishwashers, microwaves, and ranges. Additionally, students will gain an understanding of both electrical schematics and wiring diagrams and how to utilize them in troubleshooting equipment.

- Demonstrate the Proper Use of Electrical Test Equipmen
- Identify the Difference Between Wiring Diagrams and Electrical Schematics
- Identify Symbols on Wiring Diagrams and Electrical Schematics
- Identify Common Electrical and Electronic Components
- State the Principles of Operation for the Six Standard Household Appliances
- Troubleshoot Three out of the Six Major Appliances



### APPLIANCE REPAIR TRAINING COURSE



**40 HOURS** 



PROFESSIONAL CERTIFICATION COURSES

**DURATION** 



DURATION



**CERTIFICATION COURSES** 

## **EPA Section 608**Certification Course

This one-day course has a 4-hour lecture portion that prepares you to take the 2-hour exam at the end of class. The lecture covers

- Core
- Type I Appliances
- Type II Low and High-Pressure Systems
- Type III Chillers and Low-Pressure Systems

## **410-A Safety**Certification Course

This course will prepare the individual to take the EPA Universal R-410A certification exam. Includes a preparatory manual, lecture, and the 3-hour exam.

- Safely Service Systems Containing R-410A and R-407C
- R-22 Phase Out
- Appropriate Refrigerant and Oil Applications
- Service Techniques
- Safe Handling of R-410A



# HYDROCARBONS CERTIFICATION HV-RSES-HC Course

This one-day course has a 4-hour lecture portion that prepares you to take the 2-hour exam at the end of class. The lecture cover

- Identify Uses of Hydrocarbons as Refrigerants
- Summarize Hydrocarbon Regulations and Standards
- Identify Refrigerant Properties and Safety Handling Hydrocarbons







## LOKRING HV-LR-303 Course

This 8-hours course is an Introduction to Lokring technology and how to use these connectors for hydrocarbon refrigerant systems. Hands-on practice, full day course.

- Explain Servicing Procedures
- Summarize Various LOKRING Applications
- Assemble LOKRING Tube Connections





#### **PREPARATORY COURSES**



# INTERNATIONAL MECHANICAL CODE HV-IMC-301 Course

This course is designed for the HVAC/R technician or contractor and provides an overview of the key provisions of the International Mechanical Code. Learn the basic concepts of fire and life safety as well as the health impact on building occupants and how to prioritize items for inspections. Includes Preparatory exams for International Mechanical Code.

### National Electrical Code 2014 EL-NEC-301 Course

For the electrician or contractor, this course provides an overview of the key provisions of the 2017 NFPA 70/National Electrical Code. Learn the safety requirements and proper installation of electrical equipment and devices, whether it's for new construction or remodeling. Includes Prep exams for National Electrical Code

### **International Plumbing Code** PL-IPC-301 Course

This course is for the plumber or contractor and provides an overview of the key provisions in the International Plumbing Code. Includes Prep exams for International Plumbing Code.

PREPARATORY COURSES



30 HOURS (Each Course)





## Plumbing Code Course PL-CE-IFCG Course

CONTINUING EDUCATION COURSES

This is a thorough 3-hour continuing education course for new changes in the 2018 code book to maintain journeyman and or master license.

#### DURATION



### National Electric Code Course EL-CE-NEC Course

Course is a Refresher course and review of the changes in the National Electrical Code. The course will review the changes in NEC2017 & 2020 code book.

### International Mechanical Code HV-CE-IMC Course

**DURATION** 



Course is designed review of new code updates review of the changes in the International Mechanical (IMC) Code 2015 & 2018. The course will review the changes in International Mechanical Code.

### International Fuel Gas Code PL-IFGC-30 Course

Course is designed review of new code updates, review of the changes of International Fuel Gas (GFC) from 2015 to 2018. The course will review the changes to the International Fuel Gas (GFC) Code.



## LEARN. APPLY. THRIVE.

### Stackable Credentials Examinations

We are an ESCO authorized proctor facility who offer portable and stackable credentials at all levels and stages of a technician career path in HVACR industry.

We are an NASTEC authorized proctor facility. NASTEC is a national certification program for technicians who service major home appliances. The NASTeC exams measure the knowledge, ability, and skills that technicians need daily to "do the job right."

- Refrigeration and Air Conditioning
- Cooking Equipment—
- Laundry and Dishwashing
- Universal Technician (All three specialties plus basic skills)

We proctor exams at Virginia Technical Academy. Exams consist of 2 hours for the Basic Skills Exam, and 1 additional hour for each specialty exam being taken.





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