



HVAC-R

APPRENTICESHIP TRAINING PROGRAM

Northern Virginia

2026-2027

ABC Virginia is an industry leader in construction apprenticeship programs. Companies that invest in employee development through apprenticeship programs attract a quality workforce of loyal and highly skilled employees, while closing the skilled workforce gap.

ABC-VA APPRENTICESHIP

ABC-Virginia has a long history of providing high quality, student-centered learning with an emphasis on hands-on training. Our goal is to give individuals the opportunity to learn a trade, become skilled crafts professionals, earn a good living, and build Virginia.

Through our educational affiliate, National Center for Construction Education and Research (NCCER), we use Contren, a competency-based, task-driven, and nationally recognized curriculum. ABC-VA instructors are required to complete a formal certification in order to ensure consistent delivery of the curriculum.

ELIGIBILITY

- 18 years of age or older
- Employed in the HVAC-R field
- Physically able to perform work in the HVAC-R trade
- Must be able to read and write in English
- High school diploma or GED equivalent

RELATED TRAINING

By providing employers with the Advisory Apprenticeship Program Standards, ABC-VA delivers the related classroom training component of apprenticeship.

VIRGINIA WORKS REGISTRATION

Employers must register as apprenticeship program sponsors and must register their apprentices on an individual basis with Virginia Works (formerly Virginia Department of Labor and Industry).

1. **Visit bit.ly/vaworks-apprenticeship (or click here)**
2. Fill out the Registered Apprenticeship Inquiry/Referral Form. Select Potential Employer/Sponsor as your status.

Virginia Works Phone: 804.786.6030
apprenticeship@virginiaworks.gov

Without this registration, a student is not considered an apprentice in the state of Virginia.

CERTIFICATIONS

If applicant has OSHA 10-Hour and/or CPR/First Aid certifications, submit with application. These are required training per the ABC-VA curriculum. If the apprentice does not have the certifications, we will offer the training at ABC-VA.

OSHA 10-Hour is offered to all Level I students. CPR, AED & First Aid training is offered to all Level I and Level III students.

Participation in HVAC-R apprenticeship training will be strictly limited to apprentices that are employed by companies that are licensed as HVAC-R contractors in Virginia.

COURSE CONTENT

LEVEL ONE

- Core Curriculum
- Intro to HVAC-R
- Trade Mathematics
- Basic Carbon Steel Piping Practices
- Basic Electricity
- Intro to Cooling & Heating
- Intro to Air Distribution Systems
- CPR, AED & First Aid Certification
- CFC Certification
- OSHA 10 Hour

LEVEL TWO

- Commercial Airside Systems
- Chimneys, Vents and Flues
- Intro to Hydronic Systems
- Air Quality Equipment
- Leak Detection, Evacuation, Recovery & Charging
- Alternating Current
- Heat Pumps
- Duct Systems
- Basic Maintenance
- Refrigerants & Oils
- Compressors
- Metering Devices

LEVEL THREE (NOT OFFERED THIS YEAR)

- Retail Refrigeration Systems
- Commercial Hydronic Systems
- Steam Systems
- Troubleshooting Cooling
- Troubleshooting Oil, Gas & Heat Pumps
- Troubleshooting Accessories
- Fasteners, Hardware & Wiring Terminations
- Control Circuit & Motor Troubleshooting
- Zoning, Ductless & Variable Refrigerant Flow Systems
- Customer Relations
- CPR, AED & First Aid Certification

LEVEL FOUR

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

GRADUATION

All students must have completed OSHA 10-Hour and CPR, AED and First Aid Certification trainings and education requirements (600 hours) to graduate.



2026-2027 APPRENTICESHIP SCHEDULE

The term of apprenticeship consists of four years or 8,000 hours (approximately 2,000 hours per year) of on-the-job training (OJT), and four years or 600 hours (approximately 150 hours per year) of related classroom instruction. OJT is administered by the student's employer. Related classroom instruction is administered by ABC-VA.

LOCATION

ABC-VA Northern Virginia Training Facility
42680 Trade West Drive, Dulles, VA 20166

SCHEDULE

Orientation sessions are scheduled for the week of August 10, 2026, with classes beginning the week of August 24, 2026. Classes are typically set to occur once a week starting around 4:00PM. Class schedules will be finalized and shared in August.

Detailed information regarding both schedules and orientation activities will be provided in advance, ensuring ample time for planning and preparation.

2026-2027 TUITION

Tuition is due at time of enrollment. Apprentices employed by ABC-VA members receive a discount. Tuition includes lab, materials, and administrative fees.** Tuition must be paid in full for apprentices to be considered enrolled.

**If completing a test or certification outside of NCCER, additional testing fees may apply.

ABC-VA MEMBER \$2050

NON-MEMBER \$2450

DEADLINES

Enrollments received after July 31, 2026, will incur a late fee of \$100. Classes are closed to new enrollments after August 14, 2026. There are absolutely no refunds after September 4, 2026.

**CLICK HERE
TO REGISTER
ONLINE**

Please note: ABC-VA has moved to a fully digital application system.

