



# Career Pathways: Heating, Ventilation, and Air Conditioning



## About HVAC

HVAC (Heating, Ventilation, and Air Conditioning) offers a dynamic and rewarding path for those interested in hands-on technical work and problem-solving. HVAC professionals install, maintain, and repair systems that control indoor climates in residential, commercial, and industrial settings. The demand for skilled HVAC technicians is growing due to the increasing need for energy-efficient systems and the replacement of aging infrastructure. With opportunities for specialization and advancement, along with competitive salaries, a career in HVAC is both promising and fulfilling for those with the right skills and training.



## Key Tasks

- Set up new heating, cooling, and ventilation systems in residential, commercial, and industrial buildings
- Ensure proper airflow and temperature control by balancing system components
- Fix or replace faulty parts, such as motors, thermostats, and compressors
- Perform routine checks and maintenance to keep systems running smoothly, including cleaning and adjusting parts



## Key Skills

- Skill in using hand and power tools commonly used in HVAC work, such as wrenches, pliers, multimeters, and vacuum pumps.
- Handle physically demanding work, such as lifting heavy equipment, working in confined spaces, and standing for long periods.
- Understand and follow safety protocols to prevent accidents and injuries.
- Able to read and interpret blueprints, technical diagrams, and schematics.



## Education & Certifications

- **High school diploma or GED**
- **Associate degree**
- **Career and Technical Education:** Many HVAC technicians attend trade-technical schools where they receive training in HVAC systems, electrical systems, refrigeration, and related subjects. These programs often lead to a diploma or certificate.
- **Apprenticeship Programs:** Apprenticeships are a common and highly recommended pathway for becoming an HVAC technician. These programs typically last 3-4 years and combine on-the-job training with classroom instruction.
- **Journeyman License:** In many areas, HVAC technicians are required to achieve journeyman status by completing an apprenticeship program and passing a licensing exam.



## Industry Sector Employers

- Greenman-Pedersen, Inc.
- Hynak Mechanical
- McClure Company
- National Furnace Heating & Air Conditioning LLC
- NRG Controls North, Inc.
- Scranton Electric Heating & Cooling Services, Inc.
- Smurl HVAC



## Local College/ University Programs

- Johnson College
- Luzerne County Community College
- Career Technology Center of Lackawanna County
- Pennsylvania College of Technology



Learn more about HVAC and other career pathways at [ScrantonChamber.com](http://ScrantonChamber.com)

*\*List above shows a sampling of sector employers and college/university programs which is not limited to the list above.*

Sources:  
<https://www.onetonline.org/>

