



PLUMBING APPRENTICESHIP

What is a Plumber?

Plumbers develop blueprints to plan where pipes and fixtures should be plotted in a structure. They also install and connect the piping and fixtures, either working individually or with a team of apprentices and pipefitters. In addition to facilitating water supply from pipes and large fixtures, such as bathtubs, showers, sinks and toilets,

plumbers ensure that water reaches appliances like dishwashers and water heaters. The best in the occupation are strong problem-solvers who have mastered customer service and can meet the physical and mechanical demands of the job.

All it takes is one lousy morning with no running water (or a clogged sink or phantom-flushing toilet) to remind us how dependent we are on the expertise of plumbers. But troubleshooting is just a sliver of their responsibilities.

General employment within the construction sector is sensitive to changes in the economy. But job growth for plumbers is projected to be faster than the average for all jobs. New buildings and residences are being built to comply with stricter water efficiency standards and companies housed in older structures are hoping to retrofit to use more energy-efficient systems, so opportunities are in abundance. According to the Bureau of Labor Statistics, there should be a hiring spurt of 16 percent for plumbers by the year 2026, which translates to about 75,800 new jobs.

Becoming a plumber is a respectable career choice and one that many consider. If you are thinking about getting into the field of plumbing, you should be aware of the numerous career options available to you. With several different career paths in plumbing that you could take, training may vary depending on each one. Before training, it's essential to make a decision on the area of plumbing you want to get into and choose a training course accordingly.

Technicians

Plumbing technicians specialize in the service, repair, rehabilitation, and replacement of residential plumbing, heating, cooling, and sanitary service lines. As a plumbing technician, you will diagnose and repair plumbing issues and lead customers to an informed, confident buying decision. Technicians have a great deal of responsibility and specialize in many areas of plumbing.

Managers

Managers are responsible for managing a small business under the supervision of someone else. Alternatively, they can be responsible for managing a group of employees within a company. To become a manager, you might need to take special plumbing course training to learn skills for management. Managers are responsible for overseeing the day to day functions of their designated group of employees. They should ensure that all the employees have their appropriate training and are doing their jobs to the best of their abilities each day. Managers hold more responsibility than regular employees, and the pay is usually greater as well.

Pipe Fitters

Pipefitters work with both low and high-pressure pipes used for commercial purposes. These commercial purposes could include pipe fitting for factories, hydroelectric power plants, or central air conditioning or heating. Pipefitters are responsible for the installation, maintenance, and repair of all of these different systems. In addition to laying the pipes out, pipe fitters are also responsible for incorporating automatic controls. Automatic controls are being used more regularly to ensure systems are working as they should.

Steamfitters

Steamfitters undertake the same training as pipefitters but with the addition of specialist training to become qualified steamfitters. Installing pipes to transport material such as gases that are high-pressure materials is a big part of a Steamfitters job.

Pipe Layers

Pipe Layers are also a type of specialized pipefitters. Pipe Layers are in charge of digging and levelling the trenches for the pipes and then laying the pipes in the trenches. These pipes are responsible for carrying drainage, sewer, water, or gas systems throughout. These pipes could be made of materials such as cement, plastic, iron, or clay.

Business Owner

Being a business owner is a big responsibility, but it can be well worth the time and effort it takes. Being a business owner means that you might need extra training in all areas of career for plumbers in order to be knowledgeable about all practices. You might also want to take some business management courses as well to ensure the successful operation of your business. You would also be in charge of employees at your company that hold these different specializations and career options the plumbing field has to offer.

Plumbing Apprenticeship

In NH as well as many other states one must serve an apprenticeship prior to taking the plumbing journeyman exam. The NH Office of Professional Licensure and Certification (OPLC), Mechanical Safety and Licensing Board, is the agency responsible for licensing plumbers.

A plumbing apprentice must be employed by a master plumber and perform plumbing under the direct supervision of a licensed plumber. Apprentices are required to carry an apprentice identification card issued by the OPLC's Mechanical Licensing Board. This card must be renewed each year.

The work process for plumbing apprentices requires 8,000 hours or about 4 years of work experience and on-the-job training. Additionally, an apprentice is required to complete 150 hours of related classroom instruction for every year of the apprenticeship period. A record of the work and classroom hours must be submitted to the State at the end of the apprenticeship to receive a Certificate of Completion. Additionally, apprentices should plan to complete the 10 hour Construction OSHA course.

The plumbers' journeyman examination is administered on computer at approved sites throughout the year. Apprentices must obtain a Certificate of Completion and submit that to the NH Licensing Board to obtain an exam application.

Plumbing Curriculum (subject to change based on classroom pace and industry requirements)

The NH Department of Education's Plumbing Program is a 600 hour program that uses the <u>National Center for Construction Education and Research (NCCER)</u> Plumbing Program as its core curriculum.

Year One

- Core Curriculum Introductory Craft Skills
- Introduction to the Plumbing Profession
- Plumbing Safety
- Introduction to Plumbing Math
- Plumbing Tools
- Blueprints and Plumbing Drawings
- Various Pipes and Fittings
- Fixtures and Faucets
- Intro Drain, Waste, & Vent (DWV) Systems
- Intro Water Distribution Systems

Year Two

- Intermediate Math
- Reading Commercial Drawings
- Installing and Testing DWV Piping
- Installing Roof, Floor & Area Drains
- Types of Valves
- Installing and Testing Water Supply Piping
- Installing Fixtures, Valves, and Faucets
- Introduction to Electricity
- Installing Water Heaters
- Fire stops & Structural Penetrations
- Servicing Fixtures, Valves and Faucets

Year Three

- Applied Math
- Water Pipe Sizing
- Potable Water Treatment
- Back flow Preventers
- Types of Venting
- Sewage and Sump Pumps
- NFPA 54
- Sizing DWV and Storm Systems
- Corrosive-Resistant Waste Piping
- International Plumbing Code 2015 (*anticipated 2018 July 2023)

Year Four

- Water Pressure Booster & Recirculation Systems
- Indirect and Special Waste
- Servicing Piping Systems, Fixtures & Appliances
- Private Water Supply Systems
- Private Waste Disposal Systems
- Hydronic and Solar Heating Systems
- Water Supply Treatment
- Swimming Pools and Hot Tubs Plumbing for Mobile Home Parks
- International Plumbing Code 2015 Review (*anticipated 2018 July 2023)

Questions?

Contact Erin White, Program Assistant at ewhite@sau29.org or (603) 357-0088 ext. 303