State-Approved (Chapter 74)
Program Overview

Plumbing

Plumbers are skilled tradespeople who install and repair pipe systems that carry water, steam, air, and other fluids or gases.

What Students Learn & Do

Plumbing is a vital part of building construction, home renovations, water and chemical plants, and more. To prepare students for work in this specialized trade, Plumbing programs train students to analyze the needs of a project, identify the appropriate materials, conduct cost estimates and perform installations and repairs.

Safety standards are emphasized throughout the program as students become knowledgeable about the Massachusetts plumbing code and gas fuel code, learn to read and follow blueprints and develop an understanding of plumbing systems including water supply, drainage and ventilation. Starting in a school-based shop and proceeding to supervised work sites, students practice installation and repair techniques required for types of pipe. At the same time, students learn to accurately perform cost estimating and learn to provide effective customer service. Over the course of the program, students earn credit toward becoming a licensed plumber, shortening the length of their mandatory plumber apprenticeship.

Students in Plumbing programs are required to meet the same high academic standards as their peers in other high school programs. These standards are set by the State of Massachusetts. Plumbing theory and techniques also reinforce concepts of mathematics, physics and chemistry.

Licenses & Certifications

Programs will prepare students to earn industry-recognized credentials, and typically students will be able to complete one or more before they graduate from high school. Examples:

- Credit toward Massachusetts Plumbing License
- Hot Work Safety
- OSHA Construction: 10-hour, 30-hour
- Trainings: Confined Space, Platform, Silica Dust, Powder Actuated Tools, Arc Flash, Lead Paint, Asbestos Awareness, Ladder Safety, Fall Protection, Aerial Work Platform

Options After High School

State-Approved (Chapter 74) programs provide precise training needed for entry-level employment in this in-demand career field. Here are some possible career opportunities for Plumbing program graduates.

High School Diploma

- Apprentice Plumber
- Boiler Maker
- Apprentice Pipefitter, Gasfitter or Steamfitter
- Maintenance Worker

Advanced Experience, Training or License

- Journey Level Plumber
- Journey Level Pipefitter, Gasfitter or Steamfitter

Bachelor's Degree (4 Years of College)

- Mechanical Engineer
- Plumbing Engineer
- High School Plumbing Teacher

Questions to Ask a Program You Are Considering

1. **What workplace experiences do you offer to students - at school, or with an employer?**
2. **What are some common next steps for graduates of this program and how do you support them to get there?**

Learn about the differences between State-Approved (Chapter 74) and Local programs:
http://www.doe.mass.edu/ccte/cvte/cte-families/state-vs-local.html

Massachusetts Department of Elementary and Secondary Education
Federation for Children with Special Needs