

BARR CONSTRUCTION INSTITUTE

PLUMBING APPRENTICESHIP



All students start out with basic safety and construction jobsite skills. After learning the basics, they continue on to advanced plumbing skills in year four. Class time is split between traditional class lectures and practical lab time where students have the opportunity to apply what they have learned.

LEARN MORE:

240-500-2715

www.hagerstowncc.edu/bci

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Located at:

D.M. Bowman Family Workforce Training Center
562 Northern Avenue
Hagerstown, MD 21742

WWW.HAGERSTOWNCC.EDU/BCI

Plumbing Apprenticeship Courses

Level One:

- Basic Safety
- Introduction to Construction Math
- Introduction to Hand Tools
- Introduction to Power Tools
- Introduction to Construction Drawings
- Introduction to Basic Rigging (7.5 elective hours)
- Basic Communication Skills (3 hours)
- Basic Employability Skills
- Introduction to Materials Handling
- Introduction to the Plumbing Profession
- Plumbing Safety
- Tools of the Trade
- Introduction to Plumbing Math
- Introduction to Plumbing Drawings
- Plastic Pipe and Fittings
- Cast-Iron Pipe and Fittings
- Carbon Steel Pipe and Fittings
- Introduction to Plumbing Fixtures
- Introduction to Drain, Waste, and Vent Systems
- Introduction to Water Distribution Systems

Level Two:

- 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 Water Heaters
- Basic Electricity
- Fuel Gas and Fuel Oil Systems
- Finished Stairs

Level Three:

- Applied Math
- Service Plumbing
- Sizing and Protecting the Water Supply Systems
- Potable Water Treatment
- Types of Venting
- Sizing DWV and Storm Systems
- Sewage Pumps and Sump Pumps
- Corrosive-Resistant Waste Piping
- Compressed Air

Level Four:

- 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 System Systems
- Private Waste Disposal Systems
- Swimming Pools and Hot Tubs
- Plumbing for Mobile Homes and Travel Trailers
- Introduction to Medical Gas and Vacuum Systems