

# PLUMBING DESIGN

Course Duration: 1 Month

**Who Can Apply:** Mechanical/Electrical/Civil/B.E / B.Tech / M.Tech / Diploma Students.

- Software & Other tools installation Guidance.
- During Training Trainee will be working on Real time Project.

## About Course

A **Plumbing Design** course focuses on the principles, systems, and techniques involved in designing plumbing systems for residential, commercial, and industrial buildings. Plumbing design is essential for ensuring water distribution, drainage, and sanitation in buildings. The course covers both theoretical concepts and practical applications, with an emphasis on standards, safety, and efficiency.

Know your designing skills by enrolling to this Plumbing Design Course. Gain knowledge from scratch. Learn as a beginner and grow as an expert with Princeton's Plumbing Design Training. Using Plumbing design training you can create well-designed, Schools Colleges Airport Mall projects. This Plumbing Design training helps you to learn and implement real time projects as well and also accelerate in making good career scope for yourselves in the core MEP field

## Course Curriculum:

### Introduction into the Field of MEP

- Introduction to Plumbing System
- Plumbing standards
- Piping materials
- Valve types
- Common sanitary
- Fixtures Fittings
- Plumbing Formulas
- Reynolds Number

- Chezy's equation
- Darcy's equation
- Hazen Williams formula
- Cold Water supply in buildings

OHT capacity UGT capacity

- Drain pipe size for water tank.
- Minimum number of required plumbing fixtures
- WSFU & minimum fixture branch pipe size
- Conversion of WSFU to GPM
- Water pipe sizing
- Equivalent pipe length for valves & fittings
- Hot Water supply in buildings
- Hot water system
- Hot water demand per fixture
- Sizing vertical and horizontal tanks
- Gardening system
- Gardening water irrigation system
- Pump capacity
- Plumbing for high rise building
- Water management system
- Plumbing drainage system
- Minimum internal diameter for sanitary appliances
- Fixture units for different sanitary fixtures
- Vent pipes

- Drainage tank system Septic tank system
- Manholes
- Size of manhole
- Storm Water
- Runoff coefficient
- Sizing of rain water pipes for roof drain
  - Rain water available from Roof top harvesting
- Air vent pipe sizing
- Sewage Water Treatment plant
- Introduction to Sewage
- Water Treatment plant Working of STP
- STP Design

Princeton Smart Engineers