

## MODULE 1- FUNDAMENTALS

Present scenario, Common terms and definitions used in plumbing, Rules and regulations, Hydraulics and fluid dynamics, Common fixtures and services, Demand load calculation, Water quality and testing, Drawings and specifications, Pipe calculations, Pump system selection, Plumbing service designing.

## MODULE 2- DESIGN PRELIMINARY

Resource management, Pipes selection, Storage system design, Pumping system design, Fixtures and arrangement, Fixture units, Water demand calculation, Plumbing service layout, Routing and sizing, Wash room designing, Kitchen layout.

## MODULE 3- SUPPLY SERVICES DESIGN

Gravity feed system design, Ring main system design, Pipe sizing calculations, Water distribution system design, Geyser system, Centralised hot water generation and distribution, Pressure calculations, Hydro-pneumatic system design, Water supply layout.

## MODULE 4- DRAINAGE PIPING DESIGN

Drainage fixtures, DFU determination and calculation, Drainage pipe sizing and selection, Traps and seals, Drainage pipe layout, Soil waste and water waste management, Vent pipe system, Inspection chambers, Storm water services.

## MODULE 5- TERMINAL SERVICES

Septic tank designing, Soak pit designing, Water treatment system design, STP and ETP, Swimming pool recirculation system, Water fountain system, Domestic gas supply system design, Chemical disposal system design.

***PROJECT SUPPORT FOR COMMERCIAL AND RESIDENTIAL PLUMBING DESIGN***