

FINISHING SCHOOL

FOR CIVIL ENGINEERS



CORPORATE SUPPORT



Mastro Lee
Engineering & Management Consultants

Why PLUMBING @ Mastro Lee...

- ✓ Only Training Centre in South India having its own Project Division
- ✓ Tie up with multinational Companies for internship
- ✓ Chance to work in our GCC projects
- ✓ Live field Training for all
- ✓ Continuously Updated Syllabus
- ✓ Best Study materials and case studies
- ✓ Small Batches for Individual Attention
- ✓ Individual project for Students ensuring one on one attention
- ✓ Industry recognized certificates
- ✓ Placement drive with multiple companies every month
- ✓ Sessions from Companies Registered under Govt's Make in India Initiative
- ✓ Factory Training to comply with the Manufacturing procedure
- ✓ Sessions with Leading Consultants, Architects and Project Managers
- ✓ Batch Toppers will be appointed directly in our company to work in our Middle east projects

MODULE-1

INTRODUCTION

- ▶ Building services
- ▶ Standard society
- ▶ Why Plumbing Codes
- ▶ Why plumbing systems

MODULE-2

INTRODUCTION

- ▶ Overview
- ▶ Reading Architecture Layout
- ▶ Plumbing Fixture
- ▶ Bathroom & toilet fixtures
- ▶ Water closer
- ▶ Lavatory
- ▶ Bath tub
- ▶ Shower tray
- ▶ Bidet
- ▶ Floor drain
- ▶ Urinals
- ▶ Flush tank
- ▶ Flush valves
- ▶ Kitchen sink
- ▶ Dish washer

- ▶ Waste food grinder
- ▶ Abulation tap
- ▶ Electronic flush valve
- ▶ Drinking fountain
- ▶ Whirl pool bath tub
- ▶ Laundry trays
- ▶ Hose bib (water tap)
- ▶ Cuspidor (dental unit)
- ▶ Minimum plumbing fixture as per application.

WATER SIDE EQUIPMENTS

- ▶ Transfer pump
- ▶ Booster pump
- ▶ Hot water circulation pump
- ▶ Air compressor
- ▶ Dish washer
- ▶ HEATER
- ▶ Electric Water Heater (geyser)
- ▶ Central Water Heater (boiler)- electric
- ▶ Gas Water heater

PIPE FITTING AND ACCESSORIES

FITTING

- ▶ Elbow
- ▶ Tee
- ▶ Reducer
- ▶ Cross
- ▶ Coupling
- ▶ Union
- ▶ End Cap
- ▶ Y-Bend
- ▶ Return Bend
- ▶ Puddle Flange

ACCESSORIES

- ▶ Valves (Gate, Globe, Angle)
- ▶ Pressure Reducing Valve
- ▶ Water Hammer Resistor
- ▶ Strainer
- ▶ Float Valve
- ▶ Foot Valve
- ▶ Flexible Connections
- ▶ Automatic Air Vent
- ▶ Pressure Gauge
- ▶ N R V

PIPE MATERIAL

- ▶ Material Pipe (C.I, G.I, Copper, Black Steel, M.S, Stainless steel)
- ▶ Non Metallic Pipe (P.V.C, C.P.V.C, PPR, UPVC, Poly-Butylene)

BASIC OF FLUID MECHANICS

- ▶ Types of Flow
- ▶ Types of water
- ▶ Continuity Equation
- ▶ Units & conversation
- ▶ hazenwilliams formula
- ▶ Manning's formula

WATER SUPPLY IN BUILDING

- ▶ Direct system
- ▶ Pump system

- ▶ Transfer pump system
- ▶ Main Booster pump
- ▶ Hydro Pneumatic System

COLD AND HOT WATER PIPE SIZING

- ▶ Fixture units
- ▶ Cold water pipe sizing
- ▶ Thumb rules
- ▶ Fixture method
- ▶ Velocity plumbing pipes
- ▶ Pipe sizing Excel Program
- ▶ Examples
- ▶ Hot water pipe sizing

PROJECTS

- ▶ Villa Project
- ▶ Factory Project
- ▶ Office Project

TANK SIZING

- ▶ Ground level tank (or) sump
- ▶ Over head tank

PUMP SELECTION

- ▶ Type of pumps
- ▶ Pump laws
- ▶ Pump selection
- ▶ Transfer pump
- ▶ Booster pump
- ▶ Circulation pump
- ▶ Pressurize tank sizing

- ▶ Oil interceptor details
- ▶ Sewage ejector system details
- ▶ Septic tank details

GARDEN WATER SPRINKLER SYSTEM

DRAINAGE FITTING AND ACCESSORIES

WATER FOUNTAIN

TRAPS

- ▶ p-trap
- ▶ s-trap
- ▶ u-trap
- ▶ drum trap
- ▶ belt trap

SWIMMING POOL

FITTING

- ▶ clean out
- ▶ GCO
- ▶ CCO
- ▶ FCO
- ▶ Double-Y
- ▶ Tee
- ▶ Elbow
- ▶ Reducer
- ▶ Pipe Sleeve
- ▶ Coupling
- ▶ Union
- ▶ scupper drain
- ▶ Vent cap

SOLAR SYSTEM

INSTALLATION DETAIL DRAWING

VENT PIPE SIZING

- ▶ Stack vent
- ▶ Vent stack
- ▶ Branch pipe sizing
- ▶ Project

STROM DRAINAGE SYSTEM

ADDITIONAL NOTE (COMPLIMENTARY)

- ▶ Installation detail drawing
- ▶ Legends
- ▶ Notes
- ▶ Abbreviation

MODULE-3

INTRODUCTION TO PLUMBING DRAINAGE SYSTEM

- ▶ Overviews
- ▶ Types of pipe
- ▶ Slope in drainage system.

MANHOLE SIZING

DRAINAGE PIPE SIZING

- ▶ Branch pipe sizing
- ▶ Stack sizing
- ▶ Project

DRAINAGE EQUIPMENTS

- ▶ Grease interceptor details



3rd floor, Maruthi Towers, Opp Government Hospital, Coimbatore - 641 001.



99525 09581, 90920 94550



mastroleesolutions@gmail.com



www.mastrolee.com