



MECHANICAL
ELECTRICAL
PLUMBING

MEP

CERTIFICATE COURSE IN MEP DESIGN AND DRAFTING
DIPLOMA COURSE IN MEP DESIGN AND DRAFTING
ADVANCED DIPLOMA IN MEP

JOB ROLES

- MEP Project Engineer
- MEP Design Engineer
- MEP Draftsman
- MEP Coordinator
- MEP Estimator
- MEP Commissioning Engineer



Why should you learn from us?

We are the India's leading training provider in MEP sector with industry experienced engineers who can broad your technical knowledge and make you prepare to get into your dream career.

Who can learn?

Any individual with diploma or degree in Mechanical or Electrical engineering from a recognised university.

Design & Drafting of HVAC systems

A. FUNDAMENTALS

- Introduction to Building construction (Civil & MEP Services)
- Introduction to Heating Ventilation and Air conditioning
- Basics of Heat Transfer:
- Standards and codes used in HVAC
- Study on Psychrometric Charts (Manual and software analysis).
- Study on Refrigerants: Types of Refrigeration cycles and its Components.
- Types of Air Conditioning systems:
- Types of Fans & its Application, Fan Laws
- Types of Pumps, Pump Laws, Pump in series and parallel.

B. HVAC DESIGN

- Cooling & Heating Load Calculation:
- Study on Air Distribution systems
- Duct Designing methods
- Pipe Sizing methods:
- Air Balancing system and Pressurization of Space.
- District Cooling System
- Cooling Tower Selection, Evaporation losses, Drift losses calculation, Pump Head Calculation
- Coil Selection
- ESP Calculation
- Variable Refrigerant Volume (VRV) System Designing
- Dehumidifier Selection (silica gel & Desiccant DH)
- HRW-Heat Recovery System (Rotor Wheel, Heat Pipe, Run around Coil & Plate Heat Exchanger)
- Estimation and Costing
- Cold rooms
- Stair Well Pressurization System

C. EQUIPMENT SELECTION

D. MAINTENANCE

E. ESTIMATION AND COSTING OF PROJECT

F. PROJECT PROCUREMENT WORK

G. DRAFTING



Electrical Systems

- Introduction
- Fundamentals
- Rules & regulations.
- Wiring and cable management systems
- Lighting distribution system
- Power distribution system
- DB schedule
- Switchgears-types and selection.
- UPS & Inverters.
- Earthing & lightning protection system
- Transformers and generators
- Electrical system design
- Maintenance
- Safety standards
- Electrical system Drafting (CAD)
- Project planning and estimation.
- Quantity estimation



Plumbing Systems

A. FUNDAMENTALS

- Introduction to building construction (Civil & MEP services)
- Introduction to plumbing system
- Common sanitary fixture details
- Formula for flow through pipes
- Drainage system

B. PLUMBING DESIGN CALCULATION

- Cold water system
- Gray water system
- Hot water system
- Irrigation system
- Drainage system
- Storm water system

D. Estimation and costing of project

E. Drafting

Reference standards & codes:

NBC, NSPC, NPC, IPC & ASPE standards



Fire Fighting Systems

- Introduction to Fire protection Systems
- Classification of fire
- Hazard Classification
- Active and Passive Fire Protection Systems.
- Fire Strategy Plan
- Stair Well Pressurization System.
- Fire Water Sump Sizing, Over Head Tank Sizing.
- Fire Sprinkler systems– Types, (Wet pipe, Dry pipe, Pre-Action, Deluge, Anti-Freeze, Combined Dry Pipe and Pre-Action System.) Selection, Designing, Pipe Sizing.
- Fire Stand Pipe System, Fire Hose Cabinets & Fire Hydrants Selection.
- Fire Fighting Hydraulic Calculation, Head Loss & Pump Head Calculations for High Rise Buildings. Zone Control Valve.
- Fire Water Pump – [Main Pump, Jockey Pump, & Diesel Pump] Classification, Types & Selection.
- Reference Standards: NFPA 10, 13, 14, 24, 20, 2001, 11 & 1, NBC & FSAI Codes for Fire Fighting System Designing.
- FM200 System Designing – Water less Fire Protection System] Capacity, Pipe Sizing, Nozzle Selection.
- Fire Alarm System Designing. Smoke Detector (Ionization, Optical, Duct, Beam)
- Heat Detector: Fixed Temperature, Rate of Rise, Linear Heat Detection Cable. Flame Detector.

D. ESTIMATION AND COSTING OF PROJECT

E. DRAFTING

Reference standards: NFPA, NBC



Autodesk Revit MEP

STARTING MEP PROJECT

- Linking projects
- View templates
- General system options

ENERGY ANALYSIS FEATURES

- Use building elements for energy analysis mode
- Preparing spaces
- Zones in the system browser

VALIDATE ENERGY ANALYTICAL MODE

- Use third party tool for checking
- Heating and cooling load calculation

PLANNING MECHANICAL SYSTEM

- Adding mechanical equipment
- Adding diffuser
- Create duct system

ADDING DUCT SYSTEM

- Adding duct by duct layout
- Adding duct by duct pace holder
- Adding duct manually
- Duct sizing

ANNOTATION AND HYDRONIC CONNECTIONS

- Annotating duct
- Model pipe system

