

We help you to  
**Grow Up**



**MIEP**

MECHANICAL ELECTRICAL PLUMBING





# MEP - 270 Hrs ( 4 Months)

## **CAD**

INTRODUCTION | DRAWING TOOLS | MODIFYING TOOLS  
DIMENSION TOOLS | PROPERTIES BAR | LAYER TOOLS

## **HVAC SYSTEM DESIGN**

SCOPE OF HVAC INDUSTRY

INTRODUCTION

CODES & STANDARDS USED IN HVAC

PSYCHROMETRY

AIR CONDITIONING CYCLE

COOLING LOAD CALCULATION

EQUIPMENT SELECTION

STUDY ABOUT MACHINE SPECIFICATIONS & CLASSIFICATIONS

DUCT DESIGN

DUCT SIZER & CALCULATION

DUCT ACCESSORIES

AIR TERMINAL TYPES

AIR TERMINAL SELECTION

DUCT DRAWING PREPARATION

PREPARATION OF BILL OF QUANTITIES

CHILLER

CHILLER SYSTEM DESIGN

TYPES & APPLICATION OF CHILLER

HYDRAULIC CALCULATION FOR PUMP SELECTION

VRF SYSTEM DESIGN

VENTILATION SYSTEM DESIGN

KITCHENHOOD DESIGN & DRAWING PREPARATION

CAR PARKING DESIGN & DRAWING PREPARATION

TOILET DESIGN & DRAWING PREPARATION

BILL OF QUANTITIES & DOCUMENT PREPARATION





## **ELECTRICAL SYSTEM DESIGN**

INTRODUCTION TO MEP ELECTRICAL

ELECTRICAL CODES & STANDARDS

ELECTRICAL SYMBOLS USED IN DRAWINGS

FUSES & SWITCHES

TYPES OF CABLES AND WIRES

- A. LOW VOLTAGE CABLES
- B. HIGH TENSION CABLES TERMINATION & JOINTS
- C. DIFFERENT WIRES USED IN ELECTRICAL DESIGN

## **PANELS**

DBS

PROTECTION OF ELECTRIC CIRCUITS

MCBS (TYPES,RANGES)

TYPES OF MOTORS AND THEIR STARTERS

## **RESIDENTIAL BUILDING**

FLOOR PLAN AND PREPERATIONS

FIXERS AND LIGHTS

LIGHT FIXING USING DIALUX

PIPES AND CONDUITS

PUMP HOUSE

LEGENT AND LABELING CREATION

CLASS TEST 1

ASSIGNMENT



## MULTISTORIED BUILDINGS

MDBS AND SMDBS  
PANEL BOARDS  
SECTION & ELIVATION LAYOUTS-  
FOR CABILING (CABLE RISER)  
INDOOR LIGHT FIXING  
OUTDOOR LIGHT FIXING  
INDOOR & OUTDOOR LIGHT FIXING USING DIALUX  
SINGLE PHASE TO 3 PHASE-  
CONNECTION (LOAD BALANCING)  
CLASS TEST 2  
ASSIGNMENT



## COMMERCIAL/APPARTMENT

ENERGY METER/ METERING PANEL ARRANGEMENT  
LIFT  
GENERATOR SIZING AND PLACING  
MOTOR SIZING AND PLACING  
CAPACITOR BANK SIZING AND PLACING  
EMERGENCY LIGHTING  
UTILITY LIGHTING & LIGHTING ARRESTERS  
SLD AUTO CAD  
HVAC PANEL CONNECTION  
HVAC ELECTRICAL LOADING  
GENERAL ARRANGEMENT DIAGRAM  
CLASS TEST 3  
ASSIGNMENT





## PLUMBING SYSTEM DESIGN

INTRODUCTION TO PLUMBING SYSTEM  
FUNDAMENTALS AND QUALITY OF WATER  
PLUMBING FIXTURES  
FIXTURE MOUNTING & POSITIONING  
WATER CALCULATION  
INTERNAL PLUMBING DESIGN  
TYPES OF PIPE & TANK SIZING  
EXTERNAL PLUMBING DESIGN  
RAIN WATER HARVESTING  
STORM WATER



## FIRE FIGHTING SYSTEM DESIGN

INTRODUCTION TO FIRE-FIGHTING  
FIRE CLASSIFICATIONS  
FIRE PROTECTION & DETECTION SYSTEM  
SPRINKLER & HYDRANT SYSTEM,FM-200

## REVIT

INTRODUCTION TO REVIT MEP DESIGN  
LEVELS SETTING  
TOOLS  
GENERIC COMPONENTS  
MODELING  
MATERIALS  
MEP (HVAC/ELECTRICAL) DRAWING PREPARATION IN REVIT

 | AUTODESK®  
REVIT® MEP 2015



 AUTODESK

# MEP - 120 Hrs ( 2 Months)

## CAD

INTRODUCTION  
DRAWING TOOLS  
MODIFYING TOOLS  
DIMENSION TOOLS  
PROPERTIES BAR  
LAYER TOOLS

## HVAC SYSTEM DESIGN

INTRODUCTION TO SCOPE OF MEP & FUNDAMENTALS  
CODES & STANDARDS USED IN HVAC  
PSYCHROMETRY  
AIR CONDITIONING CYCLE  
COOLING LOAD CALCULATION  
EQUIPMENT SELECTION  
STUDY ABOUT MACHINE SPECIFICATIONS AND CLASSIFICATIONS  
DUCT DESIGN  
DUCT SIZER & CALCULATION  
DUCT ACCESSORIES  
DUCT DRAWING PREPARATION  
AIR TERMINAL TYPES  
AIR TERMINAL SELECTION  
PREPARATION OF BILL OF QUANTITIES

## ELECTRICAL SYSTEM DESIGN

INTRODUCTION TO MEP ELECTRICAL  
ELECTRICAL SYMBOLS USED IN DRAWINGS  
FUSES AND SWITCHES  
TYPES OF CABLES AND WIRES  
A. LOW VOLTAGE CABLES  
B. DIFFERENT WIRES USED IN ELECTRICAL DESIGN





## PANELS

DBS  
PROTECTION OF ELECTRIC CIRCUITS  
MCBS (TYPES,RANGES)  
TYPES OF MOTORS AND THEIR STARTERS

## RESIDENTIAL BUILDING

FLOOR PLAN AND PREPARATIONS  
FIXERS AND LIGHTS  
PIPES AND CONDUITS  
PUMP HOUSE  
LEGENT AND LABELING CREATION

## MULTISTORIED BUILDING

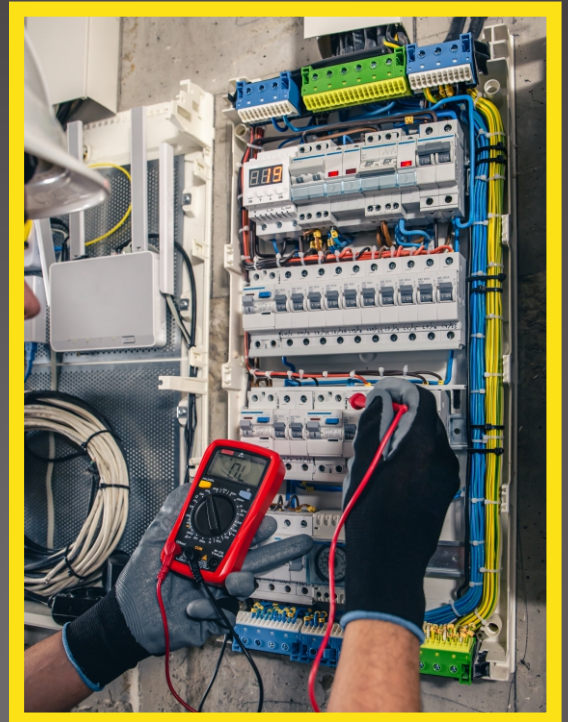
MDBS AND SMDBS  
PANEL BOARDS  
SECTION AND ELIVATION LAYOUTS FOR CABILING(CABLE RISER)  
INDOOR AND OUTDOOR LIGHT FIXING  
POWER SOCKETS AND ELECTRICAL OUTLETS  
SINGLE PHASE TO 3 PHASE CONNECTION (LOAD BALANCING)

## PLUMBING SYSTEM DESIGN

INTRODUCTION TO PLUMBING SYSTEM  
FUNDAMENTALS OF PLUMBING DESIGN & DRAFTING  
PLUMBING FIXTURES TYPES & SELECTION  
FIXTURE MOUNTING & POSITIONING  
WATER CALCULATION  
INTERNAL PLUMBING DESIGN  
TYPES OF PIPES & SELECTION  
TANK SELECTION EXTERNAL PLUMBING OVERVIEW

## FIRE FIGHTING SYSTEM DEIGN

INTRODUCTION TO FIRE-FIGHTING  
FIRE CLASSIFICATIONS  
FIRE PROTECTION  
SPRINKLER & HYDRANT SYSTEM



# ELECTRICAL SYSTEM DESIGN - 120Hrs (2 months)



## CAD

INTRODUCTION  
DRAWING TOOLS  
MODIFYING TOOLS  
DIMENSION TOOLS  
PROPERTIES BAR  
LAYER TOOLS

## ELECTRICAL

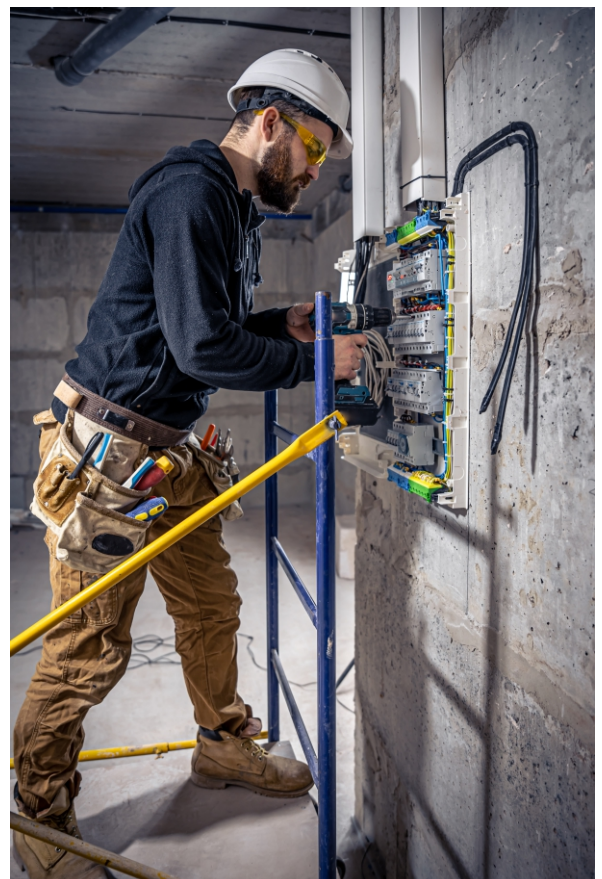
INTRODUCTION TO MEP ELECTRICAL  
ELECTRICAL CODES AND STANDARDS  
ELECTRICAL SYMBOLS USED IN DRAWINGS  
FUSES AND SWITCHES  
TYPES OF CABLES AND WIRES  
A. LOW VOLTAGE CABLES  
B. HIGH TENSION CABLES TERMINATION & JOINTS  
C. DIFFERENT WIRES USED IN ELECTRICAL DESIGN

## PANELS

DBS  
PROTECTION OF ELECTRIC CIRCUITS  
MCBS (TYPES,RANGES)  
TYPES OF MOTORS AND THEIR STARTERS

## RESIDENTIAL BUILDING

FLOOR PLAN AND PREPERATIONS  
FIXERS AND LIGHTS  
LIGHT FIXING USING DIALUX  
PIPES AND CONDUITS  
PUMP HOUSE  
LEGENT AND LABELING CREATION  
CLASS TEST 1  
ASSIGNMENT





## MULTISTORIED BUILDINGS

MDBS AND SMDBS

PANEL BOARDS

SECTION & ELEVATION LAYOUTS-

FOR CABILING(CABLE RISER)

INDOOR LIGHT FIXING

OUTDOOR LIGHT FIXING

INDOOR&OUTDOOR LIGHT FIXING USING DIALUX

SINGLE PHASE TO 3 PHASE-

CONNECTION (LOAD BALANCING)

CLASS TEST 2

ASSIGNMENT



## COMMERCIAL/APPARTMENT

ENERGY METER/ METERING PANEL ARRANGEMENT

LIFT

GENERATOR SIZING AND PLACING

MOTOR SIZING AND PLACING

CAPACITOR BANK SIZING AND PLACING

EMERGENCY LIGHTING

UTILITY LIGHTING & LIGHTING ARRESTERS

SLD AUTO CAD

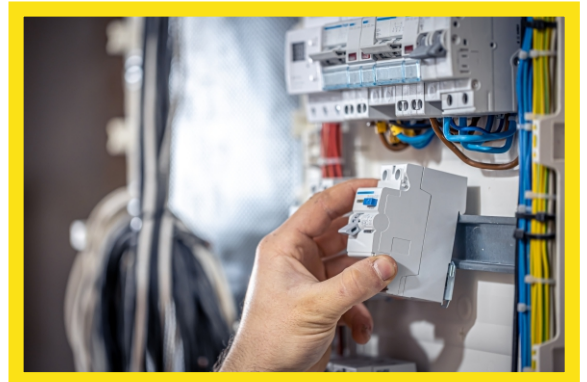
HVAC PANEL CONNECTION

HVAC ELECTRICAL LOADING

GENERAL ARRANGEMENT DIAGRAM

CLASS TEST 3

ASSIGNMENT



## **HVAC SYSTEM - 120 Hrs (2 Months)**

### **CAD**

INTRODUCTION | DRAWING TOOLS | MODIFYING TOOLS  
DIMENSION TOOLS | PROPERTIES BAR | LAYER TOOLS

### **HVAC SYSTEM DESIGN**

SCOPE OF HVAC INDUSTRY

INTRODUCTION

CODES & STANDARDS USED IN HVAC

PSYCHROMETRY

AIR CONDITIONING CYCLE

COOLING LOAD CALCULATION

EQUIPMENT SELECTION

STUDY ABOUT MACHINE SPECIFICATIONS & CLASSIFICATIONS

DUCT DESIGN

DUCT SIZER & CALCULATION

DUCT ACCESSORIES

AIR TERMINAL TYPES

AIR TERMINAL SELECTION

DUCT DRAWING PREPARATION

PREPARATION OF BILL OF QUANTITIES CHILLER

CHILLER SYSTEM DESIGN

TYPES & APPLICATION OF CHILLER

HYDRAULIC CALCULATION FOR PUMP SELECTION

VRF SYSTEM DESIGN

VENTILATION SYSTEM DESIGN

KITCHENHOOD DESIGN & DRAWING PREPARATION

CAR PARKING DESIGN & DRAWING PREPARATION

TOILET DESIGN & DRAWING PREPARATION

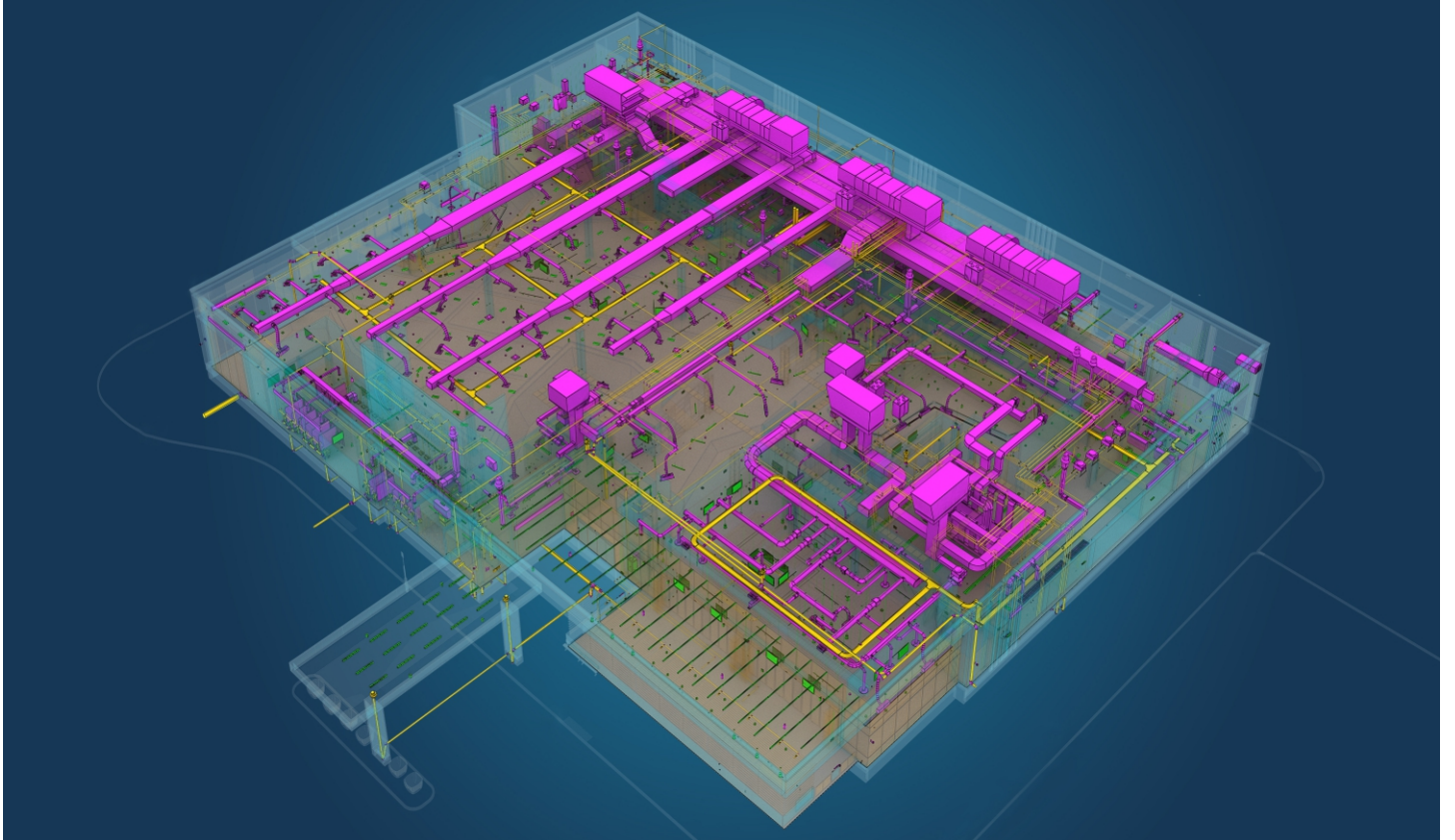
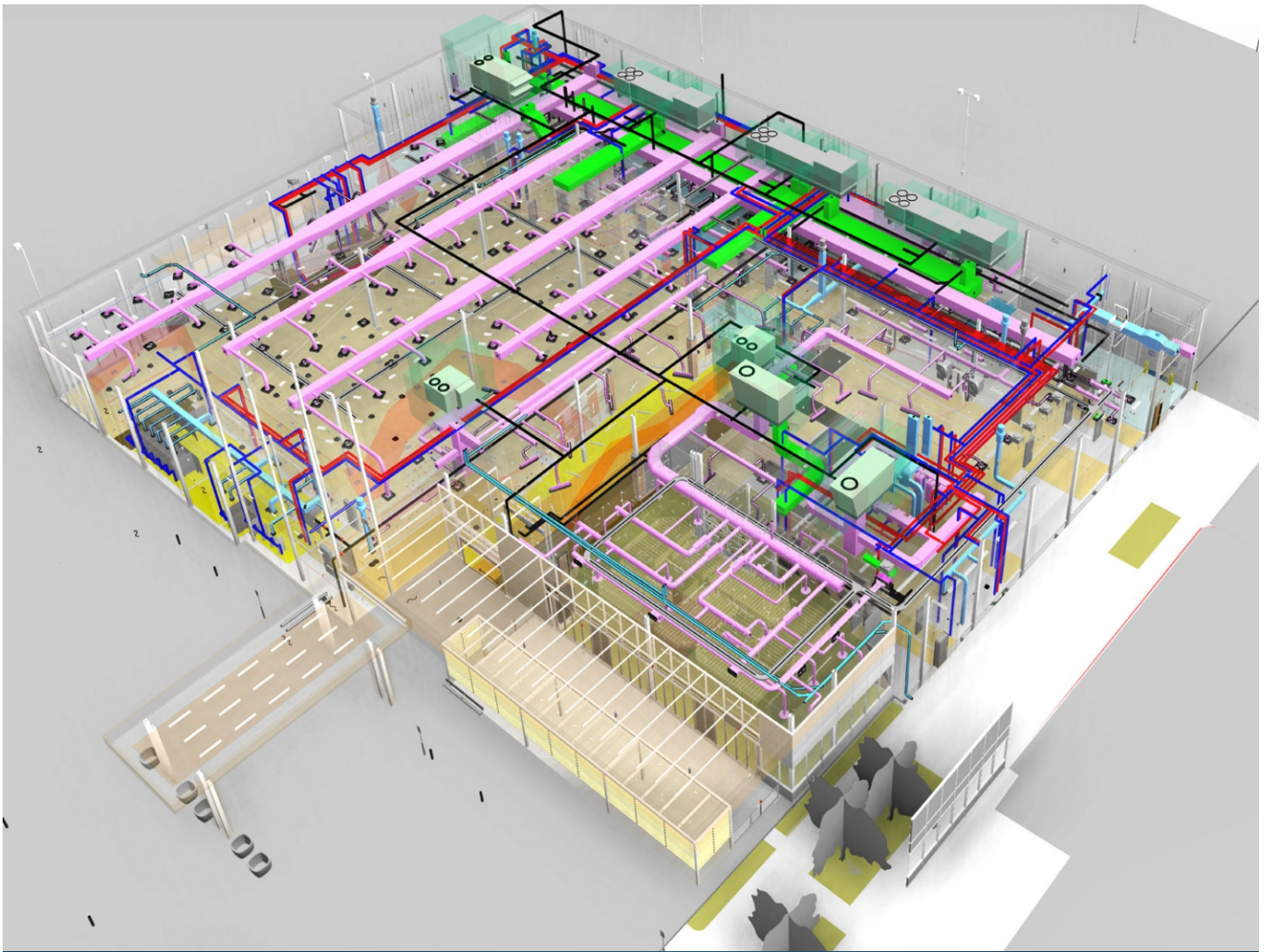
BILL OF QUANTITIES & DOCUMENT PREPARATION

ASSIGNMENTS

PROJECT SUBMISSION












# MIEP

MECHANICAL ELECTRICAL PLUMBING



## **AMBIT AUTOMATION**


### COCHIN CAMPUS

 1st Floor, Raja Arcade, pullepady, Chittoor Road  
Cochin, Kerala, India - 682035

 **+91 484 486 3886, +91 799 42 55 999**

 **info@ambitautomation.in**

### CHENNAI CAMPUS

 Ambit Automation  
2nd Floor, Indra Tapezium, Madhavaram High Road,  
Near Perambur Railway Station, Chennai-600 011

 **+91 7994211999, 7994342999**