

# AutoCAD 2D/3D

**CIVIL, MECHANICAL, ELECTRICAL**

**Duration: 30 days**

## TOPICS

Auto cad civil: Introduction, Basic commands, Details of commands, Commands & applications, 2D basic drawings, projects 2D, planings 2d, sections 2d, elevations (4 sides), 3d commands, 3d plans, all isometric views.

AUTOCAD MECHANICAL: INTRODUCTIONS, BASIC COMMANDS, DETAILS OF COMMAND & APPLICATIONS, 2D MECHANICAL DRAWINGS, 2D ENGINE DESIGNING ,TREADING & ALL MACHINE PARTS, CONVERTING 2D TO 3D MACHINE DESIGNS, 3D BASICS

AUTOCAD ELECTRICAL'S: BASIC COMMAND, DETAILS OF COMMAND & APPLICATION, ELECTRICAL LAYOUTS, CREATING ELECTRICAL LEGENDS, POWER SUPPLY, SINGLE LINE DIAG PLANNING, MAIN, DISTRIBUTION BOARD, SUB, MAIN, DISTRIBUTION BOARD, PANEL BOARD.

### ELECTRICAL

- LONGEST CIVIL PLAN TO ELECTRICALS,ELECTRICAL PLANS LAYOUT,PLACEMENTS OF S.M.D.B,PLACEMENT OF M.D.S,POWER SUPPLY,ELECTRICAL LAYOUTS

## CIVIL PROJECTS

### **PRIMAVERA:**

Introduction to Project Management, Concepts of Projects Planning and Controlling, Scheduling techniques, Reports, Resources, Cost Planning, Progressing, Project utilities

### **MSP:**

Project management basic concepts, Planning, Scheduling, Resources, Reports

### **STAAD PRO:**

RCC DESIGN As per Is456, Steel Design As per Is800, Analysis & Design & Manual concepts

RCC Wind Load Analysis, Earthquake Analysis, Steel Trusses

## MECHANICAL PACKAGE

### PRO - ENGINEER:

Sketcher, Solid Modeling

Part Modeling, Assembly Modeling, Sheet Metal, Mini Project, Drawing & Detailing

### CATIA:

Sketcher, Solid Modeling, Part Modeling, Part Modeling, Assembly Modeling, Sheet Metal, Mini Project, Drawing & Detailing

### ANSYS:

Structural Analysis ( Static & Dynamic), Thermal Analysis ( Steady State and Transient ), Harmonic Analysis, Contact Analysis, Buckling Analysis, Different types of Beams and Supports

### PDS:

Equipment Modeling, Piping Modeling, Isometric Manager, Drawing Manager, Interference manager

### PDMS:

Piping basics, Pipe manufacturing methods, Fitting, Flanges, Pipe thickness calculation, Values, Supports & Classifications, Isometrics, Pipe rack, Special equipments, Pump & pump head calculations, Pumps suction & discharges, Plot Plan, Pressure drop calculation, Piping system as per ASME - B 31.3 MTO, Control Station, Distillation column, Importance of stress analysis

### HAVC

- v Fundamentals
- v Modes of Heat and Latent Heat
- v Sensible Heat and Latent Heat
- v Basic Components of air – Conditioning and refrigeration machines
- v Classification of Air - Conditioning
- v Categories of Air Conditioning

- v Study of Psychometric Charts
- v Load Calculation
- v Static Pressure Calculation
- v Hydronic System
- v Air Conditioning Concepts

## **MEP**

- v Mechanical
- v A/C Ducting's
- v Air Diffusers
- v Air Pressures
- v Types of A/C
- v Electrical
- v Power plant
- v Main Transformers
- v Power Supply in home
- v Main Distribution Boards
- v Sub Distribution Boards
- v Power supply & electrical layouts
- v Plumbing
- v Water plant
- v Water Supply
- v M.C.H Supply
- v Home connection 2M.C.M Line

v Drainage system / supply etc.....

## **DRINEGE LAYOUTS**

v Septic Tank

v Outer to outer



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