AutoCAD 2D

- Introduction to AutoCAD
- GUI of AutoCAD
- Co-ordinate systems in AutoCAD
- Entity creations
- Entity modifications
- Drafting settings
- File handling
- Adding Annotation
- Setting and modifying object properties
- Selecting entities
- Creating Hatch Patterns
- Editing with Grips
- Inquiry tools
- Dimensioning the entities
- Creating dimension style
- Creating Blocks
- Dynamic blocks
- Parameters
- Creating, managing and extracting attributes
- Measuring tools
- Slide creation
- Running Scripts
- Creating compound documents with OLE
- External references
- AutoCAD Design Center
- Tool palettes
- Explode the drawing
- Plotting the drawings
- Markup
- Publish

Duration :60 hrs

Courseware Issued

- AutoCAD Reference guide
- Project Workbook

AutoCAD 3D

- 3D Modeling concepts in AutoCAD
- Understand and use Viewpoint and UCS
- Wireframe Modeling
- Solid Modeling & Editing
- Mesh Modeling & Editing
- Surface Modeling & Editing
- Create & Manage 2D Views from 3D Models
- Materials
- Lights
- Rendering
- Working with Images
- Import and Export

**Duration: 30 hrs**

**Courseware Issued**
- AutoCAD 3D Reference guide
- Project Work Book

**ArchiCAD**
- Introduction to BIM and ArchiCAD
- Multi-storey Settings
- Using Wall Element
- Placing building elements from Library
- Creating Wall Holes
- Creating new library elements
- Floor and Roof Designs
- Annotation and Dimension
- Documentation and Scheduling
- Present the Project with images and walkthroughs
- Construction Simulation
- Layout setting and plotting
- Projects.

**Duration: 60 hrs**

**Courseware Issued**
- ArchiCAD Reference Guide

**Revit Architecture**
- Introduction to BIM & Revit Architecture
- Project Settings
- Multi-storey Settings
- Complete a Plan by using different wall families
- Designing Complex walls & Wall Profiles
- Placing Doors, Windows & Components
- View and Camera Settings
- Dimensions and Constraints
- Designing Floors and Ceilings
- Placing Ceiling Components
- Curtain Walls Creations
- Designing different Stair case types
- Conceptual Modeling for Exterior Design
- Project Presentation with Rendering & Walkthroughs
- Annotation and Scheduling
- Placing Structural Elements
- Sheet setting and Plotting
- Site Designing
• Working with a Team
• Working with Linked Models
• Presenting a Project with Multiple Design Options
• Creating multiple phases
• Presenting the Project with customized materials
• Placing Decals
• Interference Checking
• Customizing Project Settings
• Export / Import
• Working with element groups
• Creating customized families
  ▪ Door
  ▪ Window
  ▪ Furniture
  ▪ Staircase
  ▪ Lights

**Duration 60 Hours**

**Courseware Issued**

Revit Architecture Reference guide

**STAAD.Pro**

• Introduction to Structural Design
• Introduction to STAAD.Pro
• Model generation
• Assigning loads
• Automatic load generation
  ▪ Slab, Wind and Moving loads
  ▪ Creating Load Combinations
• Analysis and Analysis Results
• Introduction to FEM / FEA
• Projects using FEM / FEA
• Report Generation
• Concrete Design
  ▪ Column and Beam designs
• Steel Design
• Interactive designs
  ▪ Concrete column and Beam Design
  ▪ Steel Member and Connection Design
• Projects.

**Duration: 60 hours**

**Courseware Issued**

➢ STAAD.Pro V8i Reference Guide
➢ Structural Workbook
PC Schematic

- How to create an electrical I geometry
- What are conducting and non-conducting lines
- How to specify signals
- An introduction to electrical projects
- How to use routers
- Graphic terminal plan
- Cable plan
- How to create a mechanical layout
- How to create a component list
- How to create terminal list
- How to create PLC projects & PLC diagrams
- How to create ground plans
- How to create isometric drawings
- How to import and export projects to other CAD software
- How to use mouse chasing system
- Graphical connection plan
- How to create database record
- How to use translator
- How to use project generator

Duration: 40 hours
Courseware Issued

PC Schematic Reference Guide

MAX for Engineers/Architects

- Standard and Extended Primitives
- Customizing the Units
- Basic Models using Parametric Deformers
- AEC Extended objects
- Advanced Set modeling
- Buildings
- Foliage-Exterior- Landscaping
- Compound Objects
- 2D Boolean
- Standard Lighting
- Advanced Lighting
- Basic Texturing
- Particles systems
- Environment Effects
- Reactors
- Mental ray Rendering
- Camera Walk through
- Mini Project
3ds MAX FOR ENGINEERS/ARCHITECT

- Standard and Extended Primitives
- Customizing the Units
- Basic Models using Parametric Deformers
- AEC Extended objects
- Advanced Set modeling
- Buildings
- Foliage-Exterior- Landscaping
- Compound Objects
- 2D Boolean
- Standard Lighting
- Advanced Lighting
- Basic Texturing
- Particles systems
- Environment Effects
- Reactors
- Mental ray Rendering
- Camera Walk through

Duration: 90 hours
Courseware Issued
Max for Engineers/Architect Reference guide

CAD Draftsman

- History of drawing
- Introduction of engineering drawing & CAD
- Introduction to AutoCAD
- Explaining AutoCAD GUI
- Drawing settings
- Enhanced editing tools
- Giving annotations
- Layer management
- Object properties
- Advanced object selection methods
- Hatching utilities
- Dimension utilities
- Concepts of block
- External references
- Defining & editing attributes
- Plot
- Page setup
- Publish.

Duration: 90 hours
Courseware Issued
Max for Engineers/Architects Reference guide

Duration : 64 hours
Courseware Issued