AutoCAD Course Syllabus(BASIC)

2D Drafting

Sessions	Syllabus
Session 1	Introduction Auto Cad Screen,Organization,Limits,Units,
Session 2	Co-ordinates method,Line, Erase, Oops, Redraw
Session 3	Circle, Rectangle, drafting setting, Zoom, Pan, Undo, Redo, Regen,
Session 4	Copy, Move, Arc, Polyline, Polyline Edit, Polygon,
Session 5	Scale, Rotate ,Mirror, Offset, Trim, Extend, Break, Object Selection Methods, Select
Session 6	Array, Stretch , Lengthen, Drag Mode, Quick Select , Ellipse, Point, Point Style
Session 7	Fillet, Chamfer, Text, Mulliline Text, Qtext, Mirror Text, Text Edit, Hatch, HatchEdit, Boundary
Session 8	Donut, 2D Solid, Ray, Construction Line, Multiline Style, Multiline Edit, Fill
Session 9	Layer,Color, Line Type, Line Type Scale, Line Weight, Explode , Change ,Group, Filters,
Session 10	Distance, List, Area, ID, Status, Time, Set variable, Change Properties, Match Properties, Isometric, Snap, Isoplane.

AutoCAD Course Syllabus(Advanced)

Advanced Productivity Tools

Sessions	Syllabus
Session 11	Dim:- Linear, Aligned, Angular, Radius, Jogged Radius, Diameter, Arc Length, Baseline, Continue,Ordinate, Space, Break,Center Mark,Inspection,Jogged Linear. Dim Edit,Qdim,
Session 12	Q_leader, M_leader, Dim Style, Tolerence, Oblique, Align Text,Override,Update,Reassociate Block, Insert, Block Edit,WBLOCK
Session 13	Dynamic block, Autocad Design Ceter,Tool Pallete,Attributes
Session 14	Define Attribute, Display Attribute, Edit Attribute, Redefine Attribute,Attribute Manager
Session 15	External Reference, Ref Edit,Ref Clip , Partial open, Partial Load, Divide, Measure,
Session 16	Table,Tablestyle,Spline, Spline Edit, Rename, Purge, Recover, Audit,
Session 17	Cut Clip, Copy Base, Copy Link,Paste Clip, Paste Block, Paste Origin, Paste Special, Ole Scale, Ole Links, Insert Objects
Session 18	Tile Mode, Model Space, Paper Space, Layout, Layout Wizard, View Port,MView MViewSet Up,
Session 19	Page Setup,Plotter Manager, Style Manager, Preview, Plot, ETransmit, Publish to Web,
Session 20	Hyperlink, Mslide, Vslide, Script, Rscript, parameters.

AutoCAD Course Syllabus(3d)

3D Modeling

Sessions	Syllabus
Session 21	Introduction to Three Dimensions (3D), Cylindrical Coordinate System, Spherical Coordinate System, View Point, Display Dialouge View Point, Plan, Thickness, Elevation, Elev
Session 22	Universal Coordinate System, Ucs, Ucs Manager, Ucs Icon
Session 23	**Mesh:-** Revolve,Tabulated,Ruled,Edge,3dface,3dMesh,3dmesh primitatives,Pedit,surftab1,surftab2 **Surface:-**Planner,Network,Blend,Patch,Offset,Fillet,3D Polyline
Session 24	**Solid:-**Polysolid,Box,Wedge,Cone,Sphere,Cylinder,Torus,Pyramid, Extrude,Revolve,Sweep,Loft,SectionPlane.

AutoCAD Course Syllabus(3d)

Advanced 3D Modeling

Sessions	Syllabus
Session 25	Union,Subtract,Intersect,Interfere,3D Array, Mirror 3D,Interference, Checking,Slice,Thicken, Fillet ,Chamfer ,
Session 26	Convert To Solid,Convert To Surface,Extract Edges, Base View Projection View Imprint Edges, Color Edges,Copy Edges,Extrude Faces,Move Faces, Offset Faces,Delete
Session 27	Rotate Faces,Taper Faces,Color Faces,Copy Faces,Clean,Separate, Shell,Check,3D Move,3D Rotate,3D Align,Align
Session 28	**SurfaceEdit:-**Trim,Untrim,Extend,Scuilt,Convert To NURBS, Convert To Mesh,NURBS Surface Editing,Project Curve
Session 29	**Render:-** Light, Render Material Browse,Material Edit, Mass Property
Session 30	Image Attach, Image Quality, Image adjust, Image Frame, Image Clip, Import Files,Export Files

Revit Architechure Course Syllabus

Conceptual Drafting

Sessions	Syllabus
Session 1	Introduction to BIM ,Revit Architure,Famiies,Screen Organization
Session 2	Plan:-Units,Levels,Walls,Walls Profile,Door,Widows, Tools:-Mirror,Array,copy,Paste Align,Dimensional constraints
Session 3	Creating Floor , Placing components,Elevators,Adding & modifying Staircases, Floor Opening
Session 4	Creatiing Ceiling & Roofs,Roof Types,Creating & Modifying Schedules
Session 5	Creating Flat & Curved Curtain system, Creating panels, Adding doors & Mullions, Sloped Glazings, Stone Front system, Cutain system by line.
Session 6	Adding Sheet & Title block,Modifying Title block,adding Views to the sheet, Revisions
Session 7	Create Rendering ,Rendering Settings, Use sun & shadows setting, Walkthrough,Exporting Walkthrough
Session 8	Path for File locations,Creating New library,Modifying Material Creating New Material ,Fill patterns,
Session 9	Creating models using Massing,Creating Railing Layout,Modifying Staircase,Model Text,Decal
Session 10	Managing Views,Controlling object visibility,Working with section & elevation,creating & modifying camera views(3d)
Section-11	Creating area schemes & plans ,Color coding,Creating & modifying (Site) Toposurface
Section-12	Phasing ,Demolishing & creating new design ,Creating Multiple design option ,Placing Structural components(Roof, Sun Screeen system& Other Compnents)
Section-13	Creating Call out views, working with Text & Tags,Creating Detail Views ,Creating Drafting views ,
Section-14	Creating Legends and keynotes interference checking,Add annotation,import & export options
Section-15	Create baluster, Titleblock & Nested famiies.Creating Doors & Furniture family.

Duartion:- 100 Hrs

Staad Pro Course Syllabus

Sessions	Syllabus
Session 1	Introduction to Structural Engg & Staad pro V8i
Modelling	
Session 2	Staadpro Concept, Designing Method (Graphics & Non-Graphics) , Non-Graphics Modeling
Session 3	Graphical Modeling-Generating Nodes ,Members ,Plates, Surface Solid Modeling
Session 4	Circular & translational Repeat, Modifying nodes & Members
Session 5	Practice:-Generation of Building, Steel Structures, Shear wall, Water tank (rectangular & Circular), Bridge Decks
Analyzing	
Session 6	Specifying material constants, member properties, member specifications, supports. Defining and Specifying Loads.Analysis types, Post analysis print
Session 7	Concrete Design:-Basic Design, Parametric Design as per IS:456-2002 , Post Processing & Report Generation
Session 8	Steel design:- Basic Design ,Parametric Design as per IS-802 , Post Processing & Report Generation
Session 9	Water Tank :- Basic Design, Parametric Design as per IS:456-2002 , Post Processing & Report Generation.
Session 10	Sesmic Design:- Basic Design, Parametric Design as per IS:456-2002 , Post Processing & Report Generation(Shear Wall).
Duration:-60 Hours	

Staad Pro course Syllabus(Foundation)	
Sessions	**Syllabus**
Session 1	INTRODUCTION TO STAAD FOUNDATION.
Session 2	Isolate Footing:- Specifying member properties, member specifications, supports. Defining and Specifying Loads. Analysis types, Report Generation
Session 3	Combines Footing:- Specifying member properties, member specifications, supports. Defining and Specifying Loads. Analysis types, Report Generation
Session 14	Mat Footing:- Specifying member properties, member specifications, supports. Defining and Specifying Loads. Analysis types, Report Generation
Session 15	Pile cap design:- Specifying member properties, member specifications, supports. Defining and Specifying Loads. Analysis types, Report Generation
Duration:-30 Hours	

Microsoft Project course Syllabus

Modules	Syllabus
Module 1	Definition of Project & Project Management. Advantages, Introduction to MSP, Screen Setting
Module 2	Defining Calendars, Calendar types, Creating & Modifying Calendars. Assigning Calendars to the Project.
Module 3	Defining Task –Creating, & Modifying Tasks. Linking & unlinking Tasks. Calculation of duration in Critical Path method & PERT Method, Gant chart Wizard
Module 4	Definitions of Links, Link Types Entering Dependencies, Stack Calculation. About Constraints Defining & setting constraints, Deadlines, Splitting Task.
Module 5	Creating & Modifying Recurring Task. About WBS-Defining WBS,WBS Types, Outline Numbers , WBS code customization Creating & modifying WBS-Applying to Projects.
Module 6	Resources-Definitions of Resources, Resources Types, Assigning Resources Resource Over-allocation, Resource Sharing-Separate Resource pool
Module 7	Resource Leveling By Splitting & by Delaying Automatic & Manual Leveling. Using Task Types (Fixed Units/Fixed Duration/Fixed Work)Effect Driven .
Module 8	Applying Actual & Updating Projects-Tracking Setting before track & Status date-Variance Analysis Earned Value Analysis
Module 9	Earned Value Management Systems Project Budget- Basics of EVMS-Setting Due date-Projections based in EVMS.
Module 10	About Groups & Filters –Creating & modifying Groups-Types of Filters –Task & Resource Filters Auto filters.
Module 11	About Views –Different Type of Views –Creating & modifying Views.
Module 12	About Reports –Types-Tabular-Graphical-Histogram-Scurve-Steps to Create Scurve
Module 13	Working with Multiples Projects–Inserting Projects-Sharing resources.
Module 14	About Customizing–Fields, Formulas, Graphical Indicators Inserting Columns, Changing Gantt chart Setting.
Duration:-8o Hours	

Revit MEP course Syllabus

Modules	Syllabus
Module 1	INTRODUCTION :- Introduction to BIM ,Revit MEP,Familes,Screen Organization
Module 2	Defining Calendars, Calendar types, Creating & Modifying Calendars. Assigning Calendars to the Project.
Module 3	Defining Task –Creating, & Modifying Tasks. Linking & unlinking Tasks. Calculation of duration in Critical Path method & PERT Method, Gant chart Wizard
Module 4	Definitions of Links, Link Types Entering Dependencies, Stack Calculation. About Constraints Defining & setting constraints, Deadlines, Splitting Task.
Module 5	Creating & Modifying Recurring Task. About WBS-Defining WBS,WBS Types, Outline Numbers , WBS code customization Creating & modifying WBS-Applying to Projects.
Module 6	Resources-Definitions of Resources, Resources Types, Assigning Resources Resource Over-allocation, Resource Sharing-Separate Resource pool
Module 7	Resource Leveling By Splitting & by Delaying Automatic & Manual Leveling. Using Task Types (Fixed Units/Fixed Duration/Fixed Work)Effect Driven .
Module 8	Applying Actual & Updating Projects-Tracking Setting before track & Status date-Variance Analysis Earned Value Analysis
Module 9	Earned Value Management Systems Project Budget- Basics of EVMS-Setting Due date-Projections based in EVMS.
Module 10	About Groups & Filters –Creating & modifying Groups-Types of Filters –Task & Resource Filters Auto filters.
Module 11	About Views –Different Type of Views –Creating & modifying Views.
Module 12	About Reports –Types-Tabular-Graphical-Histogram-Scurve-Steps to Create Scurve
Module 13	Working with Multiples Projects–Inserting Projects-Sharing resources.
Module 14	About Customizing–Fields, Formulas, Graphical Indicators Inserting Columns, Changing Gantt chart Setting.
Duration:-8o Hours	