

Pro-Skill

Quality (Content along-with Delivery) & End-Result
(The Product-You) will be our Primary Focus.

1. Pre-requisite for the Courses,

- **Qualification:- ITI(D'man/Any Trade) / BE (Mech/Prod/Auto)/ ME/M-Tech.**
- **Good Drawing Reading Skills**

2. Syllabus,

- **Introduction,**
- **Entity/ 2 D Drawing Creation,**
- **Modification of Entities,**
- **Isometric Drawing Creation,**
- **Introduction to 3D Modelling.**

3. Time Duration,

- **30-45 Days. Average 2-3 Hrs/Day**

4. Preliminary Tests weekly based on Software,

5. Project/s Presentation,

6. Final Certification Test.

Auto-Cad Syllabus

<i>Sr. No.</i>	<i>Syllabus</i>	<i>Sign</i>
	Chapter 1- Introduction	
1	Introduction to CAD/CAM/CAE, Advantages/Disadvantages, Product Development Process.	
	Chapter 2 - 2D Drawing Creation	
2	AutoCAD history, AutoCAD GUI, Drawing Limits, sheet sizes (A0-A4), Entity creation/ Selection, Pan & Zoom.	
3	Drawing point, line. (horizontal/vertical, at particular dimensions & angle), Circle (2p/3p/TTR/TTT), trim, offset & exercises.	
4	Information to grid, snap, osnap etc. (F1-F9 Keys), imp toolbar names, COMPULSORY use of keyboard shortcuts.	
5	Rectangle, construction line, polyline, polygon. (center/edge), Dimensioning, dimension styles, dimensioning methods, UCS. Ellipse, ellipse arc, spline, revclouds, selection methodologies	
6	Copy, move, mirror, rotate, Scale, stretch, break, break at a point, extend.	
7	Join, array, fillet (radius/trim), chamfer.	
8	Hatch, gradient, region, explode.	
9	Text, table, make block, insert block.	
10	Write block, edit block, Working with layers, line type, color, thickness, layer on/off concept, layer isolate, match properties. (import & export Layers)	
11	Geometric constraint Toolbar- (coincident, parallel, perpendicular, concentricity , symmetry , fix)	
	Chapter 3 - ISOMETRIC DRAWING CREATION	
12	Difference between orthographic(2d) & isometric View.	
13	Creating isometric circles, use of copy command in isometrics.	
14	Title block Creation, Editing title blocks, use of tools palette.	
	Chapter 4- 3 D Modeling	
15	Modeling Toolbar- Extrude, subtract View Toolbar- view selection (2D Views & Isometric View)	
16	Solid Editing –(Union, Remove, Subtract, Intersect)	
17	Orbit Toolbar- creation of solid and manipulation (constrained orbit, continues orbit, Free orbit)	
18	Modeling Toolbar- (3D Rotate, 3D Array, 3D move, 3D align) Visual Style Toolbar-(3D wireframe ,3D hidden, Realistic, conceptual visual styles)	
19	Modeling Toolbar- (poly-solid, box, wedge, cone , sphere, cylinder, torus, pyramid, helix)	
20	Modeling Toolbar- (Press pull, sweep, Revolve, loft)	
	MODEL TEST EXAM	