

www.engineers3d.com

# CATIAv5

# **General Course Outline**

• 1.Introduction to the Interface Lecture on CATIA

2D Sketching 2D Modifications of sketch Constraint tool bar Dimensioning and Editing dimensions Profile tool bar Constraint tool bar Modify tool bar Sketch tool bar Visualize tool bar Visualize tool bar Filters Standard tool bar View tool bar

#### Inspection of Sketches or Profiles

#### > 2. Part Modeling

Use of Modeling Tree

Selection of planes

Datum plane creations

Basic steps for creating profiles in part Environment

What is modeling?

Sketch based features

Dress up features

Transformation features

Reference tool bar

Boolean operations

Advanced dress up features

Surface based features

Material application to the models

Rendering

View tool bar icons

Annotations

### > 3. Assembly Design

Importing of models in assembly module

Place a base component

Constraint tool bar

Move tool bar

Snap tool use

BOM preparation

Balloon numbering

Reuse pattern tool application

Display of after material application

Update tool

Inspection of assembly using clashing tool

► 4. Drafting

Drawing fundamentals Adding items to drawing Creating and placing drawing views

Working with major view types **Projection views** Auxiliary views Offset section views Detailed views Clipping views Dimensioning Controlling the model views 2D drafting Creating dimensions Drawing notes Geometric Tolerances Welding Symbol applications Surface roughness symbols applications Formate creating BOM

## > 5. Sheet Metal

- Introduction to sheet metal
- Sheet metal operations
- Editing the Sheet and Tool Parameters
- Modifying the Bend Extremities
- Computing the Bend Allowance
- Walls tool bar
- Bends tool bar
- Transformation features
- Stamping/Cutting tool bar
- Reference elements tool bar
- Creating a Hooper
- Folded/Unfolded views

# > 6. Surface and wireframe Design

Select Toolbar Wireframe Toolbar Surfaces Toolbar Operations Toolbar Replication Toolbar Generic Tools Toolbar Developed Shapes Toolbar Measure Toolbar