

CATIA

CURRICULUM

① CATIA Course Contents

Introduction to CATIA V5R21

CATIA V5 Workbenches

System Requirements

Getting Started with CATIA V5R21

Important Terms and Definitions

Understanding the Functions of Mouse Buttons

Toolbars

Hot Keys

Color Scheme

② Drawing Sketches In The Sketcher Workbench-I

The Sketcher Workbench

Starting a New File

Invoking the Sketcher Workbench

Invoking the Sketcher Workbench Using the Sketch Tool

Invoking the Sketcher Workbench Using the
Positioned Sketch Tool

Setting the Sketcher Workbench

Modifying Units

Modifying Grid Settings

Understanding Sketcher Terms

Specification Tree

Grid

Snap to Point

Construction/Standard Element

Select Toolbar

Inferencing Lines

Drawing Sketches Using Sketcher Tools

Drawing Display Tools

③ Drawing Sketches In The Sketcher Workbench-II

Other Sketching Tools in the Sketcher Workbench

Editing and Modifying Sketches

Constraining Sketches and Creating Base Features

Constraining Sketches

Concept of Constrained Sketches

Applying Geometrical Constraints

Analyzing and Deleting Over-Defined Constraints

Exiting the Sketcher Workbench

Creating Base Features by Extrusion

Creating Base Features By Revolving Sketches

Dynamically Rotating the View of the Model

○
○
○
○
Modifying the View Orientation
Display Modes of the Model
Creating Sections Dynamically
Assigning a Material to the Model

④ **Reference Elements And Sketch-Based Features**

○
○
○
Importance of Sketching Planes
Reference Elements
Other Sketch-Based Features

⑤ **Creating Dress-Up and Hole Features**

○
Advanced Modeling Tools

⑥ **Editing Features**

○
○
Editing Features of a Model
Measuring Elements

⑦ **Transformation Features and Advanced Modeling Tools-I**

○
○
○
○
Transformation Features
Working With Additional Bodies
Adding Stiffeners to a Model
Generating Solid Combine

8 Advanced Modeling Tools-II

Advanced Modeling Tools

9 Working with the Wireframe and Surface Design Workbench

Need of Surface Modeling

Wireframe and Surface Design Workbench

Creating Wireframe Elements

Creating Surfaces

Operations on Shape Geometry

10 Editing and Modifying Surfaces

Surface Operations

Solidifying Surface Models

11 Assembly Modeling

Assembly Modeling

Creating Bottom-up Assemblies

Creating Top-down Assemblies

Editing Assemblies

12 Working with the Drafting Workbench-I

The Drafting Workbench

- Generating Drawing Views
- Generating the Exploded View
- Working with Interactive Drafting in CATIA V5
- Editing and Modifying Drawing Views
- Modifying the Hatch Pattern of Section Views

13 Working with the Drafting Workbench-II

- Inserting Sheets in the Current File
- Inserting the Frame and the Title Block
- Adding Annotations to the Drawing Views
- Editing Annotations
- Generating the Bill of Material (BOM)
- Generating Balloons

14 Working with Sheet Metal Components

- The Sheet metal Component
- Setting Sheet Metal Parameters
- Introduction to Sheet Metal Walls
- Creating Extrusions
- Creating Swept Walls
- Creating a Bend
- Bend From Flat
- Folding and Unfolding Sheet Metal Parts

Creating Flat Patterns of Sheet Metal Components

Viewing a Sheet Metal Component in Multiple Windows

Using Views Management

Stamping



www.softcrayons.com



(+91) 854 501 2345



@softcrayons



info@softcrayons.com



693, Sector 14-A, Vasundhara,
Ghaziabad (U.P.), 201012