



## CATIA Basic Training Course Curriculum

### Chapter 1: Introduction

- a. Dassault Systems & their products
- b. CATIA, PLM & field of applications
- c. Parametric / Feature based Modeling Concepts (Parent-child relations & associativity)
- d. Supported file formats (open / import & save / export)
- e. Syllabus modules
- f. Starting CATIA its GUI (toolbars, specification tree, compass, menu bar)
- g. Customization of workbench & entering into workbench
- h. Mouse Navigation
- i. General commands (new file, open, save, save as, close) & keyboard shortcuts
- j. Design Intent

### Chapter 2: Sketcher

- a. Customization & options
  - I) General
  - II) Display
  - III) Parameters & measure
  - IV) Mechanical Design → Sketcher
- b. Entering the sketcher workbench
- c. Toolbars
  - I) Workbench
  - II) Sketch tools
  - III) Standard
  - IV) Profile
  - V) Operation
  - VI) Constraint
  - VII) View
  - VIII) Properties
  - IX) Extra toolbars like Visualization, Selection, User selection Filter
- d. Tips & Workshop

### **Chapter 3: Part Design**

- a. Common toolbars like standard, view, workbench, selection
- b. Sketcher
- c. Sketch-based features
- d. Dress-up features
- e. Transformation features
- f. Booleans operations
- g. Reference elements
- h. Constrains
- i. Extra toolbars like knowledge, measure, apply material
- j. Tips & Workshop

### **Chapter 4: Assembly Design**

- a. Common toolbars
- b. Product structure tools
- c. Move & manipulating parts using compass.
- d. Constraints
- e. Assembly features
- f. Update
- g. Extra toolbars
- h. Extra assembly related toolbars like catalogue, annotations, space analysis
- i. Tips & Workshop

### **Chapter 5: Wireframe and Surface Design**

- a. Common toolbars
- b. Surfaces
- c. Operations
- d. Wireframe
- e. Surface & solids (part) interaction      Part Design → Surface-based Features toolbar
- f. Extra toolbars
- g. Tips & Workshop

### **Chapter 6: Drafting**

- a. Page setup & customization
- b. Layout & templates
- c. Common toolbars
- d. Generative design toolbars → Views & generate
- e. Interactive design toolbars → geometry creation & geometry modification
- f. Generation of “Bill of Material” & Auto dimension
- g. Tools

- h. Dress-up toolbar
- i. Dimensioning toolbar
- j. Annotations toolbar
- k. Extra toolbars
- l. Tips & Workshop

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