

CATIA SYLLABUS

Course Duration = 4 Weeks

Hours = 60 hrs

Details of topics to be covered

Module -1- Sketcher

1. Introduction to CATIA, History, Basics, GUI, Use of mouse buttons, Sketcher, constraints, profile, setting workbench
2. Standard toolbar, how to open sketcher, sketch details and important toolbar for sketch
3. Profile toolbar, Types of constraints, constraint application, constraint colour
4. Sketch constraint, view toolbar, Operation toolbar
5. Specification tree use, selecting toolbars
6. sketch toolbar, Visualisation toolbar
7. Toolbar setting, plane size setting, graphics properties toolbar

Module -2- Part Design

1. 3D introduction, Important toolbar
2. Sketch based features toolbar
3. Reference plane
4. Apply material
5. Dress up features
6. Annotation toolbar
7. Transformation features

Module -3- Assembly Design

1. Assembly Design-Bottom up
2. Constraints, move, space analysis
3. Product structure tools

Module -4- Drafting

1. Drafting details
2. Text properties, graphics properties
3. Generative dimensions, dimensioning
4. Annotation

Module -5- DMU kinematics

1. DMU kinematics
2. Joints
3. Mechanism and Simulations
4. DMU generic animation
5. DMU viewing
6. Render

Module -6- Generative Sheet Metal Design

1. Sheet metal parameters
2. Wall, Wall on edge
3. Bend extremities, Flange, Hem
4. User flange, Bend from flat, Cut out
5. Rolled wall, hopper, bending
6. Conical bend, corner relief
7. Stamping – all types

Module -7- Wireframe and Surface Design

1. Extrude, fill, join, trim, intersection
2. Corner, disassemble, boundary
3. Fillet, sweep

Module -8- Generative Shape Design

1. Combine, 3D curve offset, spiral
2. Extrapolate, blend, net surface
3. Conic, variable, offset, snap

Faculty Incharge

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