



Seating System Design using CATIA V5

Course Curriculum (Duration: 80 Hrs.)

- 1. Basic Fundamentals about Seat**
 - a. Introduction about seat
 - b. Seat types
 - c. Vehicle types
 - d. Seat Features and Components
 - e. Design Parameters
 - f. Manikin Information
 - g. SGRP, H-Point, Torso Angle and Cushion Angle

- 2. Initial Packaging**
 - a. Access to surrounding components
 - b. Spacing availability
 - c. Environmental data
 - d. HR position
 - e. Market Study
 - f. Gap Study
 - g. Control Access Study
 - h. M to M Distance
 - i. Lever Latches Packaging

- 3. ECE regulations**
 - a. Regulations used
 - b. Parameter consider for regulations
 - c. Indian Regulation

- 4. Foam Making & Trim**
 - a. Material
 - b. Process
 - c. Parameters
 - d. Foam built (CAD concept)
 - e. Structural considerations
 - f. Packaging
 - g. Methods used for Trimming

- 5. Armrest \ Headrest Design**
 - a. Material
 - b. Process
 - c. Types
 - d. Regulations used
 - e. Packaging

- 6. Mechanism**
 - a. Types of seats

- b. Types of tracks
- c. Types of Recliner / Latch
- d. Types of HR
- e. Other Mechanisms

7. GD&T

- a. Introduction
- b. Different types of symbols used
- c. Datum's
- d. Features frame
- e. 2D Drawing
- f. Part and Assembly Drawing

8. Layouts

- a. Safety
- b. Comfort
- c. Packaging
- d. Environment
- e. Complete Seat
- f. Fasteners

9. BOM & Assembly

- a. BOM creation and annotations
- b. Significance
- c. Annotation and Details
- d. Assembly structure

10. CATIA Modeling Methodology and Workshops

IFS Academy, Pune

T:+91-20-2543 0338, M: +91-98228 49628, +91-99224 40102, E: training@ifsacademy.org,

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