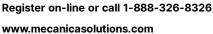


CATIA V5 COMPOSITE PART ENGINEERING

OBJECTIVE: The students will be introduced to how to design simple Composites Parts using a Manual approach. Then learn how to use a Zone-based approach to complete the preliminary design and then the detail ed design. Users will learn the advance Grid based approach of composite modeling. They will also learn how to generate plies automatically, use the analysis tools and simulate fiber behaviour. Finally, the students will learn how to generate exact solids, create composites drawings, Import/ Export Ply data and create Ply Book.

DURATION 5 Days	STUDENT PROFILE CATIA V5 Composite Designers	PRE-REQUISITES V5 Advanced Design
TOPIC	DETAILS	DURATION
Introduction to Composites Design	 Getting Started with CATIA VS CPE Familiarizing with Composites Design approaches and terminologies Design using manual approach Create, modify and analyze the piles with manual approach 	1 DAY
Creating Zone Based Design	 Design using Classic zone approach Design using Solid zone approach Create & Modify Piles with zone approach Create & Modify Piles using solid approach 	.75 DAY
Composite modeling using Grid Approach	 Understand the concept of Grid approach in Composites Design Defining composite parameter, Grid Panel and Virtual Stacking Generate plies using the Grid approach Modify the Ply geometry Create a solid or a top surface using the ply geometry Create and modify a composite part using the Composites Grid Design approach 	1.5 DAYS





Reviewing Composite Entities	 Getting Started with CATIA VS CPE Familiarizing with Composites Design approaches and terminologies Design using manual approach Create, modify and analyze the piles with manual approach 	.5 DAY
Generating Production Data	 Apply the manufacturing constraints like Producibility Generate a Manufacturing Stacking from an Engineering Stacking Synchronize the link between the Manufacturing and Engineering parts Creating Dart Create Multi-Splice and No-Splice on the Plies Compute Flattening 	.75 DAY
Creating Production Documents	 Exporting the Composite data & core samples results Create a drawing from design Create Ply book, review Ply table and perform inspections on design 	.5 DAY