Inceptra™

Hands on, Measurable Training Programs

CATIA V5 Reverse Engineering

Course Code	EDU-CAT-en-QSR-F; DSS-F; DSE-F; RSO-F
Brand & Release	CATIA V5R21, V5R23 (V5-6R2013)
Duration	4 days
Level	Fundamentals
Prerequisites	CATIA V5 Fundamentals

Objectives:

This course will show you how to use tools from the Digitized Shape Editor workbench and tools specific to Quick Surface Reconstruction and Realistic Shape Optimizer. Students will learn how scans and curves can be rapidly created on a mesh, and how surfaces can be quickly derived from the resulting curves. Students will also learn how to use the Shape Sculptor application to add details or deformation to shapes.

Class Structure:

Upon completion of this course you will be able to:

- Import and process scan and point cloud data
- Create curves from scans
- Create surfaces from scans
- Create model and fillet model
- How to use the Shape Sculptor application
- How to import, analyze, enhance meshes
- How to modify meshes by adding details or deforming shapes
- Create tessellated mesh on point cloud data
- Extract characteristic curves from the data
- Export the result in popular file formats
- Deform a surface using the displacement file output from Finite Element Analysis

Class Exercises:

- Plastic Bottle
- Car Body
- Toy Plastic Part
- Washing Powder Bottle
- Hairdryer: Import and Analysis
- Master Exercise: Dashboard
- Bootski: Selection and Mesh
- Bike: Modeling Shapes
- Hair Dryer
- Blade
- Stamped Part
- Plane Wing
- Master Exercise: Plastic Cover