



CATIA 3DEXPERIENCE Surface Design (GSD)

Course Code	CAT-EN-GSD-F-15-181
Brand & Release	CATIA 3DEXPERIENCE R2018x
Duration	3 days
Level	Fundamental
Prerequisites	Experience using CATIA 3DX (V6)

Objectives:

This course will teach you how to use the Generative Shape Design app to create curves and surfaces. You will learn how to assemble, re-limit and connect the geometries smoothly. You will also learn how to analyze the wireframe and the surface quality and rectify the detected defects.

Class Structure:

Upon completion of this course you will be able to:

- Create curves and import wireframe geometry
- Improve the quality of imported wireframes
- Create surfaces based on wireframe geometry
- Assemble, re-limit and connect surfaces smoothly
- Analyze surface quality
- Heal surface defects

Class Lessons:

Lesson 1: Creating Wireframe Geometry

- Create Reference Geometry
- Create 3D Curves
- Managing Curve Continuity
- Exercises

Lesson 2: Creating Surfaces

- Extruding, Revolving and Offset Surfaces
- Sweep and Adaptive Sweep Surfaces
- Multi-Section Surfaces
- Mid Surface Creation
- Exercises

Lesson 3: Surface Re-limitation and Connection

- Re-limiting and Disconnecting Surfaces
- Connecting Surfaces Smoothly
- Assembling Surfaces
- Exercises

Lesson 4: Surface Check Tools

- Checking Surface Continuity
- Checking Surface Moldability
- Exercises

Lesson 5: Master Exercise