# invenio

Invenio is a **Certified Education Partner** of Dassault Systèmes (DS), accredited to deliver training services for software solutions such as CATIA, ENOVIA and 3DVIA. Our trainers are fully qualified DS instructors and our classrooms are equipped to accommodate students with individual workstations. Upon successful completion, students are registered with DS Education Partner Program global database and obtain an official Certificate of Completion.



# **Training Course CATIA Surface Design/Expert (GS1/GSD)**

### **Duration**

24 hours, 4 days (0900 AM to 0500PM)

## **Course Code**

CAT-en-GS1-F-V5Rxx CAT-en-GSD-A-V5Rxx

## **Participant's Profile**

**Mechanical Surface Designers** 

## **Prerequisites**

CATIA Fundamentals course and/or CATIA experience

# **Description**

This course is a combination of the Surface Design Expert (GS1) and Surface Design Expert (GSD) courses.

# GS1

This course will teach you how to use the Generative Shape Design tools. You will learn how to create wireframes and surfaces. You will also learn about the concept of hybrid design and how to use it while creating wireframes and surfaces. This course covers only those Generative Shape Design tools that are available with a MD2 license.

#### **GSD**

This course capitalizes on the knowledge from GS1 and teaches you advanced surface creation tools, quality checking and correction techniques, and surface creation in a multimodel environment. This course covers only those Generative Shape Design tools that are specific to the HD2 license.

Please note that these courses can also be taught separately.

# **Objectives**

Upon completion of this course you will be able to:

# **GS1 Objectives**

- Identify and use the tools that are specific to the Generative Shape Design workbench
- Create simple reference geometry and wireframe geometry
- Use the reference wireframe elements to create simple surfaces
- Create a clean topology from a set of surfaces and smooth sharp edges
- 5. Detect and correct the discontinuities on curves and surfaces
- Create solids from surfaces.

# **GSD Objectives**

- Identify which tools of the Generative Shape Design workbench are common to both MD2 and HD2 licenses
- Identify and use the Generative Shape Design tools that are specific to the HD2 license
- Create advanced and parameterized swept surfaces
- 10. Perform advanced surface analysis and gap correction
- 11. Improve the designed geometry's quality and stability