

SIMULIA Training

« Simulation Model Design Essentials »

General Information

This course is an introduction to creating and assembling geometry in the 3DEXPERIENCE Platform. The focus is on techniques relevant to simulation.

- Duration 1 day
- Langage French / English
- Audience
 - Mechanical Analyst
 - Structural Analysis Engineer
 - Finite Element Modeling & Assembly Specialist
- Prerequisites None

Objectives

Upon completion of this course you will be able to:

- Create basic native solid geometry.
- Create basic native shell geometry.
- Create assemblies of parts

Day 1	
Topics	Description
Lesson 1 : Introduction to the 3DEXPERIENCE Platform Workshop Preliminaries Workshop 1: Getting Started with the 3DEXPERIENCE Platform	<ul style="list-style-type: none"> • What is the 3DEXPERIENCE Platform? • Architecture • Packaging • 3DEXPERIENCE Platform Services • Connecting to the Platform • Platform Interface • Importing and Exporting Data • Searching Data • Exploring Data • Managing Data • Compute Orchestration Services
Lesson 2 : Working with Geometry Workshop 2a: Intersecting Pipes Geometry Workshop 2b: Screwdriver Geometry Workshop 2c: Reinforced Panel Geometry Workshop 2d: Connecting Rod and Piston Geometry	<ul style="list-style-type: none"> • Working in the 3DEXPERIENCE Platform • Importing vs. Building CAD Models • Importing CAD Models • Building CAD Models • Layout • Specification Tree • Data Structure of 3D Parts • Hybrid Design • Part Design Essentials • Generative Wireframe and Surface • Patterning • Stacked Commands



Digital Product Simulation

Lesson 3 : Creating Assemblies

Workshop 3a: Screwdriver Assembly

Workshop 3b: Reinforced Panel Assembly

Workshop 3c: Cargo Crane Assembly

Workshop 3d: Crimp Forming Assembly

Workshop 3e: Connecting Rod and Piston Assembly

- What is an Assembly?
- Inserting Parts in an Assembly
- Positioning Parts
- Creating Multiple Part Instances
- Part-Level Features
- Publications