

SIMULIA Composite Structures Simulation Essentials

Brand & Release	3DEXPERIENCE® R2024x
Duration	12 hours (3 x 4h class sessions)
Level	Fundamentals
Prerequisites	Structural Simulation Essentials

Objectives:

Composite materials are used in many design applications because of their high stiffness-to-weight ratios. This course is an introduction to composites simulation with the Structural Scenario or Mechanical Scenario Creation apps on the 3DEXPERIENCE platform. Composite Layups and Sections are also covered, with hands-on exercises using either Structural Model Creation app or Composites Design app depending on your assigned role.

Class Structure:

Upon completion of this course you will be able to:

- Perform simulations of composite materials.

The course is intended for the following Roles:

- Composites Simulation Engineer
- Composites Structures Performance Engineer
- Composites Structures Analysis Engineer

Class Lessons:

Lesson 1: Overview – Composite Structures Simulation

Lesson 2: Composites Design and Analysis

Lesson 3: Modeling of Composites

Lesson 4: Composites Layups and Sections

Lesson 5: Simulation of Composites

Lesson 6: Damage and Failure in Composites