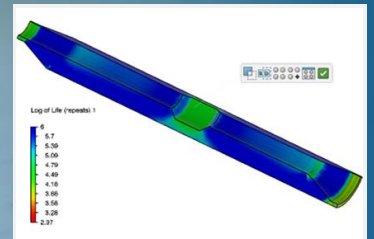


DURABILITY SIMULATION ESSENTIALS

SIMULIA COURSE DESCRIPTION



Level: Fundamental
Products: 3DEXPERIENCE
Disciplines: Structures

Audience

This course is intended for all roles that enable the Durability features of the Structural Scenario Creation or Mechanical Scenario Creation apps, including:

- Structural Analysis Engineer
- Durability Performance Engineer
- Durability and Mechanics Engi

Why take this course?

This course is an introduction to fatigue of metals on the 3DEXPERIENCE platform. Using a structural analysis that has been run in the Structural Scenario or Mechanical Scenario apps, the frames can be used to define a complex fatigue loading history. Depending on the material, the durability case can calculate either stress-life or strain-life damage, infinite life factors or FKM utilization along with other durability output. These can be used to redesign parts and assemblies in conjunction with the structural results.

What will you learn?

Upon completion of this course, you will be able to:

- Create a durability analysis case and define fatigue loading
- Assign fatigue properties of materials and simulate

surface roughness

- Run durability simulations, review fatigue results including log of life and damage

Explore Your Learning Options

Live Sessions	Engage in Real-Time, interactive group workshops guided by experts. Learn and collaborate live in your preferred language and time zone.	Join a live session
On-Demand Learning	Access expert-designed courses anytime, anywhere. Perfect for independent learners looking to build skills on their schedule.	Start Learning Now
Private Training	Exclusive, tailor-made sessions designed to meet your team's unique goals with expert guidance.	Contact Us for Custom Training



Gain hands-on experience and master real-world workflows through guided, practical training sessions.

Run simulations collaboratively within the 3DEXPERIENCE platform, connecting design, data, and analysis seamlessly.

– SIMULIA Training Expert Team

What You Need to Know Before Starting

An understanding of the Structural Scenario Creation or Mechanical Scenario Creation app is recommended prior to taking this course, for instance by completing one of the following:

- Structural Simulation Essentials
- Structural Scenario Creation Essentials

Want to Learn More?

Expand your knowledge by exploring our [course Catalog](#) and browsing learning paths on [Eduspace](#), our dedicated e-learning platform.

Join the Community!

[Join the SIMULIA community](#) to connect, learn, and stay updated.



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