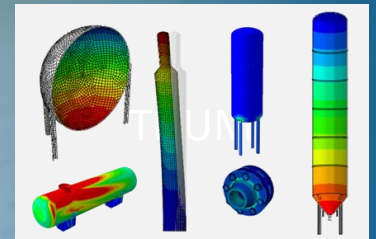


FITNESS-FOR-SERVICE ANALYSIS WITH ABAQUS

SIMULIA COURSE DESCRIPTION



Level: Advanced
Products: Abaqus
Disciplines: Structures

Audience
This course is recommended for Fixed-Equipment Reliability engineers, Fitness-for-Service engineers, Plant process engineers, Plant-equipment inspectors, Plant managers.

Why take this course?

Pressure vessels and piping equipment are periodically assessed based on guidelines prescribed by documents such as ASME/API-579 Fitness-for-Service (FFS). Finite element based Level – 3 assessments are often utilized for assessing equipment with complex geometries and loading conditions. This course discusses methods for modeling common pressure vessels such as distillation towers, storage vessels, etc. using Abaqus/CAE. Methods for application and verification of loads such as weight of contents, internal pressure, etc. using Abaqus/Standard, as required for Level-3 FFS assessments are also discussed. Procedures for analyzing metal loss using the finite element method by mapping thickness readings from scans are also considered. The following products are covered by this course: Abaqus/CAE, Abaqus/Standard. The course is divided into lectures and workshops. The course's workshops are integral to the training. They are designed to reinforce concepts presented during the lectures. They are intended to provide users with the experience of running and trouble-shooting actual Abaqus analyses.

What will you learn?

The following topics are covered in this course:

- Linear and Nonlinear finite element analysis procedures
- Modeling pressure vessel geometries

- Modeling loads and boundary conditions
- Fitness-for-Service assessment procedures
- FEA based Level – 3 Assessment

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.

Apply nonlinear analysis techniques to simulate complex structural and multiphysics problems accurately.

– SIMULIA Training Expert Team

What You Need to Know Before Starting

This course has no prerequisites.

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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