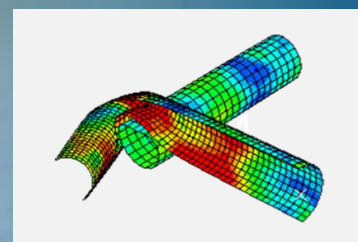


INTRODUCTION TO ABAQUS/STANDARD AND ABAQUS/EXPLICIT

SIMULIA COURSE DESCRIPTION



Level: Fundamental
Products: Abaqus
Disciplines: Structures

Audience
This course is recommended for new Abaqus users who will primarily use third-party preprocessors and whose work will require routine editing of input files.

Why take this course?

This introductory course introduces you to the analysis capabilities of Abaqus using the Abaqus keywords interface. It is the ideal way for those who will primarily use third-party preprocessors to obtain a working knowledge of both Abaqus/Standard and Abaqus/Explicit to solve linear and nonlinear problems. The following products are covered: Abaqus/Standard, Abaqus/Explicit and Abaqus/Viewer. If interested in the interactive interface of Abaqus, consider the Introduction to Abaqus course instead.

What will you learn?

The course covers the following topics:

- Fundamental modeling techniques and syntax
- Linear and nonlinear statics
- Selection of the appropriate element for your problem
- Adaptive load incrementation and convergence criteria
- Interpretation of messages issued by Abaqus
- Geometric, material and contact-induced nonlinearity
- Linear elasticity and metal plasticity
- Restarting of analyses
- Appropriate modeling techniques for contact

problems

- Eigenfrequency extraction
- Linear and nonlinear dynamics
- Model transfer between Abaqus/Explicit and Abaqus/Standard

The course's workshops are an integral part of the training. They are designed to reinforce the concepts presented during the lectures and to provide users with the experience of running and trouble-shooting actual Abaqus analyses. The workshops also provide instruction on using Abaqus postprocessors for results evaluation.

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

No previous knowledge of Abaqus is required, but some basic knowledge of finite elements and continuum mechanics is desirable.

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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