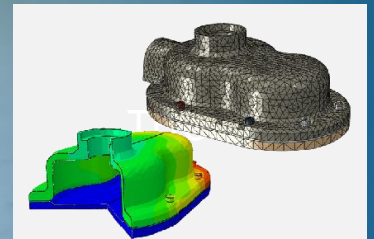


# INTRODUCTION TO ABAQUS

## SIMULIA COURSE DESCRIPTION



**Level:** Fundamental  
**Products:** Abaqus  
**Disciplines:** Structures

**Audience**  
 This course is recommended for new Abaqus users who will primarily use Abaqus/CAE to create their models.

### Why take this course?

This course is a comprehensive and unified introduction to the modeling and analysis capabilities of Abaqus. It teaches you how to solve linear and nonlinear problems, submit and monitor analysis jobs and view simulation results using the interactive interface of Abaqus. The following products are covered: Abaqus/CAE, Abaqus/Standard and Abaqus/Explicit.

### What will you learn?

The course covers the following topics:

- Linear and nonlinear structural analysis
- Static, dynamic and heat transfer analysis
- Material models: linear elasticity, hyperelasticity and metal plasticity
- Loads and constraints
- Modeling contact
- Selecting the appropriate elements for your problem
- Feature-based modeling, parts and assemblies
- Working with CAD geometry and imported meshes
- Mesh generation techniques

- Creating, submitting and monitoring analysis jobs
- Viewing simulation results
- Restarting an analysis

The course is divided into lectures, demonstrations and workshops. The course's workshops are integral to the training. They are designed to reinforce concepts presented during the lectures and demonstrations. They are intended to provide users with the experience of running and troubleshooting actual Abaqus analyses.

### Explore Your Learning Options

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



**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, interactive modeling 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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