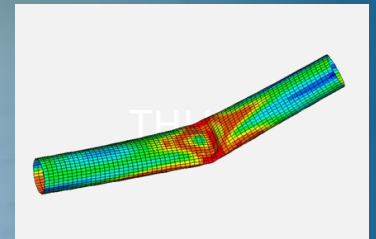


BUCKLING, POSTBUCKLING AND COLLAPSE ANALYSIS

SIMULIA COURSE DESCRIPTION



Level: Advanced
Products: Abaqus
Disciplines: Structures

Audience
This course is recommended for simulation analysts who will perform buckling, postbuckling and collapse analysis.

Why take this course?

Buckling and postbuckling behavior is critical to the success of certain designs. For example, crashworthiness of an automobile requires that particular vehicle components collapse in ways that maximize energy absorption. On the other hand, successful designs of imperfection-sensitive, thin-walled shell structures, ranging from beverage containers to large pressure vessels, must prevent unintentional buckling. This course blends the theoretical background on such topics as geometric nonlinearity and the Riks method together with examples, guidelines and workshops to illustrate how to simulate buckling and postbuckling behavior.

What will you learn?

Upon completion of this course you will be able to:

- Identify an imperfection-sensitive structure
- Extract closely-spaced eigenvalues efficiently
- Introduce imperfections into a “perfect” mesh
- Use the Riks method effectively
- Use damping to control unstable motions

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

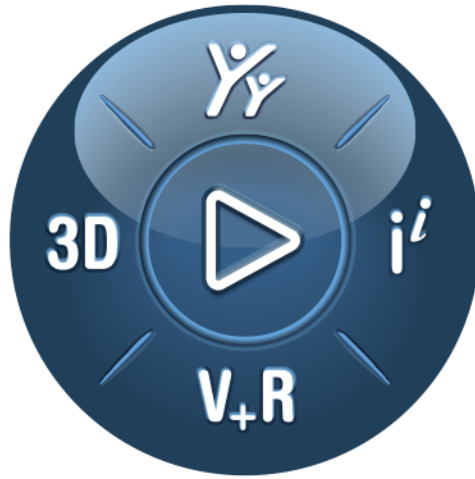
Introduction to Abaqus or equivalent and experience using Abaqus.

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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