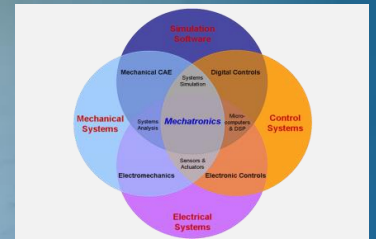


CO-SIMULATION WITH ABAQUS AND DYMOLA

SIMULIA COURSE DESCRIPTION



Level: Advanced
Products: Abaqus
Disciplines: Structures

Audience
 This course is recommended for simulation analysts who need to include logical modeling elements into their simulations.

Why take this course?

Abaqus-Dymola Co-simulation is useful when logical modeling needs to be included in a physical system simulation; for example, it can be used to couple Anti-lock Braking System (ABS) logic modeled in Dymola with an Abaqus rolling tire and brake simulation. In a typical workflow, sensor data computed in Abaqus (the physical system) are passed to Dymola (the controller), which in turn computes the needed actuation to drive the Abaqus model to a desired state. The powerful logical modeling features in Dymola cover a wide variety of engineering fields, such as electromechanics, control systems, hydraulics, pneumatics, etc. This course illustrates coupling Dymola and Abaqus to develop a very versatile logical-physical modeling capability.

What will you learn?

Upon completion of this course you will be able to:

- Set up an Abaqus model for Abaqus-Dymola Co-simulation
- Create a simple control system in Dymola for

Co-simulation

- Run a Co-simulation between Abaqus and Dymola models
- Review the Co-simulation results

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
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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. Experience using Abaqus and a basic understanding of control systems. Some familiarity with Dymola usage is helpful but not required.

Want to Learn More?

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

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