



MODELICA INTRODUCTION COURSE

- ▶ This four-day course is a comprehensive introduction to Modelica. The course teaches the principles of Modelica modeling and gives you insight in and practice from constructs for model development and library design.

The Modelica Introduction Course enables you to create models using Modelica language elements and components from available model libraries, to create custom components and organize your work into reusable libraries.

The course is designed to focus on your understanding and productivity. Each subject is first explained in a lecture focusing on understanding the purpose and usability of the involved features.

GAIN HANDS-ON EXPERIENCE

Following each lecture, there is also an exercise session that lets you practice what you've learned in the lecture. During these exercises, you will build your own model library according to best

practices. As a result, you will have both a model library and the course material to return to for future reference. After this course, you should be fluent in using Modelica to solve your engineering problems with a solid understanding of the different language elements and constructs.

TOOL INDEPENDENT

The course conforms with the Modelica Standard and therefore applies to any Modelica compliant tool.

WHO SHOULD ATTEND?

Users who want to learn Modelica modeling should attend this training. No previous knowledge of Modelica is required, but some skills in a Modelica tool are recommended.

- Your understanding and productivity is priority
- Practice what you learn yourself, with our experienced instructors
- From day 1 we teach you best practices in modeling
- The course material is yours to keep as reference in your daily work

▶ **REGISTRATION:**

For more detailed information about the course, contact:

sales@modelon.com

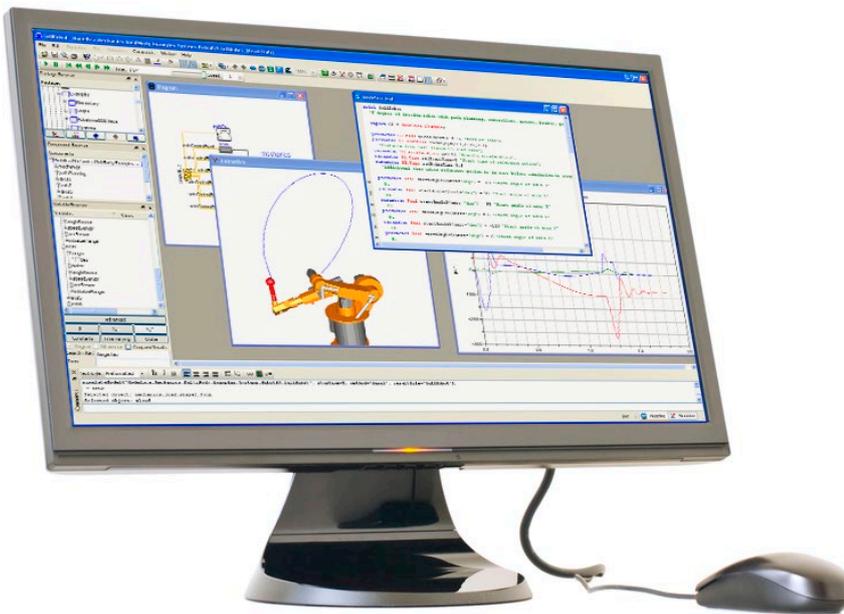
or visit www.modelon.com



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► THE COURSE COVERS THE FOLLOWING TOPICS:

- Interactive multi-domain modeling using components from the Modelica Standard Library
- Principles of physical modeling in Modelica
- Basics of the Modelica modeling language
- Introduction to FMI technology
- Organization and structuring of large models
- Best practices in model development
- Building custom model libraries
- Creating custom model components in Modelica
- Simulation and linearization
- Working with model templates and interfaces
- Working with discrete events
- Modelica traps and pitfalls
- Troubleshooting models and numerical problems
- Data management in models



We offer a selection of Modelica related courses, as well as custom training. Some examples are:

- FMI Introduction
- Thermo-fluid modeling
- Mechanics modeling
- Introduction to Modelon's Libraries
- Dymola Introduction

A day contains three sessions, each containing a lecture, demonstrations and a set of exercises that give you hands-on practice guided by our instructors.

DAY 1

- Overview of Dymola and physical modeling
- Simulation and post-processing
- Configure system models

DAY 2

- Modelica I – writing Modelica models
- Understanding equation-based modeling
- Troubleshooting and common pitfalls

DAY 3

- Modelica II – Advanced features
- Working with the Modelica Standard Library
- Hybrid modeling

DAY 4

- Efficient and reconfigurable modeling
- Model variants and data management
- FMI technology

MODELICA

Modelica is a non-proprietary, object-oriented, equation-based language to conveniently model complex physical systems. Modelon is a member of the Modelica Association and take active part in developing Modelica.

