

Product Design Simulation Essentials

R2014X



3DEXPERIENCE



About this Course

Course objectives

Upon completion of this course you will be able to:

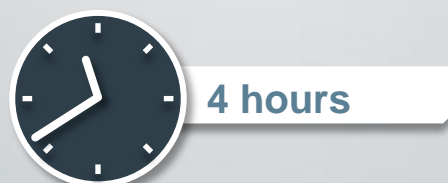
- ▶ Search for simulation data in the database
- ▶ Open the simulation for modification
- ▶ Perform a structural/frequency simulation using the Structural Validation app
- ▶ Perform a thermal simulation the Structural Validation app
- ▶ Review simulations stored in a database and generate reports

Targeted audience

Designers, Analysts

Prerequisites

None



Day 1

- ▶ Lesson 1 Product Design Simulation
- ▶ Workshop 1 Stress Analysis of a Medication Reminder
- ▶ Workshop 2 Stress Analysis of a Pump Assembly
- ▶ Workshop 3 Thermal Simulation of a Heat Sink

Join the Community!

How can you maximize the robust technology of Abaqus FEA and Isight?

Connect with peers to share knowledge and get technical insights



 **SIMULIA**

Let the **SIMULIA Learning Community** be *Your* Portal to 21st Century Innovation

Discover new ways to explore how to leverage realistic simulation to drive product innovation. Join the thousands of Abaqus and Isight users who are already gaining valuable knowledge from the SIMULIA Learning Community.

For more information and registration, visit 3ds.com/simulia-learning.
Connect. Share. Spark Innovation.

 **DASSAULT
SYSTEMES** | The **3DEXPERIENCE** Company

Legal Notices

The Software described in this documentation is available only under license from Dassault Systèmes and its subsidiary and may be used or reproduced only in accordance with the terms of such license.

This documentation and the software described in this documentation are subject to change without prior notice.

Dassault Systèmes and its subsidiaries shall not be responsible for the consequences of any errors or omissions that may appear in this documentation.

No part of this documentation may be reproduced or distributed in any form without prior written permission of Dassault Systèmes or its subsidiary.

© Dassault Systèmes, 2014.

Printed in the United States of America

The 3DS logo, SIMULIA and CATIA are trademarks or registered trademarks of Dassault Systèmes or its subsidiaries in the US and/or other countries.

Other company, product, and service names may be trademarks or service marks of their respective owners. For additional information concerning trademarks, copyrights, and licenses, see the notices at: <http://www.3ds.com/products/simulia/portfolio/product-os-commercial-programs>.

Revision Status

Lesson 1	2/14	Updated for R2014X
Workshop 1	2/14	Updated for R2014X
Workshop 2	2/14	New for R2014X
Workshop 3	2/14	New for R2014X

Lesson 1: Product Design Simulation

- ▶ Lesson content:
- ▶ Introduction
- ▶ Basics
- ▶ Using the Interface
- ▶ Running a simulation
 - Step 1: Contributing Parts
 - Step 2: Materials
 - Step 3: Connections
 - Step 4: Restraints
 - Step 5: Loads
 - Step 6: Simulate
 - Step 7: Results



4 hours