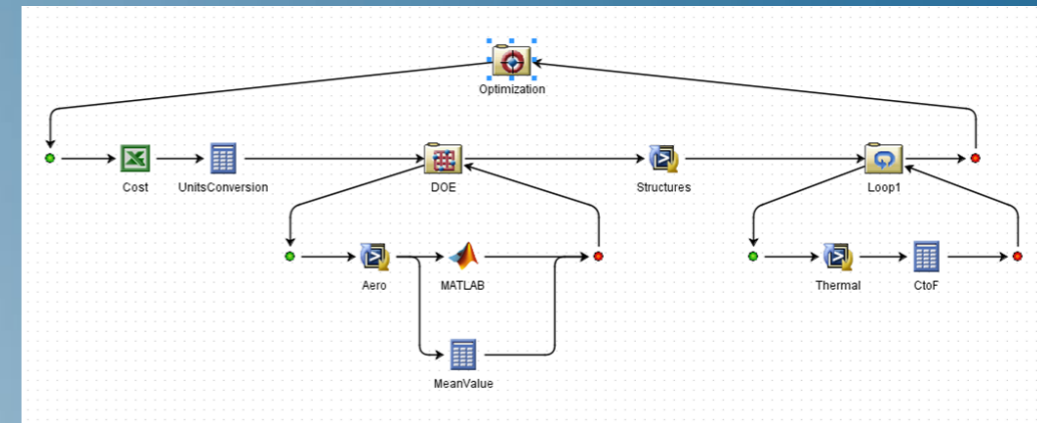


# Introduction to Isight

Isight 2021



# About this Course

## Course objectives

Upon completion of this course you will be able to:

- ▶ Automate a series of functions to create a Sim-flow
- ▶ Add components to a Sim-flow
- ▶ Set up the core component
- ▶ Configure components to pass data to/from each other
- ▶ Execute a Sim-flow
- ▶ Visualize Sim-flow results
- ▶ Evaluate design alternatives
- ▶ Create a Sim-flow to capture a process, by integrating various software in the company.
- ▶ Perform Design Optimization and gain Design Space understanding by using various techniques such as DOE, Optimization, Monte Carlo etc.

## Targeted audience

Simulation Analysts

## Prerequisites

None



2 days

# Day 1

---

- ▶ Lesson 1 Introduction
  - Demonstration
  
- ▶ Lesson 2 Isight Overview
  - Workshop 1 Exploration of an Isight Model
  
- ▶ Lesson 3 Design of Experiments
  - Workshop 2 I-Beam DOE
  
- ▶ Lesson 4 Optimization
  - Workshop 3 I-Beam Optimization
  
- ▶ Lesson 5 Monte Carlo and Six Sigma
  - Workshop 4 Plate Weld Monte Carlo and Six Sigma

## Day 2

---

- ▶ Lesson 6                      Approximations
- ▶ Workshop 5                    I-Beam Approximations
  
- ▶ Lesson 7                      Isight Components (Part 1)
  - Workshop 6                  SimCode Component – EngSim
  - Workshop 7                  Calculator Component
  - Workshop 8                  Mapping and Parallel Sim-flows
  - Workshop 9                  Excel Component
  
- ▶ Lesson 8                      File Handling
  - Workshop 10                Advanced Parsing
  - Workshop 11                Loops and Publishing
  - Workshop 12                Combining Models
  - Workshop 13                File Parameters
  - Workshop 14                Data Management (optional)
  
- ▶ Lesson 9                      Isight Components (Part 2)
  - Workshop 15a                Data Matching (*for non-Abaqus users*)
  - Workshop 15b                Data Matching on Abaqus Results (*for Abaqus users*)

# Additional Material

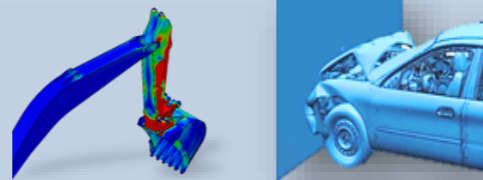
---

- ▶ Appendix 1      Isight Components (Part 3)

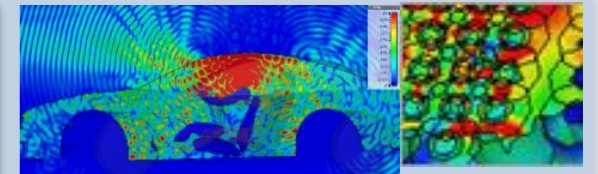
# SIMULIA

- ▶ SIMULIA is the Dassault Systèmes brand for realistic simulation solutions.
- ▶ Advanced simulation portfolio covering simulation disciplines such as structural mechanics, computational fluid dynamics and electromagnetic field simulation, for a true multiphysics simulation approach.

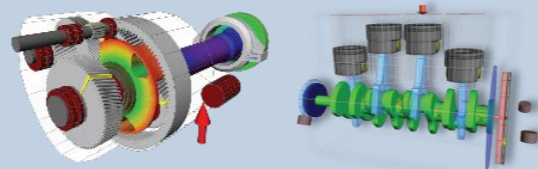
## Structures



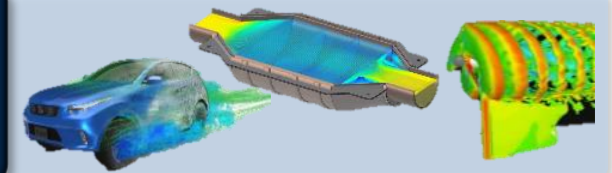
## Electromagnetics



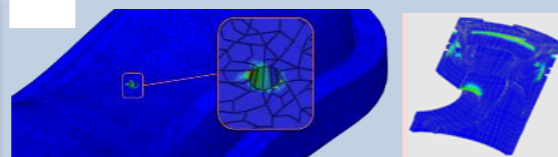
## Multibody



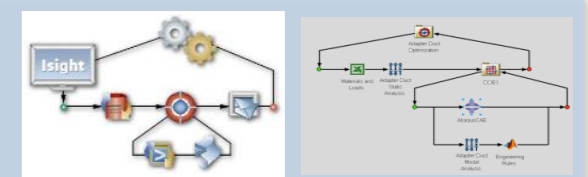
## Fluids



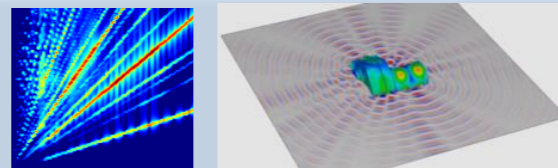
## Durability



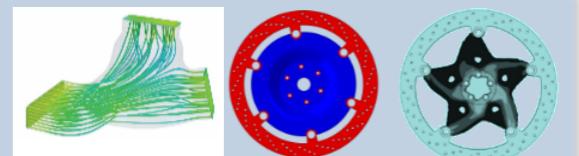
## Automation



## Vibro-acoustics



## Optimization



# Join the Community!

Go to [www.3ds.com/slc](http://www.3ds.com/slc) to log in or join!



## SIMULIA COMMUNITY

BECOME PART OF A GLOBAL USER COMMUNITY FOCUSED ON ADVANCING THE USE OF SIMULIA SIMULATION SOLUTIONS IN SCIENCE AND ENGINEERING

[LOGIN NOW](#)

### Join Us

Interested in the latest in simulation? Looking for advice and best practices? Want to discuss simulation with fellow users and Dassault Systèmes experts?

The SIMULIA Community is the place to be.

Simply [log in](#) with your 3DS Passport username and password. If you use DSx Client Care for technical support, you can use these same credentials to access the community.

If you do not already have a 3DS Passport, you can [register now](#). An account is free and access is instant.



### Join the conversation

Start a discussion with other members of the SIMULIA Community. Talk through your burning simulation questions with peers, SIMULIA experts and SIMULIA Champions. Apply to be an author to create posts, share useful tips you've discovered for SIMULIA software and establish yourself as a thought-leader. The SIMULIA Community is home to both SIMULIA product users across the world, and to SIMULIA subject matter experts.

### Stay up to date on the latest news

Modern industry trends change rapidly, and SIMULIA is always developing its products to stay ahead. Follow the SIMULIA Community to be informed of new product releases and updates to the Knowledge Base, and to receive links to articles and blog posts about the latest industry trends.



### Browse e-learning resources

The SIMULIA Community brings together learning materials covering numerous applications for SIMULIA products. Read a whitepaper on the benefits of simulation in your work, discover tips and tricks for using SIMULIA software efficiently, or watch a demonstration of how to use simulation to achieve your goals.

# SIMULIA Training

<https://www.3ds.com/products-services/simulia/training/>



## SIMULIA TRAINING

PROVIDING TRAINING SERVICES TO ENABLE OUR CUSTOMERS TO BE MORE PRODUCTIVE AND COMPETITIVE

FIND A BUSINESS PARTNER

### Simulation Training

SIMULIA and our education partners offer regularly scheduled public seminars as well as training courses at customer sites. An extensive range of courses are available, ranging from basic introductions to advanced courses that cover specific analysis topics and applications. The same courseware, and other content, is available for self-paced eLearning. On-site courses can be customized to focus on topics of particular interest to the customer, based on the customer's prior specification. To view the worldwide course schedule, register for a course, or to learn more about our eLearning options, visit the links below.

### SIMULIA DIRECT TRAINING



Instructor-lead training of both off-the-shelf materials and customized content based on your needs.

### MENTORING



Mentoring consists of short-term engagements to accelerate the efficiency and effectiveness of your processes

### EDUCATION PARTNER TRAINING



SIMULIA has a large eco-system of education partners with certified instructors who also

### SIMULIA E-LEARNING RESOURCES



SIMULIA provides extensive eLearning solutions, published on various platforms, to enable:



## Legal Notices

---

The software described in this documentation is available only under license from Dassault Systèmes or its subsidiaries 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 subsidiaries.

© Dassault Systèmes, 2020

Printed in the United States of America.

Abaqus, the 3DS logo, and SIMULIA 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 Legal Notices in the SIMULIA User Assistance.

# Revision Status

<b>Lesson 1</b>	<b>11/20</b>	<b>Updated for Isight 2021</b>
<b>Lesson 2</b>	<b>11/20</b>	<b>Updated for Isight 2021</b>
<b>Lesson 3</b>	<b>11/20</b>	<b>Updated for Isight 2021</b>
<b>Lesson 4</b>	<b>11/20</b>	<b>Updated for Isight 2021</b>
<b>Lesson 5</b>	<b>11/20</b>	<b>Updated for Isight 2021</b>
<b>Lesson 6</b>	<b>11/20</b>	<b>Updated for Isight 2021</b>
<b>Lesson 7</b>	<b>11/20</b>	<b>Updated for Isight 2021</b>
<b>Lesson 8</b>	<b>11/20</b>	<b>Updated for Isight 2021</b>
<b>Lesson 9</b>	<b>11/20</b>	<b>Updated for Isight 2021</b>
<b>Appendix 1</b>	<b>11/20</b>	<b>Updated for Isight 2021</b>

<b>Workshop 1</b>	<b>11/20</b>	<b>Updated for Isight 2021</b>
<b>Workshop 2</b>	<b>11/20</b>	<b>Updated for Isight 2021</b>
<b>Workshop 3</b>	<b>11/20</b>	<b>Updated for Isight 2021</b>
<b>Workshop 4</b>	<b>11/20</b>	<b>Updated for Isight 2021</b>
<b>Workshop 5</b>	<b>11/20</b>	<b>Updated for Isight 2021</b>
<b>Workshop 6</b>	<b>11/20</b>	<b>Updated for Isight 2021</b>
<b>Workshop 7</b>	<b>11/20</b>	<b>Updated for Isight 2021</b>
<b>Workshop 8</b>	<b>11/20</b>	<b>Updated for Isight 2021</b>
<b>Workshop 9</b>	<b>11/20</b>	<b>Updated for Isight 2021</b>
<b>Workshop 10</b>	<b>11/20</b>	<b>Updated for Isight 2021</b>
<b>Workshop 11</b>	<b>11/20</b>	<b>Updated for Isight 2021</b>
<b>Workshop 12</b>	<b>11/20</b>	<b>Updated for Isight 2021</b>
<b>Workshop 13</b>	<b>11/20</b>	<b>Updated for Isight 2021</b>
<b>Workshop 14</b>	<b>11/20</b>	<b>Updated for Isight 2021</b>
<b>Workshop 15a</b>	<b>11/20</b>	<b>Updated for Isight 2021</b>
<b>Workshop 15b</b>	<b>11/20</b>	<b>Updated for Isight 2021</b>

