## **COURSE CATALOG**

V5 March 2014



# **3DS Learning Solutions** | Course Catalog © 2007-2013 Dassault Systèmes - All rights reserved No part of this publication may be reproduced, translated, stored in retrieval system or transmitted, in any form or by any means, including electronic, mechanical, photocopying, recording or otherwise,

without the express prior written permission of DASSAULT SYSTEMES. This courseware may only be used with explicit DASSAULT SYSTEMES agreement.

## SIMULIA SIMULIA V5 Abaqus

Introduction to Abaqus for CATIA V5 (AFC)	
Course Code	SIM-en-AFC-F-V5R21
Available Release	V5R21
Duration	16 hours
Course Materials	English , Japanese
Level	Fundamental
Audience	This course is recommended for engineers with experience using Abaqus and CATIA V5, especially the Generative Structural Analysis workbench.
Description	This course teaches you how perform analyses of the parts and assemblies using Abaqus for CATIA. You will be taught to work with nonlinear analysis tools. You will become familier with the Structural Analysis workbech and Thermal Analysis workbench. You will also become familier with Explicit Dynamic Analysis.
Objectives	<ul> <li>Upon completion of this course you will be able to:</li> <li>Integrate AFC with CATIA V5</li> <li>Manage analysis cases and analysis steps</li> <li>Manage loads, boundary conditions and fields</li> <li>Manage model, assembly and part properties</li> <li>Understand geometric nonlinearity</li> <li>Understand the contact</li> <li>Perform static and thermal analysis</li> <li>Analyse the results</li> </ul>
Prerequisites	None
Available Online	Yes

## SIMULIA SIMULIA V5 Analysis

Introduction to Nonlinear Structural Analysis And Thermal Analysis (ANL)	
Course Code	SIM-en-ANL-F-V5R21
Available Releases	V5R19 , V5R20 , V5R21
Duration	16 hours
Course Materials	English , Japanese
Level	Fundamental
Audience	Mechanical Designers, Analysts
Description	This course introduces two products, Nonlinear Structural Analysis (ANL) and Thermal Analysis (ATH). Together, these products extend the existing CATIA V5 Analysis capabilities. They let designers extend their product simulation capabilities to consider permanent material deformation, large displacements, and advanced contact, as well as response to thermal loading. You will follow the general process to perform a finite element analysis for parts and assemblies and learn how to use the different tools to achieve this.
Objectives	<ul> <li>Upon completion of this course you will be able to:</li> <li>Define different analysis cases and analysis steps</li> <li>Define loads, boundary conditions, and fields using ANL/ATH workbenches</li> <li>Define model properties and part properties</li> <li>Mesh the parts and apply mesh properties</li> <li>Define contact pairs, general contacts, and connection properties</li> <li>Manage the analysis files using Job Manager</li> <li>Perform post processing to visualize the results</li> </ul>
Prerequisites	CATIA V5 Fundamentals And CATIA V5 Analysis

# Introduction to Nonlinear Structural Analysis And Thermal Analysis (ANL)

Available Online

Yes