



Design & Engineering e-Learning Subscription

Powered by Hexagon's Manufacturing Intelligence division





Nexus Academy Improving the User Experience

Nexus Academy is a Learning Management System (LMS) for all your product training needs. Providing introductory concepts to advanced practices, Nexus Academy eLearning and Instructor-Led courses are designed to enhance industry knowledge, as well as improve skills. Our course content incorporates real-world scenarios, hands-on simulations, and best practices, in addition to fundamental lessons for a comprehensive learning experience.

Key Benefits



**Comprehensive
Course Catalog**



**Knowledgeable Training
Instructors**



**Flexible Training
Solutions**



**Convenient
Global Access**

Platform Features:

- Filter by type or product
- Forum for questions and comments
- Comprehensive training records and certificates

Hexagon offers superior training services from our Industry leading experts providing in-depth training on our vast amount of products and solutions.

As a member of the Nexus Academy Education Program, you can take advantage of various learning opportunities. Please visit the Catalog page for a complete list of educational content. You can enroll for training, complete self-paced courses, register for distance learning, classroom instruction, live training events, and download or print your completion certificate. For Nexus Academy support, email nexus.academy@hexagon.com.

Design & Engineering e-Learning Subscription Course Catalog (version 24)

ACTRAN Courses

ACTRAN - Duct Propagation
ACTRAN - High frequency response using VirtualSEA
ACTRAN - HVAC Noise
ACTRAN - Introduction to Actran and Acoustics
ACTRAN - Powertrain Radiation
ACTRAN - Spacecraft launch
ACTRAN - Tire noise radiation
ACTRAN - Turbomachinery noise

ADAMS Courses

ADAMS - Fundamentals of Multibody Dynamics Analysis
ADAMS - Complete Multibody Dynamics Analysis
ADAMS - Adams Explore
ADAMS - Modeler Overview
ADAMS - Formula SAE Applications using Adams Car
ADAMS - Solver Theory: Achieving Robust, Converged Solutions
ADAMS - Tracked Vehicle
ADAMS - Advanced Drivetrain Modeling with Gear AT
ADAMS - Advanced Modeling Elements and Techniques with Solver
ADAMS - Advanced Parametrics, Design Sensitivity and Optimization using Adams/View
ADAMS - Automating Tasks using Adams/View Scripting, Macros, and GUI Customization
ADAMS - Basic Suspension and Full Vehicle Analysis using Adams/Chassis
ADAMS - Control System Integration using MATLAB or Easy5
ADAMS - Design of Experiments (DOE) and Stochastics (Monte Carlo) Analyses
ADAMS - Flex Body Dynamics and Modal Stress Recovery
ADAMS - Frequency Domain Analysis using Adams/Vibration
ADAMS - Gear, Belt, and Chain Modeling with Adams Machinery
ADAMS - Introduction to Adams Python for Automating Tasks using Adams View Python Scripts
ADAMS - Vehicle Modeling and Simulation using Adams Car
ADAMS - Writing User Subroutines in Adams/Solver
ADAMS - Car Driving Machine
ADAMS - Car Electric Vehicle Modeling
ADAMS - Tire
ADAMS - Vehicle Modeling and Simulation using Adams/Driveline
ADAMS - What's New in Adams
ADAMS - Solver 理論トレーニング
ADAMS - Certification Exam - Complete Multibody Dynamics Analysis
ADAMS - Certification Exam - Fundamentals of Multibody Dynamics Analysis
ADAMS - Certification Exam - Advanced Modeling Elements and Techniques with Adams Solver
ADAMS - Certification Exam - Advanced Parametrics, Design Sensitivity, and Optimization using AdamsView

ADAMSCourses

ADAMS - Certification Exam - Automating Tasks using AdamsView Scripting, Macros, and GUI Customization
ADAMS - Certification Exam - Flex Body Dynamics and Modal Stress Recovery
ADAMS - Certification Exam - Control System Integration using MATLAB or Easy5
ADAMS - Certification Exam - Design of Experiments (DOE) and Stochastics (Monte Carlo) Analysis
ADAMS - Certification Exam - Vehicle Modeling and Simulation using AdamsCar
ADAMS - 入門トレーニング
ADAMS - Flex トレーニング
ADAMS - Bearing AT
ADAMS - Emag AT
ADAMS - Gear AT
ADAMS - View アドバンストレーニング
ADAMS - Car ベーシックトレーニング

CRADLE CFD Courses

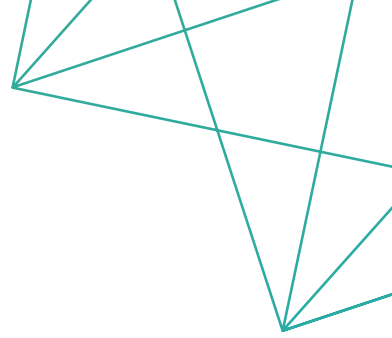
CRADLE CFD - Advanced Postprocessing
CRADLE CFD - Importing and Cleaning CAD Data
CRADLE CFD - PICLS Training
CRADLE CFD - scFLOW Demonstration - Simple Thermo-Fluid Analysis
CRADLE CFD - scSTREAM Introductory Seminar
CRADLE CFD - STREAMアドバンストレーニング（建築環境編）
CRADLE CFD - 熱流体理論トレーニング
CRADLE CFD - Introduction to Computational Fluid Dynamics
CRADLE CFD - scSTREAM for Electronics Seminar One
CRADLE CFD - scSTREAM for Electronics Seminar Two
CRADLE CFD - scSTREAM・熱設計PAC入門トレーニング
CRADLE CFD - scFLOW入門トレーニング

DIGIMAT Courses

DIGIMAT - Introduction to Multi-scale Material Modeling
DIGIMAT - Continuous Fiber Reinforced Plastic
DIGIMAT - Chopped Fiber Reinforced Plastic
DIGIMAT - Digimat FE トレーニング
DIGIMAT - Digimat マルチスケール解析トレーニング

DYTRAN Courses

DYTRAN - Dytran Structures and Fluids
DYTRAN - Introduction to Airbag Analysis and Occupant Safety



EASY5 Courses

- EASY5 - Interfacing EASY5 with Other Software
- EASY5 - Modeling and Simulation of Electrical Systems
- EASY5 - Dynamic System Modeling and Simulation
- EASY5 - Modeling and Simulation of Fluid Power Systems
- EASY5 - Modeling and Simulation of Gas Systems
- EASY5 - Modeling and Simulation of Multi-Phase Fluids
- EASY5 - Overview and Usage of the EASY5 Matrix Algebra Tool
- EASY5 - Python Scripting
- EASY5 - Working with Libraries and Custom Components

Electric Vehicle Structure and Acoustics Courses

- Electric Vehicle Structure and Acoustics - Basic_Concepts_in_Actran
- CRADLE CFD - Electric Vehicle Structure and Acoustics
- Electric Vehicle Structure and Acoustics - Introduction to Acoustics with Actran Electric Vehicle Structure and Acoustics - Romax_Electric Drive and Transmission

FATIGUE Courses

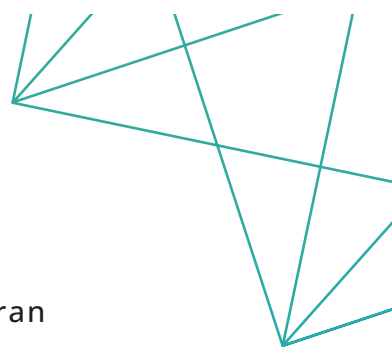
- FATIGUE - Advanced Durability and Fatigue Life Analysis
- FATIGUE - Basic Durability and Fatigue Life Analysis

FLIGHTLOADS Course

- FLIGHTLOADS - Aeroelasticity Using FlightLoads and Patran

FORMINGSUITE Courses

- FORMINGSUITE - COSTOPTIMIZER - Basic Introduction
- FORMINGSUITE - FS COSTOPTIMIZER
- FORMINGSUITE - FS FASTFORM Advanced
- FORMINGSUITE - FS FASTIncremental
- FORMINGSUITE - COSTOPTIMIZER Advanced: An Introduction
- FORMINGSUITE - COSTOPTIMIZER: Basic Introduction
- FORMINGSUITE - COSTOPTIMIZER Professional: An Introduction
- FORMINGSUITE - FASTFORM Advanced An Introduction
- FORMINGSUITE - FormingSuite 2021 Geometry and 3D Addendum Workbenches: Basic Introduction
- FORMINGSUITE - FormingSuite Professional: An Introduction
- FORMINGSUITE - FS Advanced Features - 3D Addendum
- FORMINGSUITE - FS Advanced Features - Double Attached
- FORMINGSUITE - FS COSTOPTIMIZER Advanced
- FORMINGSUITE - FS COSTOPTIMIZER Professional - Progressive Dies
- FORMINGSUITE - FS COSTOPTIMIZER Professional - Transfer Dies
- FORMINGSUITE - PROCESS PLANNER Line Die Plan: An Introduction
- FORMINGSUITE - PROCESS PLANNER Prog Die Process An Introduction



MARC & MENTAT Courses

MARC & MENTAT - Certification Exam - Basic Nonlinear Analysis
MARC & MENTAT - Advanced Nonlinear Analysis
MARC & MENTAT - Advanced Nonlinear Analysis using Marc and Patran
MARC & MENTAT - Basic Nonlinear Analysis
MARC & MENTAT - Basic Nonlinear Analysis using Marc and Patran
MARC & MENTAT - Experimental Elastomer Analysis
MARC & MENTAT - Thermal Protection Systems Analysis
MARC & MENTAT - Whats New in Marc
MARC & MENTAT - Marc 2013.1 初級トレーニング
MARC & MENTAT - Marc 2019 FP1 初級オンラインセミナー
MARC & MENTAT - Marc 接触解析トレーニング
MARC & MENTAT - Marc 2023.2 入門トレーニング

MATERIAL CENTER Courses

MATERIALCENTER - Introduction to MaterialCenter
MATERIALCENTER - MaterialCenter for the Materials Engineer
MATERIALCENTER - Introduction to MaterialCenter - MaterialCenter User Interface
MATERIALCENTER - Introduction to MaterialCenter - MaterialCenter Introduction
MATERIALCENTER - Introduction to MaterialCenter - Viewing and Searching for Data
MATERIALCENTER - Introduction to MaterialCenter - MaterialCenter UI Tour

MATERIALS MANAGEMENT Course

MATERIALS MANAGEMENT - Materials Connect - Get Started

MSC APEX Courses

MSC APEX - Linear Static and Normal Modes Analysis
MSC APEX - Practicals for Strength of Materials and other Engineering Concepts
MSC APEX - Overview of Python Scripting API in MSC Apex

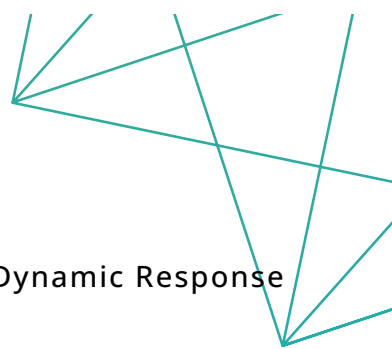
MSC APEX GENERATIVE DESIGN Courses

MSC APEX GENERATIVE DESIGN - Dive into the Workflow & Features of MSC Apex Generative Design
MSC APEX GENERATIVE DESIGN - Introduction to the Mindset of MSC Apex Generative Design
MSC APEX GENERATIVE DESIGN - Part Consolidation Workflow for Assemblies in MSC Apex Generative Design
MSC APEX GENERATIVE DESIGN - Post Processing & Solution Workflow with MSC Apex Generative Design
MSC APEX GENERATIVE DESIGN - Refining Models through Advanced Modeling & Simulation Techniques in MSC Apex Generative Design
MSC APEX-GD - Introduction to the Mindset of MSC Apex Generative Design



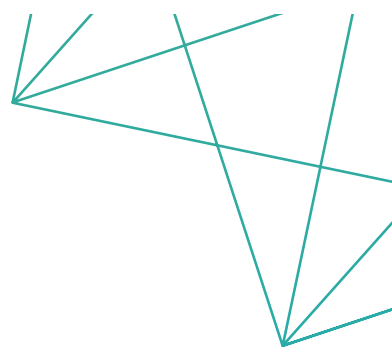
MSC NASTRAN Courses

- MSC NASTRAN - Certification Exam - Advanced Contact Analysis using MSC Nastran and Patran
- MSC NASTRAN - Certification Exam - Advanced Linear Analysis
- MSC NASTRAN - Certification Exam - Advanced Substructure Analysis using MSC Nastran - Secondary Superelements
- MSC NASTRAN - Certification Exam - Basic Substructure Analysis using MSC Nastran - Primary Superelements
- MSC NASTRAN - Certification Exam - Composite Material Analysis
- MSC NASTRAN - Certification Exam - Contact Analysis using MSC Nastran and Patran
- MSC NASTRAN - Certification Exam - Dynamic Analysis
- MSC NASTRAN - Certification Exam - Implicit Nonlinear Analysis Using MSC Nastran and Patran
- MSC NASTRAN - Certification Exam - Linear Static Analysis using MSC Nastran and Patran
- MSC NASTRAN - Certification Exam - Linear Static and Normal Modes Analysis MSC NASTRAN - Advanced Contact Analysis using Contact Pairs in MSC Nastran and Patran
- MSC NASTRAN - Advanced Dynamic Analysis
- MSC NASTRAN - Advanced Linear Analysis
- MSC NASTRAN - Advanced Substructure Analysis using MSC NASTRAN - Secondary Superelements
- MSC NASTRAN - Aeroelasticity
- MSC NASTRAN - Implementation of Fatigue Methods using MSC Nastran-Embedded Fatigue (NEF) with Patran
- MSC NASTRAN - Basic Substructure Analysis using MSC NASTRAN - Primary Superelements
- MSC NASTRAN - Composite Material Analysis
- MSC NASTRAN - Contact Analysis using MSC Nastran and Patran
- MSC NASTRAN - Design Sensitivity and Optimization
- MSC NASTRAN - Dynamic Analysis
- MSC NASTRAN - Explicit Nonlinear Analysis (SOL700) using MSC Nastran and Patran
- MSC NASTRAN - Fluid Structure Analysis
- MSC NASTRAN - HDF5 Usage in Nastran and Patran
- MSC NASTRAN - Whats New in MSC Nastran and Patran
- MSC NASTRAN - Implicit Nonlinear Analysis using MSC Nastran and Patran
- MSC NASTRAN - Linear Static Analysis using MSC Nastran and Patran
- MSC NASTRAN - Linear Static and Normal Modes Analysis
- MSC NASTRAN - Rotordynamic Analysis
- MSC NASTRAN - Thermal Analysis (SOL400)
- MSC NASTRAN - Working with Custom MSC Nastran Solution Sequences using DMAP
- MSC NASTRAN - 入門トレーニング
- MSC NASTRAN - 動解析トレーニング
- MSC NASTRAN - Design Sensitivity and Optimization - MSC Nastran Topology Optimization
- MSC NASTRAN - Design Sensitivity and Optimization - MSC Nastran Aeroelastic Optimization
- MSC NASTRAN - Design Sensitivity and Optimization - MSC Nastran and Patran Optimization Setup Introduction
- MSC NASTRAN - Automatic Output of Mechanisms and Rigidbody Modes
- MSC NASTRAN - AUTOMSET Enhancements



MSC NASTRAN Courses

- MSC NASTRAN - Co-Simulation Enhancement in Nastran
- MSC NASTRAN - Design Sensitivity and Optimization - MSC Nastran Dynamic Response Optimization
- MSC NASTRAN - Coupled Modes Enhancement
- MSC NASTRAN - Design Sensitivity and Optimization - MSC Nastran Global Optimization
- MSC NASTRAN - Design Sensitivity and Optimization - MSC Nastran Multi Model Optimization
- MSC NASTRAN - Cuntze-Bold Failure and Material Model
- MSC NASTRAN - External Modules
- MSC NASTRAN - MMPDS S-N Definitions and Mean Stress Correction
- MSC NASTRAN - Nastran 2022.2 ACMS Robustness- Conversion of Shells Skinning Solids to Membrane-only Behavior
- MSC NASTRAN - New Singularities.bdf Output File for Massless Mechanisms
- MSC NASTRAN - Design Sensitivity and Optimization - MSC Nastran Optimization with Superelements
- MSC NASTRAN - Numerical Methods and Performance Enhancements
- MSC NASTRAN - Poroelastic Material Data Encryption
- MSC NASTRAN - Random Response Enhancements
- MSC NASTRAN - Segment-to-Segment Contact Nodal Penalty
- MSC NASTRAN - SOL 106-129 to SOL 400 Translator Utility
- MSC NASTRAN - SOL 400 New Heat Transfer Chaining Capability
- MSC NASTRAN - Table of Content
- MSC NASTRAN - Design Sensitivity and Optimization - MSC Nastran Shape Optimization
- MSC NASTRAN - Design Sensitivity and Optimization - MSC Nastran Sizing Optimization
- MSC NASTRAN - Design Sensitivity and Optimization - MSC Nastran Topography Optimization
- MSC NASTRAN - Design Sensitivity and Optimization - MSC Nastran Topometry Optimization
- MSC NASTRAN - Design Sensitivity and Optimization - MSC Nastran Nonlinear Optimization
- MSC NASTRAN - Design Sensitivity and Optimization - Overview of MSC Nastran Optimization
- MSC NASTRAN - Design Sensitivity and Optimization - Understanding MSC Nastran Optimization Output
- MSC NASTRAN - Design Sensitivity and Optimization - MSC Nastran Design Sensitivity Analysis
- MSC NASTRAN - Certification Exam - Basic Dynamic Analysis using MSC Nastran and Patran



NEXUS COURSES

- NEXUS - Add products to your dashboard
- NEXUS - Change your default language
- NEXUS - Get started
- NEXUS - Create a new Nexus project
- NEXUS - Get started with Workholding Catalog
- NEXUS - Workholding Catalog - Grid View
- NEXUS - Plastics Gate Optimizer - Pilot phase

PATRAN Courses

- PATRAN - Introduction
- PATRAN - Advanced Durability and Fatigue Life Analysis using MSC Fatigue
- PATRAN - Advanced Geometry, Meshing, And Customization
- PATRAN - Automating Tasks and Basic GUI Customization using the Patran Programming Command Language
- PATRAN - Basic Durability and Fatigue Life Analysis using MSC Fatigue
- PATRAN - Composite Laminate Modeling
- PATRAN - Introduction
- PATRAN - Thermal Analysis Using Patran Thermal
- PATRAN - What's New
- PATRAN - Certification Exam - Introduction
- PATRAN - 入門トレーニング

Romax Courses

- ROMAX - 入門トレーニング03 ギヤボックス全体モデルの作成
- ROMAX - 入門トレーニング01 基本モデルの作成
- ROMAX - 入門トレーニング02 歯車詳細解析の実施

SIMDESIGNER Course

- SIMDESIGNER - Fundamentals of Multibody Dynamics Analysis

SIM-MANAGER Courses

- SIMMANAGER - Introduction to MSC SimManager
- SIMMANAGER - Advanced Configuration
- SIMMANAGER - Basic Configuration
- SIMMANAGER - Installation and Administration
- SIMMANAGER - Introduction to Hexagon SimManager

SIMUFACT Courses

- SIMUFACT - Additive
- SIMUFACT - Forming - Introduction
- SIMUFACT - Welding - Tutorial
- SIMUFACT - Additive Manufacturing Solution



SIMUFACT Courses

SIMUFACT - Simufact Forming - Basic Tutorial

SIMUFACT - Simufact Forming - Introduction

SIMUFACT - 3D and 2D Resistance Spot Welding (RSW) Simulation with Simufact Forming

SIMUFACT - Assembly Level RSW Simulation with MSC Apex and Simufact Welding

SIMUFACT - Intro to meshing for Gas Metal Arc Welding (GMAW) simulation with MSC Apex

SIMUFACT - Introduction to Gas Metal Arc Welding (GMAW) Simulation with Simufact Welding

SIMUFACT - Introduction to Laser Powder Bed Fusion (LPBF) Simulation with Simufact Additive

SIMUFACT - Introduction to meshing for Direct Energy Deposition in Simufact Welding

SIMUFACT - Introduction to Metal Binder Jetting Sintering Simulation with Simufact Additive

SIMUFACT - MSC Apex Toolkit for Simufact Welding

SIMUFACT - Simufact Forming - Application Tutorial

SIMUFACT - Simufact Forming - Open Die Forging

SIMUFACT - Simufact Forming - Scientific Tutorial

SIMUFACT - Simufact Welding - Apex Modeler

SIMUFACT - Simufact Welding - Tutorial

SIMUFACT - Simufact Welding

SIMUFACT - Trajectory and fillet generation for gap formations

SINDA Course

SINDA - Thermal Analysis using Patran

SUSTAINABILITY Course

SUSTAINABILITY - Sustainability and ESG

VTDx Courses

VTDX - Create a New Project in VTDx

VTDX - Add a Test Case from the Library in VTDx

VTDX - Test Case Detail View in VTDx

VTDX - Create a Test Case from Scratch in VTDx

VTDX - Test Case Overview Page and Available Functionalities in VTDx

VTDX - Code Mode in VTDx

VTDX - KPI in VTDx

VTDX - Test Case Details View - Vehicles in VTDx

VTDX - Change a Vehicle in the Test Case in VTDx

VTDX - Access and Edit Vehicle System Overview in VTDx

VTDX - Edit a Vehicle Sensor in VTDx

VTDX - Create a Job with the Selected Test Case in VTDx

VTDX - Display Job Overview in VTDx

VTDX - Display Job Details in VTDx

VTDX - Job Results and Download in VTDx



Hexagon Manufacturing Intelligence believes the information provided in this document was correct on the date of publication. This information may be changed without notice to bring it into line with improvements in the performance and quality of its products. Hexagon Manufacturing Intelligence declines all liability for any errors that may appear in the manual.

This document is the exclusive property of Hexagon Manufacturing Intelligence, which reserves all rights thereto. This document may not be copied, reproduced, communicated or disclosed to others without written permission of Hexagon Manufacturing Intelligence.

© Copyright 2025 Hexagon Manufacturing Intelligence. All rights reserved. Hexagon Manufacturing Intelligence is part of Hexagon. Other brands and product names used in this material are trade names, service marks, trademarks, or registered trademarks of their respective owners.