HEXAGON

Brochure

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

ADAMS Courses

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.

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