MSC LearningCenter

Get the training you need anytime you need it

MSC Learning Center

Flexible training solutions

How many of us find it difficult to fit training into our schedules?

Unfortunately, it is quite challenging to achieve a workload and study balance so that we are up to date with the latest features in technology that we use on a day to day basis.

The MSC Learning Center focuses on making training convenient and accommodating different learning styles by providing you with a blended approach to learning; meeting your needs whether you have five minutes or five days, whether you want a lot of interaction or just simply find the information you need when you need it. Making it easy for you to fit training into your schedule!

MSC understands that everyone learns differently; some of the most coming learning styles include: visual, auditory, social, and kinesthetic ("Hands-on"). Many of us use different learning styles depending on the time and circumstance. Whatever the circumstance, you can guarantee that MSC has an approach to learning that will suite your needs, style, and requirements.

Our philosophy:

- MSC's on-demand e-Learning training philosophy is to leverage the same content as our live instructor-led classes, developed by MSC experts across many engineering disciplines and industries.

- Single-sourcing our content allows MSC to combine the benefits of our mature, time-tested live content with the new capabilities on-demand training offers.

E-Learning subscription

Anywhere, Anytime!

The MSC Learning Center's e-Learning subscription provides you an innovative and creative approach to instruction that provides unprecedented access to resources and training. Besides offering flexibility and cost savings, you can proceed through a training curriculum "at your own pace and at your own place."

MSC e- learning is an efficient and effective training solution that:

- Accommodates your Schedule without travel

- Decreases cost & Increases access to training

- Allows you to manage your own learning experience

- Provides access to MSC experts and users via MSC communities

- Delivers Course Completion and Certification Certificates

Offering:

MSC's on-Demand e-Learning is offered on a subscription basis. With the e-learning subscription you get access to all online training courses for the various software products such as: MSC Nastran, Adams, Marc, Patran, Easy5, Actran, Material Center, SimManager, Apex and Adams toolkits with courses being added/updated continuously throughout the year.

*See for the details for each courses on the next page.

Subscription includes:

- Individual named user access to the MSC Learning Center and your subscription content from your desktop, laptop, or tablet device.

- Unlimited access to all available content in your subscription area for 12 months from your start date.

- Certification Exams that, upon achieving a passing score, you will receive a certificate and/or you can post to your public community profile.

- Social membership and forum participation to allow collaboration within your company and the broader MSC simulation community

Social collaboration

- Each training class has a dedicated support forum for posting course related questions to the experts at MSC and the online community.

- Users can engage, collaborate, co-create, and share knowledge by asking and answering questions

- A Document Management System with Rate & Share Capability is available to allow sharing of value-added content

- Peer-to-Peer Networking allows users to collaborate among themselves, form a team, and set team goals.

Actran e-Learning content

Course	Course name
1	Introduction to Actran and Acoustics
2	Powertrain Radiation
3	Panel Transmission Loss
4	Duct Propagation
5	HVAC Noise

MSC Apex Generative Design e-Learning content

Course	Course name
1	Introduction to the Mindset of MSC Apex Generative Design
2	Dive into the Workflow & Features of MSC Apex Generative Design
3	Post Processing & Solution Workflow with MSC Apex Generative Design
4	Part Consolidation Workflow for Assemblies in MSC Apex Generative Design
5	Refining Models through Advanced Modelling & Simulation Techniques in MSC Apex Generative Design

CFD solutions e-Learning content

Course	Course name
1	Advanced Postprocessing
2	Basics of CFD - An Introduction to the Computational Fluid Dynamics
3	scSTREAM for Electronics 101 - An Introduction
4	scSTREAM for Electronics 102 - An Introduction
5	Importing and Cleaning CAD Data
6	Mesh Generation
7	SC/Tetra 101 - An Introduction to SC/Tetra
8	SC/Tetra 102 - An Introduction to SC/Tetra
9	scFLOW Introductory Seminar
10	Scattering of Spray Paint Particles Inside a Naturally Ventilated Building
11	scSTREAM for Architecture: At a Glance
12	scSTREAM 102 - An Introduction to scSTREAM
13	scSTREAM Introductory Seminar
14	PICLS Training
15	scFLOW Demonstration - Simple Thermo-Fluid Analysis

Adams e-Learning content

Course	Course name
ADN701	Adams Modeler Overview
ADM701	Complete Multibody Dynamics Analysis with Adams
ADM702	Fundamentals of Multibody Dynamics Analysis with Adams
ADM703A	Advanced Modeling Elements and Techniques with Adams Solver
ADM703B	Adams Solver Theory: Achieving Robust, Converged Solutions
ADM703C	Writing User Subroutines in Adams Solver
ADM704A	Advanced Parametrics, Design Sensitivity and Optimization using Adams View
ADM704B	Automating Tasks using Adams View Scripting, Macros, and GUI Customization
ADM705	Python Scripting in Adams
ADM706	Adams Explore
ADM710	Flex Body Dynamics and Modal Stress Recovery using Adams
ADM711	Control System Integration with Adams using MATLAB or Easy5
ADM720	Frequency Domain Analysis using Adams/Vibration
ADM730	Design of Experiments DOE and Stochastics Monte Carlo Analyses using Adams
ADM740	Vehicle Modeling and Simulation using Adams Car
ADM741	Vehicle Modeling and Simulation using Adams Driveline
ADM742	Adams Tire
ADM743	Formula SAE Applications using Adams Car
ADM750	Gear, Belt, and Chain Modeling with Adams Machinery
ADM761	Basic Suspension and Full Vehicle Analysis using Adams Chassis
ADM7N2	Adams Tracked Vehicle
GAT101	Advanced drivetrain modeling with Adams Gear AT
ADM744	Adams Car Driving Machine Course Overview
ADM745	Adams Car Electric Vehicle Modeling

Digimat e-Learning content

Course	Class name
DIG101	Introduction to Multi-scale Material Modeling using Digimat
DIG102	Chopped Fiber Reinforced Plastic
DIG103	Continuous Fiber Reinforced Plastic

Dytran e-Learning content

Course	Class name
DYT101	Dytran Structures and Fluids
DYT103	Introduction to Airbag Analysis and occupant safety using Dytran

Easy5 e-Learning content

Course	Course name
EAS101	Dynamic System Modeling and Simulation using Easy5
EAS103	Modeling and Simulation of Fluid Power Systems using Easy5
EAS105	Modeling and Simulation of Gas Systems using Easy5
EAS106	Overview and Usage of the Easy5 Matrix Algebra Tool
EAS107	Modeling and Simulation of Multi-Phase Fluids using Easy5
EAS108	Working with libraries and custom components in Easy5
EAS109	Modeling and simulation of Electric system using Easy5
EAS110	Interfacing EASY5 with Other Software
EAS111	Python Scripting in Easy5

FormingSuite e-Learning content

Course	Course name
1	FormingSuite 2021 Geometry and 3D Addendum Workbenches: Basic Introduction"
2	FASTFORM Advanced: An Introduction
3	COSTOPTIMIZER: Basic Introduction
4	COSTOPTIMIZER Advanced: An Introduction
5	FormingSuite Professional: An Introduction
6	COSTOPTIMIZER Professional: An Introduction
7	PROCESS PLANNER Line Die Plan: An Introduction
8	PROCESS PLANNER Prog Die Process: An Introduction

FlightLoads e-Learning content

Course	Course name
FLD120	Aeroelasticity using FlightLoads and Patran

Marc e-Learning content

Course	Course name
MAR101	Basic Nonlinear Analysis using Marc and Mentat
MAR102	Advanced Nonlinear Analysis using Marc and Mentat
MAR103	Experimental Elastomer Analysis
MAR105	Thermal Protection Systems Analysis using Marc and Mentat
MAR108	What's New in Marc
MAR120	Basic Nonlinear Analysis using Marc and Patran
MAR121	Advanced Nonlinear Analysis using Marc and Patran

MaterialCenter e-Learning content

Course	Course name
MAT101	Introduction to MaterialCenter
MAT102	MaterialCenter for the Materials Engineer

MSC Apex e-Learning content

Course	Class name
Apex Kit	Practicals for Strength of Materials and other Engineering Concepts using MSC Apex
APX120	Linear Static and Normal Modes Analysis using MSC Apex
APX111	Overview of Python Scripting API in MSC Apex

Patran e-Learning content

Course	Course name
PAT301A	Introduction to Patran
PAT301B	Advanced Geometry, Meshing, and Customization
PAT304	Automating Tasks and Basic GUI Customization Using the Patran Programming Command Language PCL
PAT318A	Basic Durability and Fatigue Life Analysis Using MSC Fatigue
PAT318B	Advanced Durability and Fatigue Life Analysis Using MSC Fatigue
PAT312	Thermal Analysis Using Patran Thermal
PAT325	Composite Laminate Modeling using Patran

MSC Nastran e-Learning content

Course	Course name
NAS101A	Linear Static and Normal Modes Analysis using MSC Nastran
NAS101B	Advanced Linear Analysis using MSC Nastran
NAS102A	Dynamic Analysis using MSC Nastran
NAS102B	Advanced Dynamic Analysis using MSC Nastran
NAS106A	Basic Substructure Analysis using MSC Nastran - Primary Superelements
NAS106B	Advanced Substructure Analysis using MSC Nastran - Secondary Superelements
NAS107	Design Sensitivity and Optimization using MSC Nastran
NAS108	What's New in MSC Nastran and Patran
NAS110	Working with Custom MSC Nastran Solu-tion Sequences
NAS111	Aeroelasticity using MSC Nastran
NAS113	Composite Material Analysis with MSC Nastra
NAS115	Fluid Structure Analysis using MSC Nastran
NAS120	Linear Static Analysis using MSC Nastran and Patran
NAS124	Thermal Analysis using MSC Nastran
NAS126	Explicit Nonlinear Analysis (SOL700) us-ing MSC Nastran
NAS127	Rotordynamic Analysis using MSC Nastran
NAS133	Contact Analysis using Contact Pairs in MSC Nastran and Patran
NAS134	Advanced Contact Analysis using Contact Pairs in MSC Nastran and Patran
NAS318	Implementation of Fatigue Methods using MSC Nastran – Embedded Fatigue (NEF) with Patran
NAS400	Implicit Nonlinear Analysis using MSC Nastran and Patran
HDF5	HDF5 Usage in Nastran and Patran

SimDesigner e-Learning Content

Course	Course name
SMD102	Fundamentals of Multibody Dynamics Analysis with SimDesigner

Sinda e-Learning

Course	Course name
SND501	Thermal analysis using Patran with Sinda

Simufact e-Learning Content

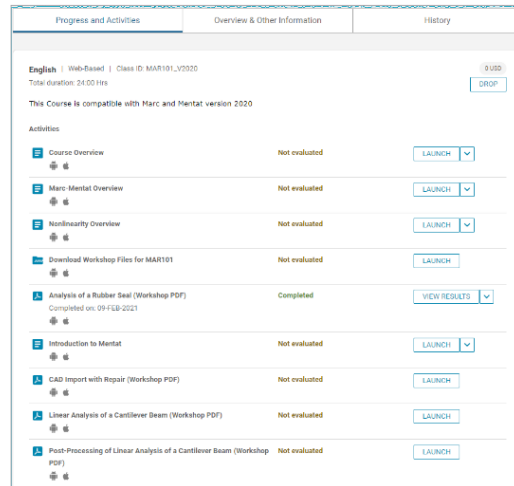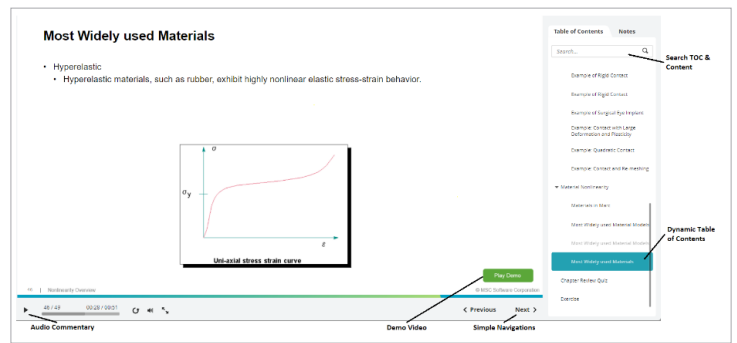| Course	Course name
1	Simufact Additive
2	Simufact Welding
3	Simufact Welding - Apex Modeler
4	Simufact Forming - Introduction
5	Simufact Forming - Application Tutorial
6	Simufact Forming - Basic Tutorial
7	Simufact Forming - Scientific Tutorial
8	Simufact Forming - Open Die Forging
9	Simufact Welding - Resistance Spot Welding

SimManager e-Learning Content

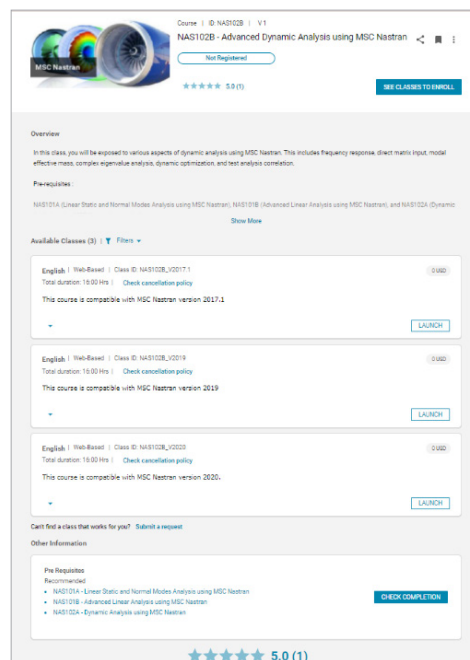| Course	Course name
SMM101	Introduction to SimManager
SMM102	SimManager Basic Configuration
SMM301	SimManager Advanced Configuration
SMM201	SimManager Installation and Administration

Value:

- If you are in the middle of a project and need to gain insight on a new task or simulation method quickly drop into the MSC Learning Center to browse through the courses and topics of interest to quickly get up to speed

- Flexibility, Convenience and Easy Access

- Interactive and Hands-on Training

- Community access that allows user to ask MSC SME's questions

- Accessed from any internet enabled device

- Quickly identify the skills you are proficient at and the skills you need to focus on developing

- Career advancement/Development

- Prove to your current/future employer that you have sufficient CAE skills to add value on projects

Content highlights

- Each class is broken into a series of modules, building on knowledge learned from previous modules. This allows users to connect the dots from each topic; developing thorough skillsets and knowledge.

- Each module typically comes with lecture slides, workshops ranging from simple examples to real world problems delivered with model files, video demonstrations, end of lecture and workshop review questions, and audio from subject matter experts (SMEs).

- Audio from the SME is designed to supplement the lecture slides by providing insight and expertise from years of teaching.

- Dynamic table of contents allows users to quickly browse and jump to any point in the course.

- After class completion, you can take certification exams that prove your proficiency in the features and skillsets learned in the training course(s).

- Social collaboration via MSC communities acts as the Face-to-Face interaction with an MSC SME to support any questions about the course content and course files to Link to Technical Forums.

Activities view

Training courses are rated and reviewed by users

Certification program:

Interested in advancing in your current field? Interested in assessing your team's skills? It's important to have the necessary qualifications to show that you are capable.

Earning a professional certificate from MSC Software can help you build your skills, increase your knowledge in your chosen area of study, prepare you for career advancement, and prove your proficiency in MSC Software Products.

Benefits:

- Establishes a goal for your training; supports your studying process

- Quickly Identifies the skills you are proficient at and the skills you need to focus on developing

- Prove to your current/future employer that you have sufficient CAE skills to add value on projects

- Career advancement/development

Features:

- Certification Exams contain up to 50 multiple-choice questions, randomly chosen out of a question pool

- Exams take up to an hour to complete

- Ability to retake exam up to 3 times, with 1 day lockout period between exam attempts

- Certifications achieved can be posted on your community profile (optional)

- Receive a certificate via email upon passing exam or completing a course

- Can access the certificate from the training details page on your transcript in the MSC Learning Center

Mobile learning:

Mobile learning is a step further than e-Learning allowing users to learn virtually anywhere.

Features:

- Easy access (anywhere, anytime)

- Self-paced learning

Features:

- Access e-Learning from any mobile device, through our dedicated apps for Apple and Android.

- View and take learning programs and courses

- View and take assessments

MSCOne e-Learning:

MSC LearningCenter is now available through MSCOne. In order to get access to the LearningCenter with an existing MSC One license, you must request an updated license file with the LearningCenter feature.

Request an updated MSC One license from your MSC Sales Admin or Account Manager. If you are unsure who this is, Please send us an email at: Learning@mscsoftware.com and we will be happy to assist.

HEXAGON

Hexagon is a global leader in sensor, software and autonomous solutions.
We are putting data to work to boost efficiency, productivity,
and quality across industrial, manufacturing, infrastructure, safety,
and mobility applications.

Our technologies are shaping urban and production ecosystems
to become increasingly connected and autonomous – ensuring a scalable,
sustainable future.

MSC Software, part of Hexagon's Manufacturing Intelligence division,
is one of the ten original software companies and a global leader in helping
product manufacturers to advance their engineering methods with
simulation software and services. Learn more at mscsoftware.com.
Hexagon's Manufacturing Intelligence division provides solutions that utilise
data from design and engineering, production and metrology to make
manufacturing smarter.

Learn more about Hexagon (Nasdaq Stockholm: HEXA B) at hexagon.com
and follow us @HexagonAB.