

Training

For Siemens NX and SAP-ECTR

Consulting
Since 1997

Welcome

Marenco AG

We offer an extensive range of training courses to suit the various tasks within your company around Siemens NX and SAP-ECTR. The users are trained specifically according to their needs and experience.

Our training offer includes:

	Apprentice	Developer	Designer	Production	Administrator
NX Basic Trainings	✓	✓	✓	✓	
NX Update Trainings	✓	✓	✓	✓	✓
NX Add-on Modules	✓	✓	✓		✓
NX Administrator Training					✓
CAE Modules/Simcenter 3D		✓			
PLM Trainings	✓	✓	✓	✓	

From the apprentice to the system administrator, we will be happy to advise you on the composition of the optimal training program.

Training organization

Marenco AG offers its customers training courses as standard courses with participants from different companies or as company-specific courses.

They are conducted according to your requirements:

- In our training facilities in Pfäffikon ZH
- In the premises and on the customer's system
- Online (not suitable for all training courses)

Training structure

Our training modules are designed for an optimal cost/benefit ratio with regard to the scope and duration.

The modules are supplemented with practical exercises as well as various tips & tricks from our trainers.

We would be happy to create an individual training program tailored to your needs.

Your Andreas Litscher,

Head of Consulting

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NX BASIC TRAININGS

NX for Newcomers

Siemens NX



In this course the user receives comprehensive basic training for the most important functions in Siemens NX. The focus is on "modeling", "assemblies" and "drawing derivation".



- Basics
- Sketching technique
- Modelling
- Assembly creation
- Drawing derivation



The NX beginner course is aimed at all users who will be working with NX and have no 3D-CAD experience. These are technical draughtsmen, designers, engineers, production specialists and CAx managers.

This is a prerequisite:

- Basics of design
- Basic knowledge of EDP is recommended



5 days

for apprentices 6 days is
recommended

dates on request

NX for Transfer

Siemens NX



The user is able to switch quickly from another well-known 3D CAD system to Siemens NX.



- Basics
- Sketching technique
- Modelling
- Assembly creation
- Drawing derivation



NX for transfer is aimed at 3D CAD system users who are new to working with Siemens NX.

This is a prerequisite:

- Experience with a known 3D CAD system



3-5 days
company-specific training

4 days
standard training course

NX CAD for CAM Users

Siemens NX



After the course, the participant is able to handle geometric models and assemblies and to create designs and auxiliary geometries for NC machining.



- Basics
- Sketching technique
- Modelling
- Assembly creation
- WAVE geometry linker
- Synchronous Technology
- Drawing derivation (short introduction)



The course serves as an introduction to the use of CAD functionality and as a minimum requirement for participation in NX-CAM training courses:

- Manufacturing Engineers
- CAM programmer
- AVOR Employees



3-5 days

dates on request



NX UPDATE- TRAININGS

NX Update Training

Siemens NX



The user is able to use the new NX functionalities in the daily design work.



- New basic functions (gateway)
- New design functions
- New assembly functions
- New drawing functions
- New methodological possibilities
- Customer specific requests
- Tips and tricks



The NX update training is aimed at all NX users.

This is a prerequisite:

- Application experience with a previous NX version



1-2 days

dates on request

NX update courses can be booked from any NX version to any newer NX version.
We create the optimal course program for you.

NX ADD ON MODULES

NX Advanced Modeling

Siemens NX



In this course the user acquires comprehensive knowledge of the practical application of NX. After completing the course, you will be able to create complex, fully or partially parameterized solid models. You will be able to evaluate the different modeling techniques and apply the appropriate approach for the needs.



- Developing strategies for modelling
- Application of different modeling techniques
- Complex volume models
- Concepts of assembly modelling
- Top-Down working technique
- Deepening Wave-Link Geometry
- Execution of changes
- Synchronous Technology
- Definition of mathematical conditions for parameterization
- Analysis of surfaces and solids
- Clean up imported data



NX Advanced Modeling is aimed at experienced NX Users.

This is a prerequisite:

- Basics of design
- NX Basic training or equivalent experience on the Siemens NX system



2-3 days

dates on request

NX Sheet Metal

Siemens NX



Productive creation of sheet metal parts and flat patterns using NX Sheet Metal.



- Overview of the NX Sheet Metal user interface
- Generation of a parameterized 3D model
- Usage of Sheet Metal functions
- Methodical structure of Sheet Metal parts
- Derivation and representation of bending sequences
- Definition and processing of the bending formula
- Derivation of the flat pattern
- Preparation of a drawing suitable for production



The NX Sheet metal training is aimed at all NX users who get into contact with sheet metal constructions.

- NX basic training or equivalent experience on the Siemens NX system



1-2 days

dates on request

NX Freeform

Siemens NX



The participant learns the basics of surface modelling as well as the underlying theory. Methods and functions are learned with which complex freeform geometries can be created and easily modified.



- Theory of splines, surfaces and transitions
- Create and modify splines (freeform curves)
- Create and modify freeform surfaces and bodies
- Methodology for the construction of parts with freeform surfaces
- Analysis of freeform geometry
- Identify and fix design problems
- Tips and tricks
- Realize Shape (overview)



The freeform surface course is aimed at all NX users who need to create models with complex (design) surfaces.

This is a prerequisite:

- NX basic training or equivalent experience on the Siemens NX system



3-days

dates on request

NX Realize Shape

Siemens NX



The participant learns the handling of cage modelling and the creation of design models. These serve as templates for designs in development.



- Theory of splines, surfaces and transitions
- Basics of Cage Modelling
- Create and modify cage bodies and cage surfaces
- Methodology for building design models
- Analysis of freeform geometry
- Identify and fix design problems
- Tips and tricks from industrial design



The course is aimed at all industrial designers and NX users who need to create design templates for products.

This is a prerequisite:

- NX basic training or equivalent experience on the Siemens NX system



1 - 2 days

dates on request

NX Convergent Modelling and Reverse Engineering

Siemens NX



The participant learns the basics and handling of scan data and their differences to CAD data. He learns the skills of correcting and modifying surfaces as well as reverse engineering surfaces.



- Basics in Convergent Modelling
- Basics regarding 3D scans
- 3D printing basics and their requirements
- Working with polygon construction (basic commands)
- Working with reverse engineering
- Analysis of geometries
- Identification and elimination of problem areas
- Methodology and tips and tricks



The course is aimed at all NX users who need to edit 3D scan data or trace surfaces from it.

This is a prerequisite:

- NX basic training or corresponding experience on the Siemens NX system



1 - 2 days

dates on request

NX Synchronous Siemens NX



The user is able to benefit from the Synchronous functionalities and knows the characteristics and limits of this technology.



- Philosophy, concept and introduction
- Basics of the Synchronous Technology
- Functions
- Advantages / disadvantages and limits
- Tips and tricks



The Synchronous Modeling training is aimed at all NX users.

This is a prerequisite:

- NX basic training or equivalent experience on the Siemens NX system



1 day

dates on request

NX Rendering & Visualization

Siemens NX



The user is able to define all necessary settings such as scenes, materials, light settings, etc. and create photorealistic images with the visualization tools of NX.



- Overview of the functions
- Efficient working methods
- Scene Geometry
- Define views
- Define / adjust lighting / shadows
- Define / adjust materials / textures
- Reflections
- Foreground / background



Users who want to create photorealistic representations with NX.

This is a prerequisite:

- NX basic training or corresponding experience on the Siemens NX system



1-2 days

dates on request

NX Large assemblies

Siemens NX



In this course, the participant learns to handle large assemblies efficiently. Which tools the system offers and what to pay attention to.



- Load options
- Representation Lightweight
- Component groups
- Zones
- Reference set
- Dummy models
- Tips and tricks



The training is aimed at all NX users who work with large assemblies.

This is a prerequisite:

- NX basic training or corresponding experience on the Siemens NX system



1 day

dates on request

NX Variants Design

Siemens NX



In this course the participant acquires the ability to efficiently implement variant designs using Siemens NX.



- Structure of parametric assemblies
- Working with part families and parameter tables
- Creating and changing relationships between components
- Simple exchange of components (variants)
- Variant control of assemblies by means of spreadsheet calculation
- Arrangements



The training is aimed at NX users who work with similar assemblies over and over again and want to transfer existing data.

This is a prerequisite:

- NX basic training or corresponding experience on the Siemens NX system



1 - 2 days

dates on request

NX PMI

Siemens NX



Participants learn how to create PMI information on 3D models and how to use this information in other NX applications. In addition to the practical part, they will also learn the basics of how PMI information can be applied in a company or group and what advantages result from using PMI.



- Use of PMI information in the development and manufacturing environment
- Goals, benefits and requirements for using PMI information
- Use of PMI information in development up to quality control
- Methodological guidelines for the use of PMI
- Creating PMI information in Siemens NX with practical exercises
- Use of PMI information in the various NX applications
- Data quality with PMI



The training is aimed at NX users, key users, administrators and system managers who want to learn more about PMI information or want to become familiar with it.

This is a prerequisite:

- Workshop PMI or corresponding concept of the company
- NX Basic training or equivalent experience on the Siemens NX system



1 day

dates on request



NX ADMINISTRATOR TRAINING

NX Administrator Training

Siemens NX



The participant learns how to install NX and how to perform maintenance work. In addition, they learn how to adjust basic settings and implement model and drawing templates.



- Installation and configuration of NX
- Installation and configuration of license servers
- Creating drawing frames and null parts
- Adjusting basic settings and menus
- Troubleshoot error messages
- Configuration of plotter / printer
- Installation of several CAD systems or different NX versions



The NX Administrator course is aimed at all NX users who work with NX and want to carry out maintenance or installation work themselves.

This is a prerequisite:

- Extended IT knowledge
- It is recommended to be employed as system administrator or key user in the company



1-2 days

dates on request

CAE-MODULES / SIMCENTER 3D

NX Motion / MKS

Siemens NX



In this course the participant learns to simulate and evaluate mechanically movable assemblies.



- Concept behind NX Motion
- Creation of simulations based on examples
- Perform collision observations and measurements
- Evaluation of speeds, accelerations and forces
- Procedure for complex problems
- Possibilities and limits of NX Motion



The motion simulation is aimed at NX users who want to simulate motion sequences from CAD data.

This is a prerequisite:

- NX basic training or corresponding experience on the Siemens NX system
- Basic knowledge of mechanics / dynamics



2-days

dates on request

NX Pre-Post with NX Nastran

FEM Basic Training



The aim of the course is to teach the participants how to use NX Advanced Simulation with NX Nastran. The participants will be able to independently create and calculate calculation models using the Finite Element Method and to interpret the results. A simple working method helps to decide on the model structure.



- Theoretical overview of the finite element method
- Getting to know the program operation and program structure
- Working methodology, model design (axisymmetric, shell, volume models)
- Knowing the limits of static-linear and non-linear calculations (Sol 101/106)
- Modal analyses (Sol 103)
- Stability problems (Sol 105)
- Transient linear and nonlinear calculations (Sol 129)
- Thermal static and transient calculations (Sol 153, 159)
- Thermal-mechanical coupled analyses
- Evaluation of results



The course is practice-oriented and is aimed at designers and engineers whose field of work lies in the area of design related strength calculations or who would like to refresh their knowledge.

This is a prerequisite:

- Basic knowledge of technical mechanics (statics and strength theory)
- NX Basic training or equivalent experience on the Siemens NX system



3-days

dates on request

PLM TRAININGS

SAP ECTR Basic Training

SAP ECTR(customer system)



The participants learn the basic functions of SAP-ECTR. The training takes place only at the customer site on the customer system. The training material is provided by the customer.



- Organization and data model
- Starting SAP-ECTR
- User interface
- Search
- Desktop and various windows
- Creation of data
- Workflows



The course is aimed at all users who are new to SAP-ECTR.

This is a prerequisite:

- SAP-ECTR training system available at customer site



1 - 2 days

dates on request

Appointment overview 2025

NX BASIC TRAINING		
NX for Transfer	6. - 9. January 2025	4 days
NX for Transfer	10. - 13. February 2025	4 days
NX for Transfer	10. - 13. March 2025	4 days
NX for Transfer	7. - 10. April 2025	4 days
NX for Transfer	12. - 15. May 2025	4 days
NX for Transfer	10. - 13. June 2025	4 days
NX for Transfer	7. - 10. July 2025	4 days
NX for Transfer	11. - 14. August 2025	4 days
NX for Transfer	8. - 11. September 2025	4 days
NX for Transfer	6. - 9. October 2025	4 days
NX for Transfer	10. - 13. November 2025	4 days
NX for Transfer	8. - 11. December 2025	4 days

Appointment overview 2026

NX BASIC TRAINING		
NX for Transfer	12. - 15. January 2026	4 days
NX for Transfer	9. - 12. February 2026	4 days
NX for Transfer	9. - 12. March 2026	4 days
NX for Transfer	7. - 10. April 2026	4 days
NX for Transfer	5. - 8 May 2026	4 days
NX for Transfer	8. - 11. June 2026	4 days
NX for Transfer	6. - 9. July 2026	4 days
NX for Transfer	10. - 13. August 2026	4 days
NX for Transfer	7. - 10. September 2026	4 days
NX for Transfer	5. - 8. October 2026	4 days
NX for Transfer	9. - 12. November 2026	4 days
NX for Transfer	7. - 10. December 2026	4 days

NX ADD ON MODULES

On request

CAE-MODULES / SIMCENTER 3D

On request

NX UPDATE TRAINING

On request

NX ADMINISTRATOR TRAINING

On request

PLM TRAININGS

On request



All services are available on-site and remotely/online.

A close-up photograph of two men shaking hands. The man on the left is wearing a white shirt, and the man on the right is wearing a grey suit jacket. The background is blurred, showing an indoor setting with light-colored walls and a dark floor.

Contact

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Visit our website to learn more about
our services.

www.marenco.ch

Location

Marenco AG | Dorfstrasse 57 | 8330 Pfäffikon



Car

From Zurich via the A53 to exit 6 Uster-Nord. Follow Pfäffikerstrasse, Usterstrasse and Hochstrasse until Dorfstrasse. Visitor parking directly in front of the company building at the main entrance.



Train

From Zurich main station take the S3 to Pfäffikon ZH.
You can reach Marenco AG on foot in approx. 15 min. (1 km walk).
Bahnhof SBB > Zelglistrasse > Hittnauerstrasse > Güchweg > Marenco AG



Bus

From Pfäffikon ZH station, take the Postbus 835 in the direction of Bauma or the Postbus 837 in the direction of Hittnau to the Güchweg stop.





Terms of service

Place, time and duration of service provision

The services are provided according to the agreement at the customer's premises, at the Marengo AG site or online. Training sessions take place from 8:30 am to 4:30 pm. Times can be adapted to the wishes of the company by arrangement. A service day comprises 8 hours.

Order and order confirmation

The order can be placed by telephone or e-mail. The customer will receive an order confirmation at least 7 days before the start of the service.

Cancellation or prevention

In case of cancellation by the client, no costs will be charged, provided that the cancellation is received in writing by MARENCO AG at least 7 days before the beginning of the service. For cancellations not received in time, CHF 300.- will be charged for extra work. In case of unforeseen events such as accident or illness of the consultant, the service can be postponed at short notice without compensation.

In addition to these terms of service, the General Terms and Conditions of Marengo AG (T&C) apply.

T&C