NX Design (CAD)

NX Manufacturing (CAM)
The learning tracks have been provided to help you plan a productive development path through our courseware.

Learning tracks start from the top and progress downward. Select any course below to open the training content.

<table>
<thead>
<tr>
<th>Course name</th>
<th>Mechanical Designer</th>
<th>Ship Designer</th>
<th>Freeform Designer</th>
<th>Wiring Designer</th>
<th>NX Administrator</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAD Fundamentals Processes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CAD Advanced Processes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teamcenter Integration for NX Users</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Synchronous Modeling</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CAD Surface Modeling Processes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CAD Large Assembly Management</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CAD Sheet Metal Modeling Processes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shape Studio</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shipbuilding</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CAD Routing Mechanical</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CAD Routing Electrical</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NX Administration</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teamcenter NX CAD Configuration</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

For more NX Design (CAD) courses see next page.
NX Design (CAD)

Select the Course for more information:

- PLM Manager Awareness Training
- CAD Hothouse
- CAD Update
- Open API
- CAD Model Based Definition using PMI
- NX Render
- Shipbuilding for Admins or Key Users
- Product Template Studio
- WAVE
Shipbuilding

Duration: 5 days
Who should attend: Users with shipbuilding background
Prerequisites: Designing Parts in NX
Follow up Training: NX Shipbuilding for admins or key-users

The NX Shipbuilding software provides a focused environment for modeling the structural area of a ship, enabling the user to easily conceptualize this structure and model the frames, decks, bulkheads, Stiffeners and Brackets.

NX Ship Structure provides the ability to design all kind of profiles for ship frames, floors and keelsons, all kind of sheets for compartment walls and all kind of edge reinforcements for support structures.

Once the steel structure is complete, NX Ship Structure aids in the assembly of the ship and in the manufacturing of parts.

This training is scheduled over 2 separate weeks in 3 + 2 days.

Day 1
- Overview Ship Structure
- Overview assembly structure for shipbuilding
- Overview Hull modeling in NX
- Ship Structure Concept Model
- Ship Structure Sectioning

Day 2
- Overview Ship Structure Basic Design
- Tools: Planar Ship Grid, Ship coordinates, Ship Container
- Plate Systems
- Stiffener Systems
- Edge Reinforcement Systems
- Seams + Transition Parts

Day 3
- Trace Lines, Longitudinal Stiffener Guides
- Shell expansion (Shell enrollment)
- Overview Ship Structure Detailed Design
- Plates
- Profiles, Stiffeners
- Edge Reinforcements
- Pillars
- Profile Cutouts, Split Plates/Profiles, End Cuts, Corner Cuts, Guide Cuts, Edge Cuts, Cutouts……

Day 4
- Copy Parts between Plates
- Standard Parts
- Overview Ship Structure Manufacturing
- Manufacturing Preparation (Attributes/Pos. No.)
- Cutting Side, Marking Lines, Reference Lines
- Excess Material, Rolling Lines, Pressure Lines

Day 5
- Plate Preparation incl. Shrinking and expansion of single curved and double curved plates
- Manufacturing XML Output (Export Cutparts)
- Material Allowance, Edge Cut Marking, Knuckled Profiles, Inverse Bending Lines, Profile List
- Templates
- Ship drafting functionalities
- Tips and tricks……

More information?
Siemens PLM Software
T: +31 (0) 73 - 680 2500
E: info.benelux.plm@siemens.com
CAD Hothouse

Duration: 10 days
Who should attend: Design Engineers
Prerequisites: none
Follow up Training: Large Assembly Management, Freeform Modeling and Sheet Metal

The NX CAD Hot House provides you a fast and thorough training in NX CAD.

It is a combined and comprised training containing the following topics: Modeling (Sketch), Assemblies, Drafting, Synchronous Technology and Teamcenter Integration for NX Users.

The learned knowledge will be put into practice in a project.

Day 1 - 10
• 2.5 days: Basic Modeling (Sketch)
• 0.5 day: Synchronous Modeling
• 2.5 days: Assemblies
• 1.5 days: Drafting
• 1 day: Teamcenter Integration for NX Users
• 2 days: Project

More information?
Siemens PLM Software
T: +31 (0) 73 - 680 2500
E: info.benelux.plm@siemens.com
**Duration:** 1 day

**Who should attend:** Training is addressed to users with responsibility for settings, library etc.

**Prerequisites:** Designing Parts in NX (Modeling)

NX Ship Design software provides a focused environment for modeling the structural area of a ship, enabling the user to easily conceptualize this structure and model the frames, decks and bulkheads. NX Ship Design provides the ability to design linear and nonlinear profiles for ship frames, linear and nonlinear sheets for compartment walls and linear and nonlinear belts for support structures between walls. Once the steel structure is complete, NX Ship Design aids in the assembly of the ship and in the manufacturing of parts.

**Day 1**
- Cutting side
- straightbrake parts
- marking lines
- reference lines
- user text
- shrinking
- plate expansion
- profile list
- manufacturing xml output
- Settings in xml files and configs

More information?
Siemens PLM Software
T: +31 (0) 73 - 680 2500
E: info.benelux.plm@siemens.com
The learning tracks have been provided to help you plan a productive development path through our courseware.

Learning tracks start from the top and progress downward. Select any course below to open the training content.

<table>
<thead>
<tr>
<th>Course name</th>
<th>CNC Programmer Lathe</th>
<th>CNC Programmer Fixed Axis</th>
<th>CNC Programmer Multi Axis</th>
<th>CNC Programmer System Admin</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAD for CAM ¹</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CAM Manufacturing Fundamentals (2.5 axis)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CAM Turning Manufacturing Process</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CAM Fixed Axis Milling (3 axis)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CAM Multi Axis Milling (5 axis)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CAM Post Building Techniques</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NX Administration</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. The [CAD Fundamentals Processes](#) training may be taken in place of the CAD for CAM training.

For more NX Manufacturing (CAM) courses see next page:
NX Manufacturing (CAM)

Select the Course for more information:

- CAM Feature-Based Machining
- CAM Customization and Configuration
- Post Configurator
- CAM Update
- CMM Inspection Programming
- PLM Manager Awareness Training
- Open API