

NAVAIR Introduction to NX and Teamcenter

This special workshop is designed to give the NAVAIR team a high-level overview of NX modeling, assemblies and drafting capabilities. Siemens will also highlight the hybrid modeling capabilities of NX, by leveraging our Synchronous Modeling technology which unites parametric and history-free modeling techniques. A brief demonstration of the NX CAD and Teamcenter integration will also be provided.

Agenda:

- **Introductions**
 - **Why PLM, (Product Lifecycle Management)**
 - **Overview of NCMS, (National Center for Manufacturing Sciences) Teamcenter Projects at FRCs**
 - **PLM Possibilities: Secure Anywhere Anytime Access to technical data**
 - **Integrated CAD, (Computer Aided Design)**
 - **Workshop in NX basic Design**
 - **Introduction to PMI (Product and Manufacturing Information) Workshop**
 - **Synchronous Modeling Fundamentals**
 - **Wrap-up**
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Additional information concerning workshops

Primary workshop topics (**bold** indicates planned topics for demonstration/instruction):

From the NX **Basic Design** course:

- **Introduction and overview**
- **NX part files**
- **User interface**
- **Sketching**
- Datum features
- **Swept features**
- **Holes**
- **Edge operations**
- **Introduction to assemblies**
- Assembly constraints
- **Introduction to drafting**

Addendum:

- **Introduction to PMI (Product and Manufacturing Information)**

From the **Synchronous Modeling Fundamentals** course

- **Synchronous modeling overview**
- **Modify face**
- **Synchronous Modeling relationships**
- Detail Feature
- Dimension commands
- **Reuse commands**
- **Edit Cross Section and Edit Section**
- Optimize Face
- Adaptive Shell
- **Delete face**

Demonstration only-

The instructor will also provide a demonstration of the integration of NX CAD software and Teamcenter product data management to create and manage NX parts and other engineering data.

The mission essential statement is as follows:

Aerospace Companies are developing into a Model Based Enterprises to leverage the efficiencies gained from 3D modeling. Technical data is developed and consumed in a 3D model based environment. As new programs come online at NAVAIR, it is essential that NAVAIR understands how to consume a 3D model throughout the lifecycle of a product, system, or platform. Failure to become a 3D model based enterprise will make product support very difficult, if not impossible. The training scheduled is the first step of accomplishing that goal. In that regard, the training is essential to the future mission of NAVAIR.