



Team Center

This Team Center course details the use of the Team Center tool to organize and manage product definition data throughout the engineering process. The course contains numerous practical examples and the student is guided through all of the concepts, techniques and commands that are necessary to gain a working knowledge of Team Center. The intended audience is engineers who will actually create data and those who only need to review data such as managers, manufacturing, and marketing. Additionally, decision makers who may never touch the data, but need to gain an understanding of PLM, will also benefit greatly.

Participants will bring information on specific company projects to be worked on during this training for real application of these concepts, tools and techniques.

- First, the basics of Team Center are discussed to gain a common understanding of the standard practices, tools and techniques that are utilized in multiple industries. Team interactions with clearly defined roles and responsibilities are emphasized.
- Next, participants will focus on Product and Process details and the portfolio of digital management solutions available with Team Center and their application in industry.
- Lastly, participants will complete projects that will connect their strategic portfolio plans to program and project management and to detailed operational execution.



Course Syllabus

I IDENTIFYING INFORMATION

Course:	Team Center
Prerequisite:	Understanding of Design, Engineering data
Time Frame:	24 total contact hours in three modules
Instructor:	Ali Nasser, AAS in Engineering BS in Mechanical Engineering 30 years in the product design engineering profession 20 years Application Engineer with Dassault and UGS Team leader for Team Center integration at GM
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II REFERENCE MATERIALS

1. Team Center Engineering and Product Lifecycle Management Basics, by Stephen M. Samuel; Eric D. Weeks and Mark A. Kelley

III COURSE GOALS AND OBJECTIVES

1. Improve digital data management controls
2. Organize record and document retention and disposition
3. Organize technical and engineering content data
4. Implement best-practice standards-based change processes
5. Collect product, process, and manufacturing information into a single source
6. Provide secure global access to product and process knowledge



IV METHODOLOGY

This course is a detailed view of Team Center, dealing with interpretation of meanings and applications as applied to executing company projects. Each module will introduce new material that will prepare the student for the projects to be completed.

Lectures

Each detailed subject will be presented in a lecture format outlining the theory and standardized accepted methodology. A PDF file of the lecture material will be provided for the student's personal use as reference material. Lecture note outlines will be distributed to the students for each lecture to help the student capture personal notes.

Specific Industry Examples

Real life industry examples will be covered that detail out the application of the theory to demonstrate how different companies apply these tools and techniques. This will give the students a clear understanding of how and why these techniques are utilized at different companies and industries in different manners.

In-Class Assignments

Using the theory and industry examples the student will conduct several projects that outline each key principal on in-class projects. These projects will increase in complexity as the students further develop their skills in applying these tools and techniques. The students will present their work to the group for review and discussion.

Specific Company Application

As a summary of the training we will apply these tools and techniques on a specific company project that is currently in development by the students. This will build a standard methodology on how to appropriately apply project management at your company.



V COURSE OUTLINE AND ASSIGNMENTS

Module 1

- What is PLM?
- Collaborative engineering
- Global collaboration
- Check-Out and check-in
- Part numbering scheme
- Search
- Never lose a file
- Relate files of different types
- Re-use of legacy parts
- Product structure
- Workflows
- Important Team Center definitions
- How does it fit in with other systems?

Module 2

- Getting started in Team Center
- Creating folders
- Running V5 with
- Creating a new part file
- Creating another component part file
- Create the final component
- The navigator refresh command
- Creating an assembly
- Creating part revisions
- Searching for items
- Displaying Team Center attributes
- Check-Out & check-in operations
- Importing vendor data
- Importing miscellaneous documents
- Creating Team Center specifications (2D drawings)
- Creating a new document item
- Releasing items
- Groups, ownership, roles, user access and permissions
- Importing an assembly
- Drawing patterns
- Exiting Team Center



Module 3

- Altreps (alternative representations)
- Versioning rules / load options
- Where used report
- Retrieving previous versions of files that have not been revised
- Workflow
- Product Structure Editor (PSE)
- Implementation of Team Center
- Design the design process
- A multi stage process
- Capturing what exists already
- Innovate upgrade and improve
- Produce a final design
- Install and test all hardware
- Customizations
- Migrate legacy data
- Move all groups to the new system
- Team Center v9.0 and Team Center 2005
- The Team Center 2005 User Interface
- My Navigator in Team Center 2005
- Team Center 2005 Item Display
- DPET (Design Project Estimation Tool)