Intro to Siemens NX: Engineering Essentials and Part Design

Course Description:

This foundational course introduces participants to Siemens NX, a powerful CAD/CAM/CAE software used in product design, engineering, and manufacturing. The course covers essential concepts and tools for 2D sketching, 3D modeling, part design, assembly creation, and technical drawing generation. Through hands-on exercises and real-world design workflows, learners will gain practical skills to create and manage parametric models, assemblies, and drawings within the Siemens NX environment.

Audience Profile:

This course is ideal for:

- Mechanical engineers, product designers, and CAD professionals

- Engineering students or graduates entering CAD-based industries

- Professionals transitioning to Siemens NX from other CAD platforms

- Anyone involved in product development, design, or prototyping

Prerequisite Knowledge/Skills:

- Basic understanding of mechanical design and drafting principles

- Familiarity with general CAD concepts (any CAD software experience is helpful)

- Fundamental computer literacy (Windows environment)

Course Objectives:

By the end of this course, participants will be able to:

- Navigate the Siemens NX interface and workspace

- Create and manage 2D sketches and parametric constraints

- Build and modify 3D parts using solid modeling techniques

- Design assemblies and apply proper constraints and relationships

- Generate professional technical drawings from models and assemblies

- Apply productivity tools and design best practices within NX

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- 1.5 Starting a new design project

Module 2: Sketching Fundamentals

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- 2.4 Managing sketch planes and references
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- 3.3 Editing and modifying features
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• 7.1 Creating and using design templates

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