Course Name : *Drafting Essentials*

Course Duration : 24 Hrs.

Course Overview

- **Intended audience**
  - The Drafting application provides you with the tools required to create and fully annotate drawings of three dimensional models generated in the Modeling application. NX drawings are fully associative to model geometry. This associativity ensures that your drawings reflect the latest configuration of the model.
  - The Drafting Essentials course is intended for:
    - Drafters.
    - Designers.
    - Engineers.
    - CAD/CAM managers.
- **Prerequisites**
  - *Education*: Diploma completed or Degree 2nd year completed in any one of following Streams.
    - Aeronautical, Automobile, Civil, Industrial, Marine, Mechanical, Mechatronics, Metallurgy, Production and Manufacturing Engineering.
  - *Software*:
    - Essentials for NX Designers, or NX Basic Design, or Self-paced topics (the Basic Concepts in NX, Feature Modeling, and Sketching courses)
    - Basic understanding of parametric modeling
- **Course Objectives**
  - After successfully completing this course, you should be able to perform the following activities in NX:
    - Navigate through the drafting user interface.
    - Create and maintain drawing sheets and views.
    - Create and edit user-defined view boundaries.
    - Create and edit associative section views.
    - Create view dependent geometry.
    - Create and edit symbols, dimensions and text.
    - Generate an assembly parts list.
  - You will also explore some techniques for working with assemblies.
- **Course Contents**
  - Part Navigator
  - Master model drawings and drafting standards
  - Drawing sheets
  - Drafting views
  - Custom views

- Move, copy, and align views
- Hiding geometry in drafting views
- Updating drawings and drafting views
- Centerline symbols
- Dimensions
- Notes and labels
- Balloon symbols
- GD&T symbols
- Surface finish, weld, and custom symbols
- Section views
- Editing section lines
- Maintaining associativity
- Detail views
- View boundaries
- Broken views
- Break-out section views
- View dependent edits
- Part Attributes
- Parts lists
- Sectioning assembly views
- Exploded views
- Ordinate dimensions
- Hole Tables