

Course Name : ***NX Manufacturing Fundamentals***

Course Duration : 24 Hrs.

#### Course Overview

- **Course Description**
  - This course teaches the use of the NX Manufacturing application for creating 2–1/2 and 3–axis tool paths.
- **Intended Audience**
  - This course is designed for manufacturing engineers, process planners and NC/CNC Programmers that have the basic knowledge of NC/CNC manual programming of 3–axis positioning and contouring equipment.
- **Prerequisites**
  - Education: Diploma completed or Degree 2<sup>nd</sup> year completed in any one of following Streams.
    - Aeronautical, Automobile, Industrial, Marine, Mechanical, Mechatronics, Metallurgy, Production and Manufacturing Engineering.
  - Software:
    - This is a basic NX manufacturing class that requires you to have basic computer knowledge and experience as an NC/CNC programmer.
- **Course Objective**
  - After successfully completing this course, you should be able to perform the following activities in NX:
    - Create manufacturing assemblies
    - Understand the master model concept
    - Create parent group objects that supply information to operations
    - Utilize options and parameters that are common to various operation types
    - Create drilling, milling, and subsequent tool paths
- **Course Contents**
  - Basic Manufacturing Concepts
  - Analyzing a manufacturing part
  - Tools
  - Operation Navigator
  - Parent groups
  - Cavity milling
  - Machining with T-Cutters
  - Coordinate systems
  - Visualization (ISV)
  - Planar milling

- Floor and wall milling
- Manual drilling
- Fixed axis contouring
- Engraving text
- Tool path information output