**MASTERCAM MILL Advanced**

**Duration** : 3 days  
**Time** : 9:00am – 5:00pm  
**Methodology** : Practical hands-on with using computers  
**Target** : CNC programmer  
CNC Machinist  
**Prerequisite Introduction** : Basic knowledge of Windows XP or Latest and CNC machining experience.  
**Introduction** : Learn the fundamentals of working with milling system. You'll complete a series of 3D modeling exercises covering Coons, Ruled, Loft, Revolved, Swept, Offset entity creation, geometry modification and transformation, create or move entities onto different axis millings, Levels, import and export files from other CAD systems. You will learn how to machine a 3D part using contour, pocket, and drilling toolpaths. You will be shown how to use pocket remachining, island facing, tapered wall pocketing, tombstone programming, and how to verify the toolpaths using solid-based toolpath verification.

**Objective** : In this training, participants will learn to enhance your knowledge in CAD\CAM and CNC programming. In the training you will learn 3D surface modeling. Features of programming for CNC machining will be multi-surface machining, finishing & roughing.

**Day One**  
1. Overview of Mastercam 3D Design functions  
2. Overview of Mastercam 3D Planes  
3. Overview of 3D Wireframe Design  
4. Overview of 3D Surface Creation  
5. Overview of 3D Solid Modeling  
6. Student Question and Answer Session on day’s work

**Day Two**  
1. Introduction to Surface Machining  
2. Mastercam Finishing Options explained  
3. Mastercam Finish Toolpaths applied to a model  
4. Mastercam Roughing Options explained  
5. Mastercam Roughing Toolpaths applied to a model  
6. Set up and machine a model to completion using the Surface Finish and Surface Rough toolpaths  
7. Student Question and Answer Session on day’s work

**Day Three**  
1. Introduction to the Highspeed Surface Toolpaths  
2. High Speed Roughing Options  
3. High Speed Finishing Options  
4. Converting Solid Models to Surface Models and creation of Containment Boundaries  
5. Set up and machine a model to completion using the Surface High Speed Toolpaths  
6. Setting Operation defaults  
7. Student Question and Answer Session on day’s work