3-D SolidModeling Module Syllabus

This 1 day 3D Solid Modeling class has a prerequisite of the 2 day Mill class.
Includes lecture & hands-on exercises to show you how to import, create and machine solid and surface parts.

CS and CS Palette

Creating new CS
Moving Origin
Aligning with Geometry
Aligning with surfaces
Toggling depth
Rotating CS
Duplication CS
Aligning with 3 points
Moving CS

Surface Modeling

Planes
Revolve
Loft
Coons Patch
Sweep
Sheet from face
Trim
Stitch
Un-stitch

Solid Modeling

Sphere
Cuboid
Extrude
Revolve
Loft
Sweep
Solidify
Slice
Union
Subtraction
Intersection
Separate

Advance Modeling

Shell/Offset
Blending
Un-stitch body
Draft
Move

CAM

Holes
FI-FO feed in rapid
FI-FO feed in feed out
Tap
Rigid Tap
Peck, Full out
Peck, Chip breaker
Rough Mill Bore
Finish Mill bore
Bore
Fine bore
Back bore
Pre-Mill
Entry hole
Corner holes
Selecting Locations by:
Clicking each location
Dragging window

Contour

For inside and outside
For rough and finish
Pre-Mill
Entry Holes
Straight walls
Tapered walls
Tapered walls with fillers
Swept shapes
Patterns
Engraving
Tapered thread milling
Toggle Single cut feature
Setting machining markers
Direction of cut
Side of line
Starting feature
Ending feature
Starting point
Ending point

Roughing

Face milling
Stock
Shape
Pocketing
Offsetting
Zigzag
For inside & outside
Pre-mill
Entry holes
Corner holes
Straight walls
Tapered walls
Tapered Walls with fillers
Swept shapes
Patterns
Material only cutting
Using air walls
Selecting geometry
Pockets
Islands

Engraving

On surfaces
Around a diameter
(if rotary milling)
Single or double line
Standard or Raised

File Menu
X-T, .SAT, .IGES Files
Importing or Opening
Exporting

Modify

Duplicate
Duplicate & mirror
2D rotate
Scale
Translate
Shrinkage
Move Part Origin
Change CS (XYZ)
Change CS (HVD)

Plug Ins

Plunge rough