

Design Centre

The Complete CAD-CAE Academy



Course Name : NX CAD
Duration : 108 Hrs.

Syllabus

Introduction to NX

Introduction to CAD & CAE, Application of CAD Software, Product Design Flow-Chart, Engineering. Drawing, Angle Projection, sheet size, Introduction to GUI (Pull down menu, icons), Mouse Buttons, Short-cut Commands Sketcher geometry : Co-ordinate systems, profile, predefined profiles, circle/arcs, lines

Sketcher

Sketcher & Sketch Task Environment explanation, 2D Constraining, Dimensional & Geometrical Constraints, Sketch preference settings, Offset, Patterns, Mirror Demo exercises , Assignments

Part Modeling

Explanation of All commands in toolbar, Extrude(limit, Boolean, draft, offset), Selection tool bars(single curve, connected curves etc. & stop at intersections)

Demo exercises, Assignments
Revolve, Edge Blend, Chamfer, Thread
Datum Place, Datum Axis, Datum CSYS
Pattern features, Mirror, Instance/Pattern geometry
Demo exercises, Assignments

Part Modeling

Block, Cylinder, Cone, Sphere
Boss, Pocket, Hole, Pad

Groove, Rib, Dart
Demo exercises, Assignments

Part Modeling

Swept, Sweep Along guide
Shell
Trim, Split body, divide face, delete body
Demo exercises, Assignments

Part Modeling

Through Curve, thorough curve mesh
Emboss, Slot
Layers
Demo exercises, Assignments

Synchronous Modeling

Move Face, Pull Face
Offset region, resize face,
Replace face, Delete face & features
Introduction to Reverse Engineering
Dump solid concept
Demo exercises, Assignments

Assembly

Reference sets , Suppress & Un-Supress Component, Using Layers, Assembly Load
Options, Assembly Navigator, Bill Of Material, Clash/Sectioning check,
Demo exercises & Assignments

Assembly

Replace Component, Make Unique,
Pattern Component, Mirror Assembly, Assembly Explode
Demo exercises & Assignments

Drafting

Sheets (Standard, Custom & Template Sheets)
Base, Projected Views
Sectional, Half Section View, Stepped sectional View
Setting for Dimensions & Annotation styles
Centre lines
Demo exercises & Assignments

Drafting
View Dependent Edit, View Boundary, View Alignment, Expand, Detail View, View Break Demo exercises & Assignments
Drafting
Annotation , GD & T Symbols, Welding Symbols, Layer Visible in View Demo exercises & Assignments
Drafting & Assembly Assessment
Review of All options & Doubt Clarifications Assessment Models
Sheet Metal
Introduction, Tab, Flange types, Bend, Sheet Metal Form, Dimple, Louver Demo exercises & Assignments
Sheet Metal
Draw Cut out, Bead Solid Punch, Normal Cut out, Unbend , Rebend Flat Pattern, Advance Flange Resize Bend Radius & Angle Demo exercises & Assignments
Projects
INDUSTRIAL BASED PROJECTS

Design Centre

www.dcpune.in