

Course Outline

AutoDesk Inventor

20 Days 40HRS (2HRS/Day)

DAY 1:

GENERAL INTRODUCTION

DAY 2:

INTRODUCTION TO AUTODESK INVENTOR

- PROJECT FILES
- INTRODUCTION TO FILES (PART,ASSEMBLY,DRAWING,PRESENTATION)

USER INTERFACE

- THE BROWSER
- THE PANAL BAR

INTRODUCTION TO PART MODELLING

- ANATOMY OF PARAMETRIC PART
- SKETCHED ,PLACED,WORK FEATURES
- DIMENSIONAL AND GEOMETRICAL CONSTRAINTS

EXERCISE:

SKETCHED AND PLACED FEATURES

EXTRUSION

CUT

HOLE

DAY 3:

SKETCHED FEATURES (CONTD)

- EXT,REV

PLACED FEATURES

- CUT(OFFSET METHOD)
- HOLE

MIRROR FEATURE

EXERCISE

DAY 4:

SKETCHED FEATURES AND PLACED FEATURES (CONTD)

CREATING BASE FEATURES (EXTRUSION)

ADDING PLACED FEATURES (HOLES)

ADDING PLACED FEATURES (FILLET, CHAMFER)

EXERCISE

DAY 5:

COORDINATE SYSTEMS
PRECISE INPUT
SKETCH DOCTOR
CONSTRAINING SKETCHES
DIMENSIONING SKETCHES
EXERCISE

DAY 6:

WORK FEATURES

- WORK PLANES
- WORK AXIS
- WORK POINTS

EXERCISE

DAY 7:

SKETCHED FEATURES AND PLACED FEATURES (CONTD)

- SWEEP
- FACE SPLIT
- FACE DRAFT

PROJECT GEOMETRY
EXERCISE

DAY 8:

SKETCHED FEATURES AND PLACED FEATURES (CONTD)

- RIBS GENERATION AND RIB NETWORK
- COIL GENERATION

EXERCISE

DAY 9:

SKETCHED FEATURES AND PLACED FEATURES (CONTD)

- SHELL
- THREADS
- LOFT

EXERCISE

DAY 10:

EXERCISES

DAY11:

CONCEPT TO DRAWINGS
DRAFTING STANDARDS
DIMENSION STYLE
TEXT STYLE
DEFINING NEW BORDER
DEFINING TITLE BLOCK

DEFINING SYMBOLS
CREATING PART DRAWING

- BASE VIEW
- PROJECTION VIEWS

DAY 12:

CREATING VIEWS

- SECTIONED VIEWS
- AUXILARY VIEWS
- BROKEN VIEWS
- DRAFT VIEWS

ALIGNMENT OF THE VIEWS
MODIFYING VIEWS

DAY 13:

DRAWING ANNOTAIONS

- GENERAL DIMENSION
- ORDINATE DIMENSION
- HOLES/THREAD NOTES
- CENTRE MARK,CENTRE LINE,CENTRE PATTERN,BISECTOR
- WELD SYMBOLS
- FEATURE CONTROL FRAME
- DATUM IDENTIFIER SYMBOL
- DATUM TARGET LEADER
- TEXT LEADER
- TEXT
- BALLON
- PART LIST
- HOLE TABLE SELECTION

DAY 14:

FUNDAMENTALS OF ASSEMBLY.
CREATION OF PARTS FOR ASSEMBLY

DAY 15:

CREATION OF PARTS FOR ASSEMBLY
ASSEMBLY ENVIRNOMENT

- PLACINIG COMPONENTS
- ASSEMBLY CONSTRAINTS
- CREATING PART IN ASSEMBLY
- MOVE PART
- ROTATE PART

DAY 16:

TRANSLATING DATA FROM MDT6.0 FOR ASSEMBLY

DAY 17, 18:

PRESENTATION

HOW TO ANIMATE THE ASSMBLY MODELS

ADDING TWEAKS

DAY 19:

CONCEPT OF ADAPTIVITY

CONCEPT OF I-FEATURES

PRODUCING I-FEATURES

USE OF I-FEATURES

DAY 20:

INTEGRATION OF AUTODESK INVENTOR TO Visual Nastran 4D.