

## Autodesk Inventor Advanced Training

### Course Outline

#### Course Description

In this course, candidates learn the recommended workflows and advanced functionalities for creating 3D assemblies using Autodesk Inventor. Students explore the proper techniques and recommended workflows for skeletal modelling, adaptive design, derived design, and functional design. Students also learn how to quickly create steel frames, create and document welded designs, and publish custom parts using the Content Centre.

#### Duration –

1 Day

#### Who should attend?

Current users of Inventor, who have working knowledge of the software.

#### Learning Objectives?

To receive a thorough grounding in Autodesk Inventor enabling candidates to produce and document 3D digital Prototypes so they can excel in their fields.

Hands-on exercises representing real-world, industry-specific design scenarios are included

#### **Inventor Application Configuration**

Application Options  
Ribbon & Panel Set-up  
Short-cut Keys  
Heads-up Display  
Right Click Menus

#### **Introduction to Top-Down Design**

Skeleton Modelling  
Adaptive Parts  
Top-Down Design Process

#### **Multi-Body Part Modeling**

Layout Design  
Make Components  
Make Parts Utility  
Direct Edit

#### **Intelligent Features**

I-Features  
I-Parts  
I-Assemblies  
I-Mates

## **Design using, I-Logic**

Introduction to iLogic

iLogic Forms Part & Assembly

Linking Assembly Parameters to Parts Parameters

I-Logic Rules

## **Constraints**

Motion Constraints

Transition Constraints

Joint Creation

Degree of Freedom Motion

## **Positional Representatives**

Introduction to Positional Representations

Create and Edit Positional Representations

Using a Positional Representation

## **Assembly Management Tools**

Level of Detail Representation

Shrinkwrap Derivatives

Creating Shrinkwrap Assemblies

Linking levels to detail

Adding/Updating levels of detail

Using Inspection Tools/ Selection Filters

## **Design Accelerator**

Shaft Generator

Frame Generator

Bolt Connections

Calculators

Engineer's Handbook

## **Advanced File Management**

Design Assistant

Design Assistant Options

Pack and Go

Purging Old Files

Copy Design using Autodesk Vault

## **Working with Weldments**

Cosmetic Welds

Groove Welds

Fillet Welds

### Course Requirements-

Microsoft® Windows® 7, Vista® or XP working knowledge.

Current users of Inventor, who have a good working knowledge of the software.

### Additional Info :

Candidates receive comprehensive courseware upon completion.

Afterwards they have the option of completing the Autodesk Inventor Certification exam and gaining the industry recognised 'Autodesk Certified' status.

