



## AUTODESK INVENTOR TRAINING

### **Objectives**

This course will cover principles of 3D parametric part design, assembly design and creating production-ready part, assembly drawings and analysis using Autodesk Inventor. After completing this course users will be able to:

- ✓ Use Autodesk Inventor for daily working process.
- ✓ Understand the concept and techniques to design 3D model.
- ✓ Create multiple designs using several of tools.
- ✓ Understand how to assembly parts.
- ✓ Understand how to use work plane on X,Y, Z axis.

### **Pre-requisites**

No previous CAD experience is necessary. It is recommended that you have a working knowledge of:

- Microsoft® Windows® 7, Microsoft® Windows® 8 or Microsoft® Windows® 10.

## TRAINING PROGRAMME DAY 1

### **Chapter 1: Getting Started**

- Autodesk Inventor User Interface
- Designing Parametric Parts
- Using Project Files for Part Design
- Creating 2D & Basic Sketches
- Geometric Constraints

### **Chapter 2: Intermediate Sketching**

- Editing Parametric Parts
- Creating Work Features
- Modify
- Creating Basic Swept Shapes
- Creating Chamfers and Fillets
- Creating Holes and Threads
- Patterning and Mirroring Features

### **Chapter 3: Assembly**

- Creating Thin-Walled Parts
- Designing Assemblies
- Using Project Files for Assembly Design
- Constraining Components
- Basic Part Design in an Assembly
- Identifying Parts in an Assembly

**Chapter 4: Drawing Creation Environment**

- Creating Chamfers and Fillets
- Base and Projected Views
- Section Views
- Detail Views
- Managing Views
- Automated Dimensioning Techniques
- Manual Dimensioning Techniques
- Annotating Holes and Threads
- Creating Centrelines, Symbols and Leaders
- Creating Tables
- Bill of Materials
- Creating and Customizing Parts Lists
- Creating Balloons
- Setting Drawing Standards
- Drawing Resources

**Chapter 5: Analysis**

- Stress Analysis Overview
- Dynamic Simulation Overview
- Preparing and Running a Simulation
- Viewing Results
- Analyzing Assemblies Performing
- Convergence Performing a Model Analysis
- Preparing and Running a Simulation
- Viewing Results
- Analyzing Assemblies
- Performing a Parametric Design Study