



INVENTOR FUNDAMENTAL TRAINING

Objectives

The main objective of this course is to teach users the basic commands and tools necessary for professional 3D part design, assembly and drafting using Inventor. After completing this course users will be able to:

- ✓ Understand the concept and techniques to design 3D model
- ✓ Create multiple designs using several of tools
- ✓ Understand how to work on assembly
- ✓ Create complete engineering drawing

Pre-requisites

This guide is designed for new users of Inventor. It is recommended that you have a working knowledge of:

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

Chapter 1: Introduction to Autodesk Inventor

- Feature-Based Modeling
- Parametric Features
- Autodesk Inventor Interface
- Model Manipulation

Chapter 2: Creating the Base Feature

- Creating a New Part File
- Sketched Base Features
- Editing Sketched Features
- Practice 2 Extruded Base Features

Chapter 3: Additional Sketching Tools

- Additional Entity Types
- Basic Editing Tools
- Additional Constraint Tools
- Additional Dimension Tools
- Advanced Editing Tools
- Rectangular Sketch Patterns
- Circular Sketch Patterns
- Sketch Preferences

Chapter 5: Model and Display Manipulation

- Reordering Features
- Inserting Features
- Suppressing Features
- Section Views
- Design Views

Chapter 4: Creating Pick and Place Features

- Edge Chamfer
- Constant Fillets
- Variable Fillets
- Face Fillets
- Full Round Fillets
- Straight Holes
- Threads
- Editing Pick and Place Features
- Creation Sequence
- Shell
- Ribs
- Rail and Center Line Lofts
- Advanced Loft Options
- Sweep Features

Chapter 6: Duplication Tools

- Rectangular Feature Patterns
Inserting Features
- Circular Feature Patterns
- Sketched Driven Patterns
- Mirror Parts or Features
- Manipulate Patterns and Mirror Features

Chapter 7: Assembly Environment

- Assembling Components Using Constraints
- Assemble Mini-Toolbar
- Assembling Components Using Joints
- Manipulating Assembly Display
- Moving and Rotating Assembly Components
- Model Information, Measurement Tools and Model Properties
- Presentation Files, Storyboard, Snapshot View and Publishing a Presentation File.

Chapter 8: Assembly Tools

- Replacing Components
- Duplicating Components
- Restructuring Components
- Driving Constraints
- Contact Solver
- Interference
- Error Recovery
- Assembly Parts
- Assembly Features
- Assembly Bill of Materials

Chapter 9: Drawing Basics

- Creating a New Drawing
- Base and Projected Views
- Additional Drawing Views
- Manipulating Views

Chapter 10: Detailing Drawings

- Dimensions
- Parts List
- Balloons
- Styles and Standards
- Hatching
- Drawing Annotations

Chapter 11: Customizing Autodesk Inventor

- Application Options
- Document Settings
- File Properties
- Changing Part Units
- Command Customization