



Autodesk Inventor 2010 Essentials Course Outline

Course Objectives

After completing this course, you will be able to:

- Capture design intent by learning the proper techniques and recommended workflows for creating intelligent 3D parametric parts.
- Create, place, and constrain custom and standard components in an assembly, simulate mechanisms, animate assembly designs, and check for interferences.
- Document designs using base, projected, section, detail, and isometric drawing views, and document assemblies using standard and exploded drawing views.
- Follow drafting standards while dimensioning and annotating drawing views with centerlines, symbols, leaders, hole and thread notes, hole tables, automated balloons, and parts lists.

Prerequisites

This course is designed for new Autodesk Inventor users who want to learn the essential tools and principles of 3D parametric part design, assembly design, and how to create production-ready part and assembly drawings using Autodesk Inventor.

It is recommended that you have:

- A basic understanding of mechanical drafting or design.
- A working knowledge of Microsoft® Windows® 2000 or Microsoft® Windows® XP.

Topics:

1. Getting Started

Autodesk Inventor User Interface
View Manipulation
Designing Parametric Parts

2. Basic Sketching Techniques

Creating 2D Sketches
Geometric Constraints
Dimensioning Sketches

3. Basic Shape Design

Creating Basic Sketched Features
Intermediate Sketching
Editing Parametric Parts
3D Grip Editing
Creating Work Features
Creating Basic Swept Shapes

4. Detailed Shape Design

Creating Chamfers & Fillets
Creating Holes & Threads
Patterning & Mirroring Features
Creating Thin-Walled Parts

5. Assembly Design Overview

Designing Assemblies
Using Project Files in Assembly
Designs

6. Placing, Creating, & Constraining Components

Placing Components in an Assembly
Constraining Components
Placing Standard Components
Using the Content Center
Basic Part Design in an Assembly

7. Interacting with an Assembly

Identifying Parts in an Assembly
Analysis & Motion Tools
Presenting Your Assembly

8. Basic View Creation

Drawing Creation Environment
Base & Projected Views
Section Views
Detail Views
Crop Views
Managing Views

9. Dimensions, Annotations, & Tables

Automated Dimensioning Techniques
Manual Dimensioning Techniques
Annotating Hole & Threads
Creating Centerlines, Symbols, & Leaders
Revision Tables & Tags

10. Annotating Assembly Drawings

Assembly-centric Bill of Materials
Creating and Customizing Parts Lists
Creating Balloons

11. Drawing Standards & Resources

Setting Drawing Standards
Drawing Resources

Duration: 4 days

Classroom Tuition:
\$1,100.00/student

Group rates are available

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