



Autodesk Inventor 2011 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

The User Interface
How to Open Files
How to Create New Files
Different File Types In Autodesk Inventor
Save Options
Application Options
How to Issue Commands
The Help System
Reasons for Which a Project File is Used
How to Create a Project File for Single User
Autodesk Vault
Different Viewing & Appearance Commands

2. Basic Sketching Techniques

Change the Part & Sketch Options
Sketch Outline of a Part
Create Geometric Constraints
Use Construction Geometry to Constrain Sketches
Dimension a Sketch
Create Dimensions Using the Automatic Dimensioning Command
Change a Dimension's Value in a Sketch
Open and Insert AutoCAD DWG Data

3. Creating and Editing Sketch Features

What a Feature Is
Autodesk Inventor's Browser
Direct Manipulation Techniques to Create & Edit a Part
Extrude a Sketch into a Part
Revolve a Sketch into a Part
Edit Features of a Part
Edit the Sketch of a Feature
Make an Active Sketch on a Plane

Create Sketched Features Using: Cut, Join or Intersect
Project Edges of a Part

4. Creating Placed Features

Create Fillets
Create Chamfers
Create Holes
Shell a Part
Create Work Axes
Create Work Points
Create Work Planes
Create a UCS
Pattern Features

5. Creating & Editing Drawing Views

Changes under Drawing Tab of Application Options Dialog Box
Create Base & Projected Drawing Views from a Part
Create Auxiliary, Section, Detail, Broken, Break Out, & Cropped Views
Edit Properties & Locations of Drawings
Retrieve & Arrange Model Dimensions for Use in Drawing Views
Edit, Move & Hide Dimensions
Add Automated Centerlines
Add General Dimensions, Baseline, Chain, & Ordinate Dimensions
Add Annotations
Create Hole Notes

6. Creating & Documenting Assemblies

Understand Assembly Options
Components into an Assembly
Create Components & Assemblies
Create Subassemblies
Constrain Components using Assembly Constraints
Edit Assembly Constraints
Pattern Components in an Assembly
Check Parts in an Assembly for Interface
Drive Constraints
Create a Presentation File
Manipulate and Edit the Bill of Materials (BOM)
Create Individual and Automatic Balloons
Create and Perform Edits on a Parts List of an Assembly

Autodraft, Inc. dba Adraft

email: info@adraft.com

www.adraft.com

ADRAFT, AN AUTODRAFT, INC. COMPANY

Rochester Office:

2815 Baird Road
Fairport, NY 14450-1244
Phone: (585) 389-1900
Fax: (585) 389-0953

Buffalo Office:

8201 Main Street, Suite 3
Williamsville, NY 14221
Phone: (866) 769-6163
Fax: (585) 389-0953

Syracuse Office:

126 Dwight Park Circle
Syracuse, NY 13209
Phone: (866) 769-6163
Fax: (585) 389-0953

Duration: 4 days

Classroom Tuition:

\$1,150.00/student

Group rates are available