

Autodesk Inventor 2012 Advanced Assembly Modeling

Course Objectives

Autodesk Inventor 2012 Advanced Assembly Modeling builds on the skills acquired in the Inventor Introduction to Solid Modeling and Advanced Part Modeling courses to take students to a higher level of productivity when creating and working with assemblies in Inventor.

Who Should Attend / Prerequisites

The class assumes a mastery of Inventor basics as taught in *Inventor 2012 Introduction to Solid Modeling*. Inventor Advanced Part Modeling is recommended. Users should have a working knowledge of the following:

- Creating and editing parts, using work features, and creating and annotating drawing views.
- Microsoft® Windows® 7, Microsoft® Windows® Vista or Microsoft® Windows® XP.

Course Outline

Working Effectively with Assemblies

- General Assembly Tips
- Constraint Tips
- Motion Constraints
- Transitional Constraints

Introduction to Top-Down Design

- Top-Down Design
- Top-Down Design Process
- Top-Down Design Tools

Derived Components

- Derived Components
- Modify Derived Components

Multi-Body Part Modeling

- Multi-Body Part Modeling

Layout Design

- Layout Design

Associative Links and Adaptive Parts

- Associative Links
- Adaptive Assembly Parts

iMates

- iMates

Positional Representations

- Introduction to Positional Representations

- Create and Edit Positional Representations
- Using a Positional Representation

Level of Detail Representations & Shrinkwrap

- Level of Detail Representations
- System-Defined Level of Detail Representations
- Shrinkwrap
- User-Defined Level of Detail Representations
- Using Level of Detail Representations
- Substitute Level of Detail Representations
- LOD Productivity Tools

Design Accelerator

- Design Accelerator
- Generators
- Calculators
- Engineer's Handbook

Advanced File Management

- Design Assistant
- Design Assistant Options
- Pack and Go
- Purging Old Files
- Copy Design using Autodesk Vault

Inventor Studio

- Introduction to Inventor Studio
- Rendering

- Animation
- Video Producer
- Creating a Standard Room

iAssemblies

- Introduction
- Create Basic iAssemblies
- Create Multi-Level iAssemblies
- Create iAssemblies Using Existing Assemblies
- Place iAssemblies
- Edit iAssemblies

Assembly Design using iLogic

- Introduction to iLogic
- iLogic Functions
- Creating Logical Assemblies

Frame Generator

- Frame Generator
- Structural Shape Author

Assembly Duplication Options

- Pattern Components
- Mirror Components
- Copy Components

Working with Weldments

- Working with Weldments
- Fillet Welds
- Cosmetic Welds
- Groove Welds

Course Duration: 3 Days (21 Hours)

Tuition: \$975.00 / Student