

# Inventor Advanced Assembly Training

## 2-day class

In this training class we will begin by focusing on the Top-Down Design workflow. Learn how tools are used to achieve this workflow using Derive, Multi-Body Design, and Layouts. Other topics include model simplification tools, Positional and Level of Detail Representations, iMates and iAssemblies, Frame Generator, Design Accelerator, and file management and duplication techniques. A chapter has also been included about Autodesk® Inventor® Studio to explore how to render, produce, and animate realistic images.

- **Working Effectively with Assemblies**
  - General Assembly Tips
  - Relationship Building
  - Motion and Transitional Constraints
- **Top-Down Design**
  - Top-Down Design and Process
  - Top-Down Design Tools
- **Derived Components**
  - Derived Components
  - Modify Derived Components
- **Multi-Body Part Modeling**
  - Working with Solid Bodies
  - Manipulating Solid Bodies
- **Layout Design**
  - Sketch Blocks
  - Making Parts & Components
- **Associative Links and Assembly Parts**
  - Associative Links
  - Adaptive Assembly Parts
- **iMates**
  - iMate Creation and Composites
  - iMates in an Assembly
- **Positional Representations**
  - Create & Edit Positional Representations
  - Using Positional Representations
- **Model Simplification**
  - Shrinkwrap
  - Assembly Simplification
- **Level of Detail Representations (LOD)**
  - System and User Define LOD
  - Using and Substituting LOD
  - LOD Productivity Tools
- **Design Accelerator**
  - Generators and Calculators
  - Engineers Handbook
- **Advanced File Management**
  - Design Assistant
  - Design Assistant Options
  - Pack and Go
  - Purging Old Files
- **Inventor Studio**
  - Introduction to Inventor Studio
  - Rendering and Animation
  - Video Producer
- **iAssemblies**
  - Creating Basic & Multi-Level iAssemblies
  - Existing Assemblies to iAssemblies
  - Placing and Editing iAssemblies
- **Frame Generator**
  - Frame Generator
  - Structural Shape Author
- **Assembly Duplication Options**
  - Pattern and Mirror Components
  - Copy Components
- **Working with Weldments**
  - Weldment Preparations
  - Fillet, Cosmetic and Groove Welds