

Autodesk Inventor – Advanced Part Modeling

In this class, we will provide you with a deeper knowledge of the interworking's of the Inventor part environment. Learn how Inventor functionality can be applied to your design process through the use of part design methodologies, using multi-body design, surface modeling, iParts, iLogic and iFeatures.

Duration

2 days

Who should attend?

Drafters, Mechanical Designers, Mechanical Engineers

Prerequisites

Completion of “Inventor Introduction to Solid Modeling” Class

A minimum of 120 hours of work experience with software is recommended.

Knowledge of drafting, design, or mechanical engineering principles.

Proficient with Microsoft® Windows®

Typical Schedule

This class starts at 9:00 am and ends at 4:00 pm, for the duration of the class.

Topics Covered

- Tips & Tools
 - Design Philosophies
 - Sketch Options
 - Feature Relationships
 - Equations
- Sketching Tips
 - Sketch Degrees of Freedom
 - Reference in 3D
 - Chamfers
 - Sketched Sections
- Modeling Tips
 - Dynamic Input & Dimensioning for Sketching
 - Precise Input
- Appearance Options
 - Visual Style
 - Ray Tracing
 - Lighting Styles
- Multi-Body Part Modeling
- Sketching Tools
 - Splines
 - 3D Sketches
 - Arc
 - Project Curve to Surface
 - Work Features
- Advanced Work Features
- Grounded Work Points
 - User Coordinate Systems
 - Redefining UCS Placement
- Advanced Lofts, Sweeps, and Coils
- Creating Parts Using iLogic
- Analyzing a Model
 - Zebra Analysis
 - Draft Analysis
 - Curvature Analysis
 - Surface Analysis
 - Cross Analysis
- Introduction to Surfacing
 - Basic Surfaces
 - Patch Surfaces
 - Stitch Surfaces
 - Sculpting with Surfaces
 - Surfaces in Drawing Views
 - Annotating Surfaces in a Drawing
 - Construction Environment
- Creating iFeatures
- Editing iFeatures
- Create iParts
- Editing an iPart Factory
- Translation
 - Import and Export Data
 - Editing Imported Data