

Inventor Advanced Part Modeling Training

2-day class

In this training class, specific advanced part modeling techniques will be covered including multi-body design, advanced lofts and sweeps, generative shape designs, and surface modeling. Additional material aimed at increasing efficiency is also included: iFeatures for frequently needed design elements, iParts for similar designs, translation options for importing data, and an introduction to Part Model States. The class also covers some miscellaneous drawing tools such as custom sketches symbols, working with title blocks and borders, and documenting iParts. With an understanding of these tools, you will begin to streamline your design and documentation process.

Model Appearances

- Visual Display
- Lighting
- Color And Texture

Sketching Tools

- Splines & 3D Sketch Creation Tools
- Bending A Part
- Unwrapping A Part
- Imported Point Data

Multi-Body Part Modeling

- Multi-Body Part Design
- Complex Part Design

Advanced Work Features

- Grounded Work Points
- User Coordinate Systems

• Advanced Lofts, Sweeps, and Coils

- Area Lofts
- Advanced Loft Options
- Advanced Sweeps & Coils

Analyzing a Model

- Analysis Types & Procedures
- Analysis Continuity

• Generative Shape Design

Shape Generator

• Introduction to Surfacing

- Basic, Patch, Ruled & Stitched Surfaces
- Sculpting with Surfaces
- Thickening & Offsetting a Surface

Additional Surfacing Options

- Extend and Trim Surfaces
- Replace Face with a Surface
- Delete Faces & Copy Surfaces

Model States

Part Model States

Coping Between Parts (iFeatures)

- Creating & Inserting iFeatures
- iFeatures vs. Copy Feature
- Table-Driven iFeatures
- Editing iFeatures

iParts

- iPart Creation & Placement
- Editing an iPart Factory
- Table-Driven iParts

Introduction to Freeform Modeling

- · Creating Freeform Geometry
- · Box And Cylinder Freeform Modeling

Importing & Editing CAD Data

- Import and Export Data
- Editing the Base solid & Direct Edit
- Attaching Point Clouds

Working with AutoCAD Data

- Opening AutoCAD files & DWG underlay
- Other Autodesk Product Files

Analyzing A Model

Analysis Types And Procedures