

## Autodesk Inventor 2012 Advanced Part Modeling

### Course Objectives

The goal of this course is to build on the skills acquired in *Inventor 2012 Introduction to Solid Modeling* by taking students to a higher level of productivity when designing part models in Inventor.

### Who Should Attend / Prerequisites

The class assumes a mastery of Inventor basics as taught in *Inventor 2012 Introduction to Solid Modeling*. 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

#### **Tips & Tools**

- Design Philosophies
- Sketching Tips
- Modeling Tips
- Appearance Options
- Color Styles

#### **Multi-Body Part Modeling**

- Multi-Body Part Modeling

#### **Sketching Tools**

- Splines
- 3D Sketches

#### **Advanced Work Features**

- Grounded Work Points
- User Coordinate Systems

#### **Advanced Lofts, Sweeps and Coils**

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

#### **Part Design using iLogic**

- Introduction to iLogic

- iLogic Functions
- Creating Parts Using iLogic

#### **Analyzing a Model**

- Analysis Types
- Analysis Procedures

#### **Introduction to Surfacing**

- Introduction to Surfaces
- Basic Surfaces
- Patch Surfaces
- Stitch Surfaces
- Sculpting with Surfaces
- Thickening & Offsetting a Surface
- Surfaces in Drawing Views

#### **Additional Surfacing Options**

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

#### **Importing Surfaces**

- Importing Surfaces
- Repairing Imported Surfaces
- Construction Environment

#### **Copying Between Parts (iFeatures)**

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

#### **iParts**

- iPart Creation
- iPart Placement
- Editing an iPart Factory
- Creating iFeatures from a Table-Driven iPart
- Tables for Factory Members

#### **Translation**

- Import and Export Data
- Importing Data Formats
- Importing Solids

**Course Duration:** 2 Days (14 Hours)

**Tuition:** \$650.00 / Student