

Inventor Advanced

Overview

The Inventor Advanced course is broken into two sections to make learning more structured and easier to follow – Advanced Part Modeling and Advanced Assembly Modeling.

Prerequisites:

- The class assumes a mastery of Inventor basics as taught in Inventor Introduction to Solid Modeling. Students should know how to create and edit parts, use work features, and create and annotate drawing views, etc.

Advanced Part Modeling Overview

Inventor Advanced Part Modeling is the second in a series of courses on Inventor. The goal of this class is to build on the skills acquired in the Inventor Fundamentals course to take students to a higher level of productivity designing part models in Inventor. In this course we consider various approaches to part design and emphasize useful strategies. Specific advanced part modeling techniques covered here include multi-body design, advanced lofts, advanced sweeps, coils, and surface modeling.

Additional material aimed at increasing efficiency is also included: iFeatures for frequently needed design elements, iParts for similar designs, iLogic for automating designs, translation options for importing data, and engineering notebook for communication. The course also covers some miscellaneous drawing tools such as custom sketch symbols, working with title blocks and borders, and documenting iParts. With an understanding of these tools, students can begin to streamline the design and documentation process.

Duration: 16 hours

Fundamental Topics

- Advanced model appearance options
- Multi-body part modeling
- 2D and 3D sketching techniques
- Advanced geometry creation tools (work features, area lofts, sweeps, and coils)
- Part creation using iLogic
- Analysis tools
- Creating and editing basic surfaces
- Importing surfaces and surface repair tools
- Using iFeatures and iParts to work efficiently with part models
- Advanced Drawing tools (tables for iParts, surfaces in drawing views, and custom sketched symbols)
- Importing and exporting data
- Adding notes with the Engineer's Notebook

Advanced Assembly Modeling Overview

The goal of this section is to build on the skills acquired in the Inventor fundamentals course to take students to a higher level of productivity designing part models in Inventor. In this course we consider various approaches to part design and emphasize useful strategies. Specific advanced part modeling techniques covered here include multi-body design, advanced lofts, advanced sweeps, coils, and surface modeling.

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