

# Inventor Fundamentals

## Overview

Autodesk Inventor Fundamentals introduces the concepts and techniques of 3D modeling with Autodesk Inventor. As an introductory course, it does not assume prior knowledge of any 3D modeling or CAD software. Students do need to be experienced with the Windows operating system. Also, some background with drafting of 3D parts (such as orthographic projections, sections, and exploded views) is recommended.

The structure of the course follows the typical stages of using Inventor to create and edit parts, add them to assemblies, and generate drawings. Not all aspects of Inventor can be addressed within the time limits of an introductory course. Advanced techniques and features are covered in Inventor Advanced.

Like its predecessor from Autodesk, Mechanical Desktop, Inventor is a parametric, feature-based solid modeling program. Unlike Mechanical Desktop, however, it is not based on AutoCAD. Students coming to Inventor from the AutoCAD/MDT environment discover that this means changing some long-standing habits, like working at the Command Line. On the other hand, they should find that many of the new tools in Inventor are intuitive. Students familiar with Mechanical Desktop also find extensive similarities with concepts and techniques in Inventor.

**Duration:** 40 hours

## Prerequisites

- None are required

## Fundamental Topics

- The Inventor interface.
- Creating 2D sketches with basic sketch and editing tools.
- Constraining and dimensioning sketches.
- Generating 3D parts from sketches.
- Part modeling, adding and editing 3D features.
- Placing and constraining parts in assemblies.
- Creating drawings and views.