

Autodesk Inventor - Intermediate



Overview

Course Length: 40 hours (*can be taken via flexible schedule in-center or remotely*)

Description: This course is designed to build on skills learned from introductory course, practice, and experience. Learn how to create complex parts using advanced part tools. Material covered includes Sheet Metal Design, Tube & Pipe Design, Frame Generator, Weldments, Plastic Part Design & Appearance, Materials & Styles functionality.

Course Objectives/Topics

- **Appearance, Materials and Styles**
The Autodesk Inventor Appearance, Materials and Styles course will teach the user how to create, edit and manage styles in Autodesk Inventor. The course covers the basics of Appearance styles using the Appearance Browser and Material styles using the Material Browser. Drawing styles and use of the Style and Standard Editor are also covered. In addition to these three main style types additional style types are reviewed for these creation and edit location with in Autodesk Inventor. Each unit has exercises to improve your productivity and enhance your comprehension of the software. Upon completion of the course, you'll have all the tools needed to start creating your own styles and style libraries with Autodesk Inventor.
- **Sheet Metal Design**
The Autodesk Inventor Sheet Metal Design course will teach the user how to create and document sheet metal parts inside of Autodesk Inventor. The course covers everything from basic sheet metal features to complex shapes and design techniques. Flat pattern and drawing documentation are covered to ready your completed sheet metal parts for manufacture. Each unit has an exercise to improve your productivity and enhance your comprehension of the software. Upon completion of the course, you'll have all the tools needed to start creating and documenting sheet metal parts with Autodesk Inventor.
- **Tube and Pipe Design Essentials**
The Autodesk Inventor Tube and Pipe course provides a complete and detailed description of routes and runs essentials, fittings and components, and documenting tube and pipe assemblies for manufacture. Each course topic will include detailed lessons, procedures and examples, and practice projects to apply your learning.
- **Frame Generator**
The Autodesk Inventor Frame Generator online course will teach the user how to create parametric frames using the design tools inside Autodesk Inventor. The course includes frame creation basics from sketching the skeleton frame and inserting frame members to beam calculation and BOM data. Then users are shown how to modify frame members to complete their frame design with miters, trims, extends and notching in order to make a design that can be manufactured. Finally, users are shown how to create and publish their own custom frame member profiles. Each unit has exercises to improve your productivity and enhance your comprehension of the software. Upon completion of the course, you'll have all the tools needed to start creating parametric frames and structures with Autodesk Inventor.

- **Weldments**

The Autodesk Inventor Weldment course will teach the user how to create and document weldments inside of Autodesk Inventor. The course begins with an overview of the weldments from an industry perspective. It then continues with the weldment construction process inside of Autodesk Inventor. The course includes the weldment environment (preparations, welds, & machining), weld types (fillet, cosmetic, groove, and end fills), welding symbols (reference line, tail, arrow side, other side, flag, weld all around, arrow to joint), weldment drawings/documentation (weld bead report, annotations, weldments drawings, symbols, workflows), parts list creation, and mass properties (solid, cosmetic welds). Each unit has an exercise to improve your productivity and enhance your comprehension of the software. Upon completion of the course, you'll have all the tools needed to start creating and documenting weldments with Autodesk Inventor.

- **Plastic Part Design**

The Autodesk Inventor Plastic Part Design course will teach the user how to create plastic part features inside of Autodesk Inventor. The course covers some basic plastic part design rules and reviews the plastic part feature tools. Each unit has an exercise to improve your productivity and enhance your comprehension of the software. Upon completion of the course, you'll have all the tools needed to start creating grills, bosses, rests, rule fillets, lips, and hook / loop snap fits with Autodesk Inventor.

Practical practice and Projects

- Put what you learned to use. Practice virtualized part modeling using advanced techniques from traditional 2D drawings, 3D annotated illustrations, and from measuring/approximating existing items.
- Put it all together with a final project of your choosing.

Prerequisites

- Autodesk Inventor – Essentials course.
- Practice and experience using Autodesk Inventor.

Audience

- A person who wants to be proficient in Autodesk Inventor to find a job
- A person who wants to build advanced Autodesk Inventor part modeling skills