

Autodesk Inventor training course - Tooling

Course Description

Teaches the fundamental principles of mold design for plastic parts, how to create a mold cavity and core, design the injection feeding systems as well as other required components for a mold, and how to analyse and document that design using Autodesk® Inventor™. Delegates work with hands-on exercises representing real-world, industry-specific design scenarios.

Course duration: 2 days
Courseware provided: 280 pages

Objectives

To provide delegates with a thorough understanding of the principal requirements and components of a plastic part mold, and how to design, validate, and document an injection mold design using Autodesk Inventor.

Who Should Attend?

This course is designed for experienced Autodesk Inventor users.

Pre-requisites

Delegates should have completed an *Autodesk Inventor* course or be familiar with the concepts taught in this course, and have a working knowledge of:

- Parametric part and assembly design using Autodesk Inventor.
- Parametric solid modeling concepts and design or mechanical engineering principles.
- Mechanical Plastic part design and/or injection mold design experience useful, but not required.

Course Outline

Begin Creating Plastic Injection Molds

- Plastic Injected Part Design
- Create a Mold Assembly
- Adjust and Pattern a Placed Part

Designing the Mold Core and Cavity

- Gate Position, Material Shrinkage, and Workpiece Definition
- Analysis for Optimisation
- Parting Design
- Core/Cavity Inserts

Mold Layout and Assembly Design

- Creating Runners, Gates, and Cold Wells
- Creating the Mold Base
- Ejecting the Part
- Sprue Bushings and Locating Rings
- Cooling System
- Lock Sets
- Combining Mold Components

Verify and Communicate the Mold Design

- Analysis for Verification
- Communicating the Mold Design

Please note: Course topics may be modified by the instructor based upon knowledge and skill level of the course participants.