

# INVENTOR

## ADVANCED: TOOLING\*\*

### OVERVIEW

Learn 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 analyze and document that design. For project experience, the instructor will utilize hands-on exercises representing real-world, industry-specific design scenarios.

**\*\*Not available for all product versions.**

### SPECIFICS

**Duration:** 2 Days

**Hours:** 9 am - 4 pm (including lunch hour)

**Cost:** \$795/person (includes training materials)

**Prerequisites:** No previous CAD experience is necessary.

Working knowledge of:

- Inventor Essentials
- Microsoft® Windows®

\* This course is based on Autodesk® Official Training Guide (AOTG).

### TOPICS COVERED

#### 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 Optimization
- 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