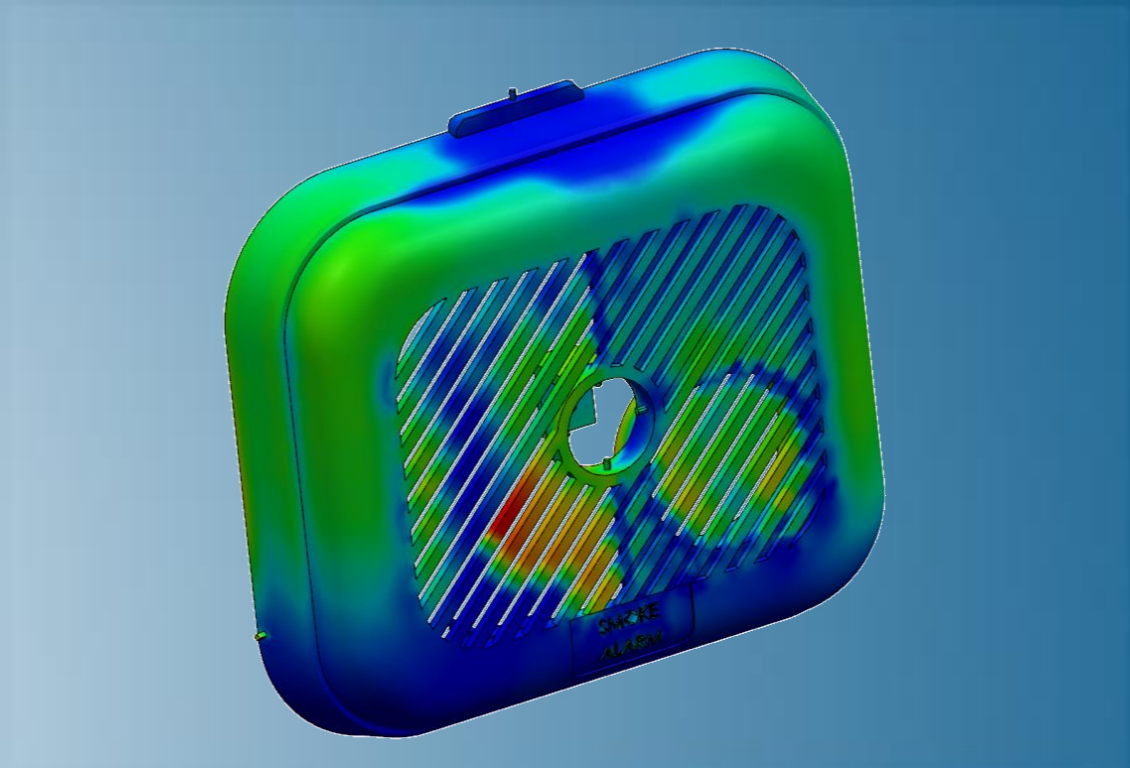


# Plastic Part Injection Essentials

R2017x



**3DEXPERIENCE**<sup>®</sup>



# About this Course

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## Course objectives

Upon completion of this course you will be able to:

- ▶ Perform Injection Molding simulations
- ▶ View and evaluate simulation results

## Targeted audience

This course is intended for the following roles:

- ▶ Plastic Injection Analysis Engineer

## Prerequisites

None.



4 hours

# Day 1

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- ▶ Lesson 1 Introduction
- ▶ Lesson 2 Simulation Setup for Injection Molding
- ▶ Workshop 1 Simulation Setup for a Smoke Alarm Cover
- ▶ Lesson 3 Postprocessing
- ▶ Workshop 2 Smoke Alarm Simulation, Postprocessing and Modification

# Additional Material

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- ▶ Appendix 1      Cloud-based Simulation Roles

# Join the Community!

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### Training Schedule & Registration

We offer regularly scheduled public seminars as well as training courses at customer sites. An extensive range of courses are available, ranging from basic introductions to advanced courses that cover specific analysis topics and applications. On-site courses can be customized to focus on topics of particular interest to the customer, based on the customer's prior specification. To view the worldwide course schedule and to register for a course, visit the links below.

<b>North American</b>  <ul style="list-style-type: none"><li>&gt; By Location</li><li>&gt; By Course</li></ul>	<b>International</b>  <ul style="list-style-type: none"><li>&gt; By Location</li><li>&gt; By Course</li></ul>	<b>Live Online Training</b>  <ul style="list-style-type: none"><li>&gt; Full Schedule</li></ul>
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## Revision Status

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<b>Lesson 1</b>	<b>4/17</b>	<b>Updated for R2017x</b>
<b>Lesson 2</b>	<b>4/17</b>	<b>Updated for R2017x</b>
<b>Lesson 3</b>	<b>4/17</b>	<b>Updated for R2017x</b>
<b>Appendix 1</b>	<b>4/17</b>	<b>Updated for R2017x</b>
<b>Workshop 1</b>	<b>4/17</b>	<b>Updated for R2017x</b>
<b>Workshop 2</b>	<b>4/17</b>	<b>Updated for R2017x</b>



# Lesson 1: Introduction

## *Lesson content:*

- ▶ Introduction
- ▶ Plastic Part Design Rules
- ▶ **3DEXPERIENCE** Platform Basics
- ▶ Geometry for Simulation



1 Hour

# Lesson 2: Simulation Setup for Injection Molding

## *Lesson content:*

- ▶ Plastic Part Injection Overview
- ▶ Materials
- ▶ Simulation Setup
- ▶ Mold Wall Temperature
- ▶ Injection Location
- ▶ Feature Manager
- ▶ Mesh Setup
- ▶ Simulate
- ▶ Workshop Preliminaries



1 hour

# Workshop 1: Simulation Setup for a Smoke Alarm Cover

In this workshop, you will create a simulation setup for the three-dimensional model of the Smoke Alarm top cover shown below.

After completion of this exercise, you will be able to:

- a. Create the simulation setup steps for Plastic Part Injection
- b. Define an injection location.
- c. Set up a mesh for a given model



30 minutes

