

# Training: SOLIDWORKS CAM Standard (2.5 days)

**Prerequisites:** Experience with the SOLIDWORKS design software.

Experience with the Windows® operating system.

**Description:** This course teaches how to use the SOLIDWORKS CAM Standard software to generate, modify and post process 2.5 axis milling toolpaths used for the machining of SOLIDWORKS part files.

## Introduction

- About This Course

## Lesson 1: SOLIDWORKS CAM Basics and User Interface

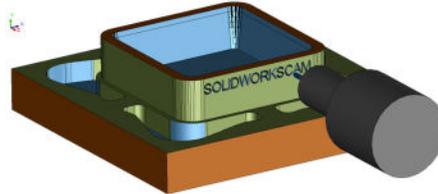
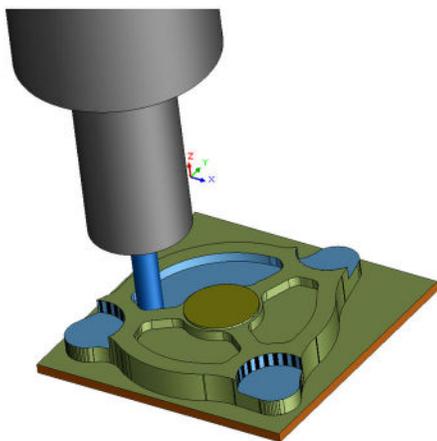
- What is SOLIDWORKS CAM?
- SOLIDWORKS CAM User Interface
- Process Overview
- Generate Toolpaths and NC Code

## Lesson 2: Automatic Feature Recognition (AFR) and Operation Modification

- Working with Features, Operations and Toolpaths

## Lesson 3: Interactive Feature Recognition (IFR)

- Interactive Feature Creation
- Case Study: AFR and IFR Feature Creation
- Case Study: IFR 2.5 Axis Feature and Operation Creation
- Case Study: IFR 2.5 Axis Feature Selection Filters



## Lesson 4: Interactive Operations

- Interactive 2.5 Axis Mill Operations
- Case Study: Interactive Operation Creation
- Case Study: Create Operations
- Save Operation Plan
- Case Study: Save Operation Plan

## Lesson 5: Merging Features and Operations

- Machining Similar Features
- Case Study: Combine Operations
- Case Study: Combine Selected Operations

## Lesson 6: Avoid and Contain Areas

- Adding Avoid and Contain Areas
- Case Study: Add Avoid Area

## Lesson 7: Pattern Features and Mirror Toolpaths

- Patterning
- Case Study: Create Linear, Circular and Sketch Driven Patterns
- Case Study: Mirror Toolpaths

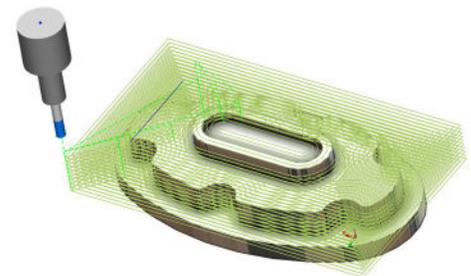
## Lesson 8: Advanced Features and Operations

- Advanced Feature Creation
- Case Study: Engrave Feature Creation
- Case Study: Curve Feature Creation

- Case Study: Multi-stepped Hole Machining
- Case Study: Tap and Thread Mill
- Case Study: Corner Round and Chamfer
- Case Study: Multi Surface Feature

## Lesson 9: Customizing the Technology Database

- SOLIDWORKS CAM Technology Database (TechDB)
- Case Study: User Defined Tool Creation
- Case Study: TechDB Add Machine
- Case Study: TechDB Add Tool
- Case Study: TechDB Create and Apply Strategy



## Appendix A: Considerations for Waterjet, Plasma and Laser Machining

- Waterjet, Plasma and Laser Machining
- Case Study: Plasma Workflow

## Appendix B: Tolerance Based Machining

- Tolerance Based Machining Overview
- Case Study: Tolerance Based Machining