

## SOLIDWORKS Assembly for Tooling

### OVERVIEW

**CLASSROOM LENGTH:** 1 day

**PREREQUISITES:** We recommend completing the SOLIDWORKS Essentials course or similar experience.

**DESCRIPTION:** Combining the concepts from the Assembly Modeling and Surfacing training classes, the Assembly for Tooling course focuses on practical applications for the tool and die industry. Covers design methodology and tips and tricks for Import cleanup, Tool Fixture/Work Holding, Gage Design, Metal Stamping Die Design, and best practices when working and setting up standard parts libraries.

#### LESSON 1:

##### IMPORTING GEOMETRY & CLEAN UP

- Importing geometry, clean up importing customer files, and setting up templates properly
- Import diagnostics and manual surfacing work to repair faulty/missing faces
- Knitting into a solid for use in tooling

#### LESSON 2:

##### TOOL FIXTURE

- Tool fixture working with the customer data in an assembly environment
- Generating fixture blocks to suit application needs
- Basics behind working with the surfaces of imported data

#### LESSON 3:

##### GAGE DESIGN

- Gage design working with the customer data in an assembly environment
- Generating fixture blocks to suit application needs
- Basics behind working with the surfaces of the imported data

#### LESSON 4:

##### DIE DESIGN

- Die design working with the customer data to generate the forming and cutting steels needed for die design
- In context relations between the import data and the tool steels at an assembly level

#### LESSON 5:

##### WORKING WITH STANDARD PARTS LIBRARIES

- Proper utilization of standard parts libraries with regard to multi-user design environments
- How to download, simplify and store standard parts for use in all future tooling designs