

## SolidWorks Simulation

Price \$1,500.00 Duration 3 Days

Delivery Methods VILT, Private Group

The course is designed to make SOLIDWORKS users productive more quickly with SOLIDWORKS Simulation Bundle. This course will provide in-depth coverage of the basics of Finite Element Analysis (FEA), covering the entire analysis process from meshing to evaluation of results for parts and assemblies. The class discusses linear stress analysis, gap/contact analysis, and best practices.

## **Course Objectives**

- What is SOLIDWORKS Simulation?
- What is Finite Element Analysis?
- Build Mathematical Model
- Build Finite Element Model
- Solve Finite Element Model
- Analyze Results
- Errors in FEA
- Finite Elements
- Degrees of Freedom
- Calculations in FEA
- Interpretation of FEA Results
- Units of Measurement
- Limitations of SOLIDWORKS Simulation

## Agenda

**LESSON 1: THE ANALYSIS PROCESS** 

LESSON 2: MESH CONTROLS, STRESS CONCENTRATIONS, AND BOUNDARY

**CONDITIONS** 

**LESSON 3: ASSEMBLY ANALYSIS WITH** 

**CONTACTS** 

**LESSON 4: SYMMETRICAL AND FREE SELF-**

## This class is not currently scheduled.

Contact us and we will help you get the training you need!





**EQUILIBRATED ASSEMBLIES** 

LESSON 5: ASSEMBLY ANALYSIS WITH CONNECTORS AND MESH REFINEMENT

LESSON 6: COMPATIBLE/INCOMPATIBLE

**MESHES** 

**LESSON 7: ANALYSIS OF THIN** 

**COMPONENTS** 

**LESSON 8: MIXED MESHING SHELLS &** 

**SOLIDS** 

**LESSON 9: MIXED MESHING SOLIDS, BEAMS** 

& SHELLS

**LESSON 10: SUBMODELING** 

**LESSON 11: DESIGN STUDY** 

**LESSON 12: THERMAL STRESS ANALYSIS** 

**LESSON 13: ADAPTIVE MESHING** 

**LESSON 14: LARGE DISPLACEMENT** 

**ANALYSIS** 

APPENDIX A: MESHING, SOLVERS, AND TIPS

& TRICKS

APPENDIX B: CUSTOMER HELP AND

**ASSITANCE** 

