

### Course Outline

<b>SOLIDWORKS Simulation Premium Dynamics</b>	
Description	This course covers time dependent analysis (force loads as well as motion shock loading examples), harmonic analysis and random vibration analysis (MILS-STD-810F example is Included), response spectrum analysis, and introduction to nonlinear dynamics simulation.
Prerequisites	SOLIDWORKS Simulation Course or experience with SOLIDWORKS + working basic knowledge of finite elements and of basic mechanical principles. The knowledge of basic principles in Vibrations is strongly recommended, but not required.
Duration	2 days
Delivery Mode	Face to Face <b>OR</b> Online

<p><b>Introduction</b>                      What is SOLIDWORKS Simulation</p> <p><b>Lesson 1: Vibration of a Pipe</b>                      Objectives                      Problem Description                      Static Analysis                      Frequency Analysis                      Dynamic Analysis (Slow Force)                      Discussion                      Dynamic Analysis (Fast Force)                      Summary                      Questions</p> <p><b>Lesson 2: Transient Shock Analysis According to MILS-STD-810F</b>                      Objectives                      Problem Description                      Model with Remote Mass                      Summary</p>	<p><b>Lesson 3: Harmonic Analysis of a Bracket</b>                      Objectives                      Project Description                      Harmonic Analysis of a Bracket                      Summary</p> <p><b>Lesson 4: Response Spectrum Analysis</b>                      Objectives                      Response Spectrum Analysis                      Response Spectrum                      Project description                      Summary</p>	<p><b>Lesson 5: Random Vibration Analysis According to MIL-STD-810F</b>                      Objectives                      Project Description                      Summary                      References</p> <p><b>Lesson 6: Nonlinear Dynamic Analysis of an Electronic Enclosure</b>                      Objectives                      Project Description                      Linear Dynamic Analysis                      Nonlinear Dynamic Analysis                      Summary</p>
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