

Solidworks Simulation FEA Analysis Training

COURSE CONTENT

GET IN TOUCH



Multisoft Systems
B - 125, Sector - 2, Noida



(+91) 9810-306-956



info@multisoftsystems.com



www.multisoftsystems.com

About Multisoft

Train yourself with the best and develop valuable in-demand skills with Multisoft Systems. A leading certification training provider, Multisoft collaborates with top technologies to bring world-class one-on-one and certification trainings. With the goal to empower professionals and business across the globe, we offer more than 1500 training courses, which are delivered by Multisoft's global subject matter experts. We offer tailored corporate training; project Based Training, comprehensive learning solution with lifetime e-learning access, after training support and globally recognized training certificates.

About Course

Solidworks Simulation FEA Analysis Training by Multisoft Systems is designed to provide professionals and students with in-depth knowledge and hands-on experience in finite element analysis (FEA) using Solidworks Simulation.

Module 1: Frequency Analysis of Parts

- ✓ Objectives
- ✓ Modal Analysis Basics
- ✓ Case Study: The Tuning Fork
- ✓ Frequency Analysis with Supports
- ✓ Frequency Analysis Without Supports
- ✓ Frequency Analysis with Load

Module 2: Frequency Analysis of Assemblies

- ✓ Objectives
- ✓ Case Study: The Engine Mount
- ✓ All Bonded Contact Conditions
- ✓ Bonded and Free Contact Conditions

Module 3: Buckling Analysis

- ✓ Objectives
- ✓ Buckling Analysis
- ✓ Case Study: Particle Separator

Module 4: Load Cases

- ✓ Objectives
- ✓ Load Cases
- ✓ Case Study: Scaffolding
- ✓ Summary

Module 5: Sub modeling

- ✓ Objectives
- ✓ Sub-modeling
- ✓ Case Study: Scaffolding

- ✓ Part 1: Parent Study
- ✓ Part 2: Child Study
- ✓ Summary
- ✓ Questions

Module 6: Thermal Analysis

- ✓ Objectives
- ✓ Thermal Analysis Basics
- ✓ Case Study: Microchip Assembly
- ✓ Steady-State Thermal Analysis
- ✓ Transient Thermal Analysis
- ✓ Transient Analysis with Time Varying Load
- ✓ Transient Thermal Analysis using a Thermostat

Module 7: Thermal Analysis with Radiation

- ✓ Case Study: Spot Light Assembly
- ✓ Project Description
- ✓ Steady State Analysis
- ✓ Full Radiation Conditions

Module 8: Advanced Thermal Stress2D Simplification

- ✓ Objectives
- ✓ 2D Simulations – plane stress, plane strain, axisymmetry
- ✓ Thermal Stress Analysis
- ✓ Case Study: Thermal Expansion Joint
- ✓ Thermal Analysis
- ✓ Thermal Stress Analysis

Module 9: Fatigue Analysis

- ✓ Fatigue

- ✓ Stress-life (S-N) Based Fatigue
- ✓ Case Study: Pressure Vessel
- ✓ Thermal Stress Study
- ✓ Fatigue Terminology
- ✓ Fatigue Study
- ✓ Fatigue Study with Dead Load

Module 10: Variable Amplitude Fatigue

- ✓ Objectives
- ✓ Case Study: Suspension
- ✓ Project Description
- ✓ Fatigue Study
- ✓ Summary
- ✓ Questions

Module 11: Drop Test Analysis

- ✓ Objectives
- ✓ Drop Test Analysis
- ✓ Case Study: Camera
- ✓ Rigid Floor Drop Test
- ✓ Elastic Floor Drop Test
- ✓ Elasto-Plastic Material Model
- ✓ Drop Test with Contact

Module 12: Optimization Analysis

- ✓ Objectives
- ✓ Optimization Analysis
- ✓ Case Study: Press Frame
- ✓ Static and Frequency Analyses
- ✓ Optimization Analysis

- ✓ Design Study

Module 13: Pressure Vessel Analysis

- ✓ Objectives
- ✓ Case Study: Pressure Vessel
- ✓ Pressure Vessel Analysis
- ✓ Manhole Nozzle Flange and Cover