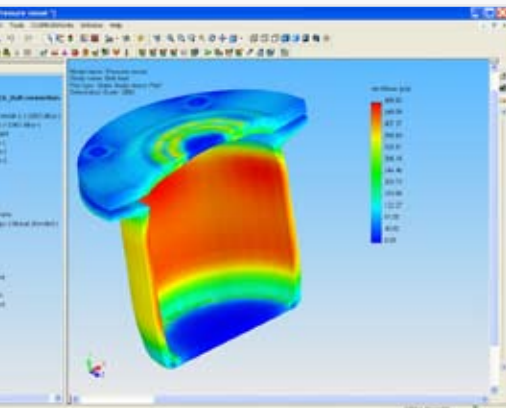


Course: COSMOSWorks Designer



Who should attend:

All COSMOSWorks users wishing to create better designs in SolidWorks by performing analysis and evaluating the behavior of their parts and assemblies under actual service conditions.

Prerequisite:

Knowledge of SolidWorks and basic mechanical engineering concepts is recommended.

Logistics:

- Length: 2 days
- Time: 9:00 am to 5:00 pm.

OVERVIEW

This course is designed for SolidWorks users to become productive quickly with the COSMOSWorks Designer Bundle. It offers a comprehensive hands-on training on the applications of COSMOSWorks. This 2 day course will provide an in-depth coverage on the basics of Finite Element Analysis, 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. Analysis features are discussed using an integrated approach of the COSMOSWorks software from within the SolidWorks environment. Finally, examples of parts and assemblies including those with various gap/contact conditions are reviewed.

TOPICS COVERED

Introduction to FEA

- Key Concepts and Principles
- FEA and CAD modeling approaches
- Benefits
- Boundary Conditions
- Loads
- Elements
- Linear vs non-linear analysis

FEA using COSMOSWorks

- Analysis set up, results visualization and post-processing
- Meshing Options
- Mixed Meshing
- Adaptive Meshing
- Loads and Restraints
- Small vs. Large Displacements
- Linear Static Analysis of parts
- Mixed Meshing and Advanced Assembly Analysis
- Gap/Contact and Advanced Assembly Analysis
- Analyses with special connectors and bolts
- Thermal stress analysis
- Limitations of linear analysis

Structural Research & Analysis Corp.
3000 Ocean Park Blvd.
Suite 2001
Santa Monica, CA 90405
Phone: +1-310-309-2800
Fax: +1-310-309-2801
Email: Jeff@srac.com

COSMOS[®]
www.cosmosm.com