

Learning Module

Tosca Structure nonlinear: Optimization for Structures with Nonlinearity

In this course you will learn how to perform structural optimization (topology and shape optimization) based on nonlinear simulation results.

Objectives

Upon completion of this course you will be able to:

- Contact.
- Nonlinear materials.
- Nonlinear geometries.

Knowledge Prerequisites

Basic knowledge of Tosca Structure.

Language(s) for selected release

English

Brands

Simulia

Available Releases

SIMULIA 2019, SIMULIA 2018, SIMULIA 2017,
SIMULIA 2016

Duration

8 hours

Discipline

Tosca Structure

Contents

Overview - Tosca Structure.nonlinear - Optimization for Structures with Nonlinearity

- 1 - Tosca Structure Overview
- 2 - Topology Optimization - Overview and Special Features
- 3 - Contact in Topology Optimization
- 4 - Geometric and Material Nonlinearities
- 5 - Shape Optimization - Overview and Special Features
- 6 - Shape Optimization for Structures with Nonlinearities
- 7 - Sizing Optimization for Structures with Nonlinearities