

Structural Mechanics (VPS) Implicit - Boundary Element Method

OEM: Keysight

COURSE DESCRIPTION

The aim of this course is to show the participants solutions of tasks with this method. The interacting methods are uncoupled and strongly coupled. A special focus is the consideration of the sound radiation to the environment.

AUDIENCE PROFILE

- CAE engineers with a focus on NVH.

PREREQUISITES

- Structural Mechanics (VPS) Implicit - Dynamics (Modal Analysis and NVH)

COURSE OBJECTIVES

By the end of this course, participants will be able to:

- Learn how to set up a vibroacoustic BEM model for a given structural mesh. Learn how to evaluate results on the BEM surface and the exterior.

COURSE OUTLINE

Module 1: Day 1 - BEM

- Typical application areas
- Model set-up
- Exercise 1: Uncoupled BEM
- Exercise 2: Coupled BEM
- Exercise 3: Using symmetry
- Exercise 4: Trimmed body
- Exercise 5: Gearbox uncoupled (using BEM Wizard)
- Exercise 6: Gearbox coupled