

Simcenter Nastran 2019.2

Introduction to Dynamic Analysis with Simcenter Pre/Post

Course Code **NAS121-GH**

User Level **Intermediate**

Language **English**

Price **\$3,300.00 (USD)** (Price may not include taxes applicable to your billing region)

Training Center Duration **3 Days**

For More Information **Learning Services, USA (training.usa.plm@siemens.com)**

The **Introduction to Dynamic Analysis with Simcenter Pre/Post** course introduces the dynamic capabilities available in NX Nastran. It covers the fundamental methods for solving for dynamic response, focusing on modal analysis. There is an emphasis on practical applications and enhancing the students' engineering judgment with respect to dynamic response. The fundamentals of structural dynamics theory are reviewed and the numerical methods used to solve them are presented.

The course covers the linear dynamic response capabilities of NX Nastran, including normal modes analysis, transient and frequency response, residual vectors, and enforced motion. A variety of hands-on workshop exercises supplement the lecture content. The class is focused on NX Nastran and most of the material applies independently of pre- or postprocessor. However, additional material is available for demonstration of use with Simcenter Pre/Post.

#### WHO SHOULD ATTEND

This course is intended for designers, engineers and finite element analysts who will be using NX Nastran to perform dynamic analyses to predict structural behavior under steady state and transient conditions.

#### COURSE TOPICS

- Normal Modes Analysis
- Model Mass
- Damping
- Transient Analysis
- Frequency Response Analysis
- Residual Vectors
- Enforced Motion

#### PREREQUISITES

Required courses:

- Introduction to Finite Element Analysis with Simcenter Pre/Post (NXNAS111-GH)

#### PROVIDED COURSE MATERIAL

- Student Guide
- Activity Material