

NX Nastran 12.0

Superelement Analysis with Simcenter Pre/Post

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Course Code NXNAS321-GH

User Level Intermediate

Language English

Price \$2,200.00 (USD) (Price may not include taxes applicable to your billing region)

Training Center Duration 2 Days

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

The **Superelement Analysis with Simcenter Pre/Post** course offers training in the use of the superelement analysis capabilities of NX Nastran. Superelements can play a key role in allowing the analyst to solve larger and more complex finite element models with limited computer resources. NX Nastran offers three types of superelements, and these can all be used with most NX Nastran analysis sequences. The different types of superelements each have their advantages and disadvantages, depending on the particular needs of a program. The student will learn to use all three types of superelements through the presentation of lecture materials and the completion of example problems. 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 3D.

#### WHO SHOULD ATTEND

This course is intended for finite element analysts who need to analyze large system level models composed of multiple components or who work within a team of analysts each responsible for a set of components.

#### COURSE TOPICS

- Model reduction (static and component mode synthesis)
- Main bulk data superelements
- Partitioned superelements
- External superelements
- Choosing the best type of superelements
- Optimal partitioning of a system model into superelements

#### PREREQUISITES

Required courses:

- NX Nastran Introduction to Finite Element Analysis with NX (G2H) (NXNAS111)

- Basic understanding of finite element analysis principles, statics, solid mechanics, and basic dynamics.

#### PROVIDED COURSE MATERIAL

- Student Guide
- Activity Material