

NX Nastran 12.0

Aeroelastic Analysis with Femap for Pre/Post

Course Code **NXNAS430-GH**

User Level **Intermediate**

Language **English**

Price **\$1,100.00 (USD)** (Price may not include taxes applicable to your billing region)

Training Center Duration **1 Day**

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

This course introduces the aeroelasticity capabilities available in NX Nastran. A review of aeroelastic theory and the fundamentals of setting up and running aeroelasticity solutions are covered. There is an emphasis on the practical applications of the software and enhancing the student's engineering judgment with respect to aeroelastic analysis of aircraft.

The course covers the aeroelastic capabilities of NX Nastran, including aerodynamic panel model theories, connection of aerodynamic models to structural models, static trim analysis, dynamic maneuver and gust analysis, and flutter analysis. The class is focused on NX Nastran and most of the material applies independently of pre- or post-processor. Additional material is available for use with Femap.

WHO SHOULD ATTEND

This course is intended for engineers and finite element analysts who will be using NX Nastran to perform aeroelastic analysis to determine aircraft, missile, or launch vehicle loads, performance, or stability.

COURSE TOPICS

- Aerodynamic theories
- Aerodynamic panel modeling
- Aerodynamic model corrections
- Static aeroelasticity
- Dynamic aeroelasticity
- Flutter

PREREQUISITES

Required courses:

- NX Nastran Introduction to Finite Element Analysis with Femap (G2H) (NXNAS110)
- NX Nastran Introduction to Dynamic Analysis with Femap (G2H) (NXNAS120)

Participant also needs to have a basic understanding of finite element analysis principles, statics, solid mechanics, and dynamics.

PROVIDED COURSE MATERIAL

- Student Guide
- Activity Material

Course Description
