

## COURSE

### Advanced nonlinear analysis with NX Nastran

<b>Level</b>	Advanced
<b>Duration</b>	2 days
<b>Language</b>	English or Dutch
<b>Location</b>	Delft, or on-site

#### Description

The **Advanced nonlinear** course is a comprehensive presentation of the nonlinear capabilities available in NX Nastran's Advanced Nonlinear solver. Nonlinear topics include large displacement, large strain, nonlinear materials (plasticity, hyperelastic), and contact. The supported elements, materials, and boundary conditions are presented along with the formulations and solution schemes. Tips on solving convergence difficulties are also presented. The hands-on activities and case studies are presented using Simcenter for the pre- and post-processor (Femap).



#### Aim of training

After the training, the trainee is capable of setting up nonlinear calculations in NX Nastran Advanced Nonlinear solver and is able to interpret the measured results independently.

#### Topics

- Overview of the NX Nastran Advanced Nonlinear solver
- Model definition elements, materials, boundary conditions, contact
- Formulations and solution schemes for SOL 601 & SOL 701
- Element formulations
- Modeling contact problems
- Resolving convergence difficulties
- Case studies and hands-on activities

#### Who should attend?

This course is intended for users who will be using NX Nastran Advanced Nonlinear solver to perform nonlinear analyses to predict structural behavior under steady state and transient conditions.

**Interested? Sign up on [www.femto.eu](http://www.femto.eu) or send your training request to [info@femto.nl](mailto:info@femto.nl).**

#### About us

At Femto Engineering we help companies achieve their product innovation goals with FEA & CFD consulting, software, training, support, deployment and R&D. We are the CAE partner of Siemens PLM Software in the Benelux and an authorized distributor for Femap, NX Nastran, Simcenter 3D and SDC verifier.

#### Directions

Our address is: Oude Delft 137, Delft.  
By car: follow the parking signs to the Phoenixgarage (Phoenixstraat 29). Leave the "centrum" exit from the parking and turn left. Directly after the gate, we're in the first building on your right.  
When you arrive by train, it's a 5 minute walk via the Westvest and the Binnenwatersloot to the Oude Delft.

