

# Autodesk Nastran In-CAD® New User Training

## 2-day class

The Autodesk Nastran In-CAD® Simulation New User course will cover the basic material everyone needs to know, including best practices and explanations of the fundamental concepts. You will learn how to create, edit, and assign a physical property and materials (linear and nonlinear) for use in an analysis and how to manage the creation, setup, and modification of analyses and subcases. Specific analyses types covered in this training include: Linear Static, Nonlinear Static, Nonlinear Transient Response, Normal Modes, Direct & Modal Frequency Response, and Direct & Modal Transient Response

- **The Basics: How do I get started?**
  - Introduction to FEA
  - Strategy Recommendations
  - Important Resources
  - CAD Modeling Guidelines
  - CAD Connection & Basic Model Interactions
  - Autodesk Nastran In-CAD introduction and interface
- **Working with the Default Analysis**
  - Analysis & Subcases
  - Physical Properties & Materials
  - Constraints & Loads
  - Connectors
  - Boundary Conditions
- **Working with the Mesh & Result Plots**
  - Meshing Basics
  - Generating & Reviewing the Mesh
  - Customizing the Mesh
  - Loading Analysis Results
  - Visualizing Result Plots
  - Visualizing XY Plot Results
- **Surface Contacts**
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- **Nonlinear Static Analysis**
  - Basics of Nonlinear Analysis
  - Creating a Nonlinear Analysis
- **Nonlinear Materials**
  - Working with Nonlinear Materials
- **Nonlinear Transient Response Analysis**
  - Creating a Nonlinear Transient Response Analysis
- **Normal Modes Analysis**
  - Basics in Dynamic Analysis
  - Creating a Normal Modes Analysis
- **Frequency Response Analysis**
  - Creating a Frequency Response Analysis
- **Transient Response Analysis**
  - Creating Direct & Modal Transient Response Analysis
- **Dynamic Analysis Theory**