CATIA V5 Structural Analysis

Course Type: Intermediate  
Intended Audience: Design Staff  
Course Prerequisites: V5F_F (CATIA Version 5 Fundamentals)  
V5A_F may be substituted for Analysts  
Course Duration: 3 Days

This core course is designed for CATIA V5 users who have a need to perform preliminary finite element analysis on their parts and assemblies while still in the early design stage. The focus is on processing static and frequency analysis computations on CATIA V5 Parts and Assemblies.

Graduates of this course will be able to perform structural analysis on their CATIA V5 designs including meshing, applying loads and restraints, computing results, visualizing results, saving reports and studying impacts to the analysis resulting from design changes.

Who should take this course?
Design engineers and others needing to perform preliminary finite element analysis work in CATIA V5.

Agenda:
Day 1  
FEM Fundamentals & Analysis Products Overview  
- Preliminary Structural Analysis in the Design Process  
- Understanding the Finite Element Method  
- Steps in Finite Element Analysis  
- Generative Structural Analysis Process Map  
- Overview of V5 Analysis Products  
GPS Basics  
- Creating and Saving Analysis Documents  
- Defining Mesh Parameters and Properties  
- Defining Restraint and Load Conditions  
- Computing and Visualizing Analysis Results  
- Solid, Shell and Beam Meshing

Day 2  
CATIA V5 GPS Extended Topics  
- Managing Analysis Results  
- Image Extrema and Animation  
- Cut Plane Analysis  
- Local and Global Mesh Refinement & Mesh Adaptively  
- Working with Virtual Parts

Day 3  
CATIA V5 GPS Extended Topics  
- Frequency Analysis for Parts  
- Generative Structural Analysis for Part Assemblies  
- Defining Part Connections and Connection Properties  
- Reactions Between Part Components  
- Frequency Analysis for an Assembly

Quality Training – A Crucial Investment
CATIA Version 5 contains a wealth of sophisticated workbenches and tools providing potentially huge decreases in time and expense for engineering and manufacturing processes.

In order to achieve the best return on your investment in CATIA Version 5 products, your users should not only be trained but receive the best training available. Step out on the right foot to maximize the return on the investment you have made.

Let NobleTek show you why it is regarded by many companies in a variety of industries as having the highest quality CATIA Version 5 instructors and curriculum available.

You have purchased the best software for the job. Now get the best training for your users.

Other courses to consider:
• CATIA V5 Mechanical Design Expert (V5E_F)  
• CATIA V5 Surface Design (GSD_A)  
• CATIA V5 Generative Part Structure Analysis (GPE_A)  
• CATIA V5 Knowledgeware (KWF_F)

Easy Ways to Register:
1. Email: training@nobletek.com  
2. Telephone: 770-645-0770

NobleTek