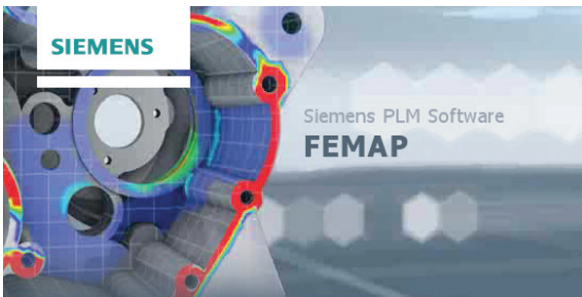


FEMAP & NX Nastran Training

Foundation | Advanced | Customization



When: Oc. 5-15, 2020

Monday-Thursday, 8am-12pm PST

Where: Live, Interactive Web Broadcast

Cost: Foundation and Advanced training is \$2450 per student with optional additional online (at your own pace) Customization/API training for an additional \$245.

What's Included: Course manual and workshop video downloads.

Course Requirements: You will need a copy of the latest version of FEMAP to work from; if you cannot secure one, it can be provided.

Registration: Early registration is encouraged since sessions are limited to 15 students and it is expected that classes will fill. To register, please send email to:

Jeremy.Russell@AppliedCAx.com

About Predictive Engineering

Based in Portland, Oregon, Predictive has more than 20 years of experience with FEMAP, Nastran and LS-DYNA and is well known as the "go-to-company" for FEMAP training. Our portfolio can be found on our website:

www.PredictiveEngineering.com



Welcome FEA Colleague,

Please note that due to the current pandemic, all training courses have been changed to a live, interactive online format.

This two-week course taught by Applied CAx and Predictive Engineering takes new & experienced users through FEA best practices to advanced subjects dealing with manifold and non-manifold surface modeling, detail plate meshing and tet versus hex meshing. The course will be fast paced and follow a workshop format with theory, practice and Q&A sessions.

Course Outline

Foundation of FEA Modeling with FEMAP + NX Nastran (Four Days)

- I. FEA theoretical background w.r.t Beam, Isoparametric and special elements
- II. Tour of FEMAP interface: Preferences, Panes, Toolboxes, Help and Tips & Tricks
- III. FEMAP modeling workflow for Beam, Plate and Solid (BPS) elements
- IV. Static stress analysis and results interpretation of BPS elements
- V. Introduction to Plate and Solid modeling with surface and solid geometry and Mesh Toolbox
- VI. Introduction to Assembly Modeling: Glued, Contact and Rigid element Usage

Advanced FEMAP + NX Nastran (Four Days)

- I. Surface modeling using Manifold and Non-Manifold geometries
- II. Advanced surface preparation for high-accuracy Plate modeling
- III. Meshing toolbox tips and tricks with Jacobian optimization
- IV. Building efficient assemblies via efficient Solid modeling (tet & hex elements) and Linear Contact
- V. Introduction to linear dynamics (modal analysis tips & tricks)
- VI. Non-linear analysis: geometric versus material non-linearity and best practices

Customization & Automation of FEMAP (optional, self-paced)

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| I. Introduction to FEMAP's API | IV. Meshing |
| II. Geometry Modification | V. Boundary Conditions |
| III. Materials And Properties | VI. Post Processing |