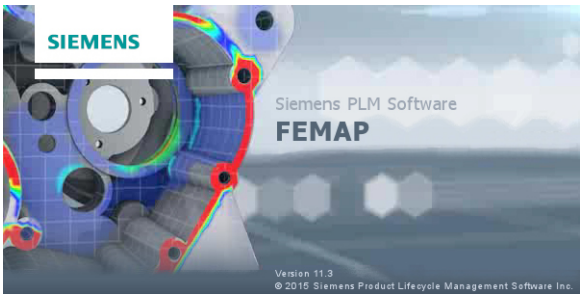
FEMAP & NX Nastran Training

Foundation | Advanced | Customization

Applied CAx
We do this *every day*



When: April 22-26, 2019 (Monday-optional Friday)

Where: Portland, Oregon

Cost: Foundation and Advanced training (Mon-Thurs) is $2,450 per student with the optional Customization/API training on Friday for an additional $575.

What's Included: Course manual and workshop videos saved to a USB stick. A lunch and social event are provided to encourage class interaction with fellow users.

Course Requirements: We highly recommend students configure and bring their own laptops. We can and will align versions of FEMAP for consistency throughout the class. We do have limited availability of rental laptops for registrants.

Registration: Early registration is encouraged since space is limited to 15-18 students and it is expected that the class will fill. *To register please send email to:*

Training@PredictiveEngineering.com
Attn: Adrian Jensen, PE

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,

This week-long course taught by **Predictive Engineering and Applied CAx** will take the new user from ground floor through FEA best practices to advanced subjects dealing with manifold and non-manifold surface modeling, detailed plate meshing and tet versus hex meshing. The final day will finish with a focus on customization and automation using Excel and FEMAP's own API interface. 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 (Two 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 (Two 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 (One Day)

I. Automation of results processing via Excel
II. Introduction to FEMAP's macro capability
III. Introduction to FEMAP's API via Custom Tools
IV. Programming FEMAP's API