

DIGITAL INDUSTRIES SOFTWARE

Simcenter Femap

Powerful, collaborative simulation

FEA Getting Started

(Online training sessions)

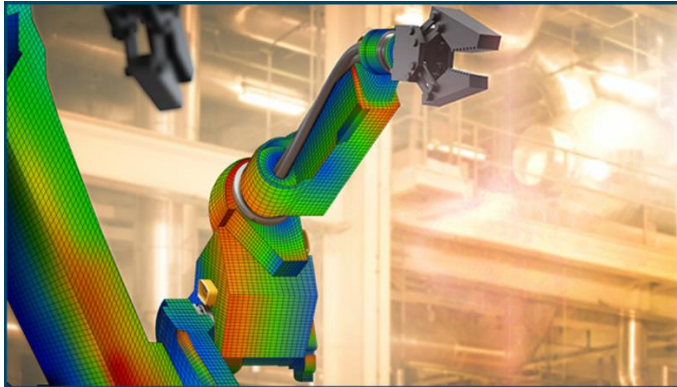
Session 1 08.30-11.30

- Introduction to FEMAP FEA Software
 - ✓ Preferences, Units and File Formats
 - ✓ FEA Modeling Procedures
 - ✓ User Interface

Tutorial 1 User Interface

- FEA Modelling using FEMAP Main Menu
 - ✓ Toolbars and Selector Toolbar
 - ✓ Selector Entity
 - ✓ Selector Mode
 - ✓ Selector Action
 - ✓ Selector Clear

Tutorial 2 Analyzing a Solid Part



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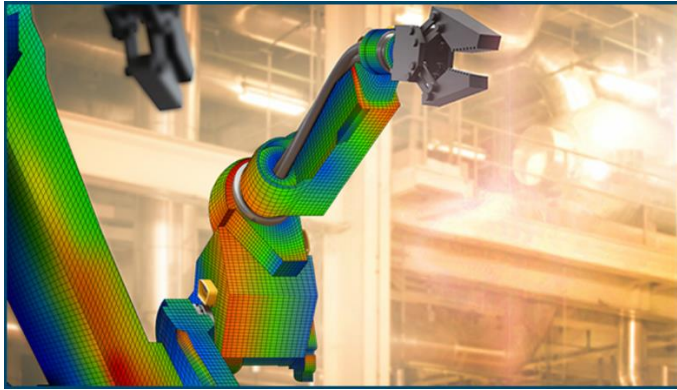
Session 2 08.30-11.30

- FEMAP Geometry Creation, Import and Modifications
 - ✓ Geometry Commands, Formats and Tools
 - ✓ Sheet Solids vs. Solids
 - ✓ Troublesome Geometry
 - ✓ Process of Solid Meshing
 - ✓ Mid-surfacing of Geometry

Tutorial 3 Creating Mid-surface Model

- Definition of Model Materials and Properties
 - ✓ Material Definition and Modifications
 - ✓ Defining Properties
 - ✓ BAR and BEAM Properties

Tutorial 4 Analyzing a Beam Model



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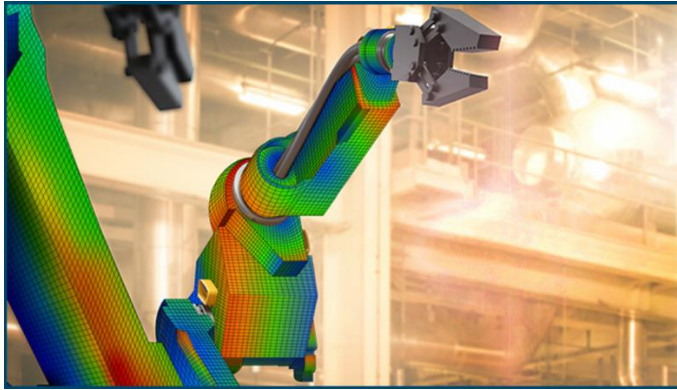
Session 3 08.30-11.30

- FEA Model Meshing
 - ✓ Mesh Size Controls
 - ✓ Points, Curves, Surfaces and Solid Meshing

Tutorial 5 Beam/Plate Meshing

- FEA Model Handling using Meshing Toolbox
 - ✓ Feature and Geometry Handling
 - ✓ Mesh Sizing, Surface Mesh and Mesh Quality Check

Tutorial 6 Interactive Shell/Solid Meshing



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Session 4 08.30-11.30

- Definition of FEA Model Loads and Constraints
 - ✓ Load Types
 - ✓ Creating Load Sets
 - ✓ Creating Constraint Sets

Tutorial 7 Tetra vs. Hexahedral Solid Meshing

- FEA Assembly Connection Modeling
 - ✓ Modeling of FEA Connections

Tutorial 8 Solid Assembly with Linear Contact

- Analysis Set Manager and Solver Solution Setup
- Results Post-Processing Guidelines and Evaluation
 - ✓ Post-Processing using View Select Menu
 - ✓ Post-Processing using PostProcessing Toolbox

Tutorial 9 Post-Processing with Deformed Contour and XY Plots