

FEMAP THERMAL/FLOW

Course code MDA232

Duration 3 days

The **I-deas NX Femap Thermal/Flow** course provides students with comprehensive instruction in how to model heat transfer and fluid flow problems using I-deas NX Femap Thermal/Flow. Participants will learn the skills necessary to carry out sophisticated thermal and CFD analysis quickly and easily, including geometry construction and manipulation, meshing, fluid flow and heat transfer modeling, boundary condition application, solution setup, post-processing and model validation. The course deals with both theoretical and practical aspects of how the software handles fluid flow and heat transfer, and includes a variety of examples and tutorials addressing a wide range of applications.

WHO SHOULD ATTEND

This course is intended for:

- Designers
- Engineers who need to model and simulate heat transfer or fluid flow in components or complex systems using Femap Thermal and Flow

USER LEVEL

New

PREREQUISITES

- None. Any knowledge of Femap will help, especially meshing and creating/manipulating element groups.

PRIMARY COURSE TOPICS

Presentation of Femap related topics including:

- Meshing for TMG and groups
- TMG selection
- Basic BCs
- FE studies and manager
- Conduction

- Thermal couplings
- Flow modeling
- Convection
- Radiation
- Solver control
- Steady-state/transient analysis
- Temperature mapping

PROVIDED COURSE MATERIALS

- Student Guide
- Workshops on CD

REQUIRED LICENSES

N/A