

## **MECHANICA<sup>®</sup> Advanced Training**

### **– Thermal Analysis (1 day)**

**‘In’-Tuition – In-house, Intensive training for Individuals**  
**We come to you to deliver these courses.**

**You use your own software, we supply the trainer.**

**Standard Course :- £975 for 1 person, £1050 for 2 people, £1250 for 3 people.**

**Contact us for a quote if you have more people or for a customised course.**

#### **Content as of 1<sup>st</sup> Dec. 2014**

An Advanced Mechanica licence is needed for the Transient Thermal example. This course covers thermal aspects in more depth than in the Intermediate course. The course contains a mixture of lectures and prepared examples. Students may also bring their own examples  
Also see our other Advanced and Specialist Courses.

The thermal simulation environment that’s integrated with Pro/Mechanica Structure is finite element based and capable of steady-state and transient analysis, Thermal also contains powerful sensitivity and optimisation tools. The course covers

- Introduction
- Heat Transfer Theory
  - Conduction
  - Convection
  - Radiation
  - Heat Transfer Coefficients
  - Thermal Resistance
- Steady State Thermal Analysis
- Transient Thermal Analysis
  - Time-varying conditions
- Thermal Contact Resistance
- Thermal Sensitivity & Optimisation
- Transferring Thermal Loads into Structure
  - Global Thermal loads
  - MEC/T Loads
  - Imported Thermal Loads
- When Independent Mechanica is useful
  - Special cases
- Reviewing & Interpreting Results

Pre-requisite : Previous Pro/Engineer & Pro/Mechanica experience or training

Note: It may not be possible to get through everything in the time, in which case the most appropriate items will be selected.

\*Prices include travel expenses for sites within 100 miles of Northampton, but not VAT. Extra expenses may be charged for other sites.  
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