modeFRONTIER Training Courses
Advanced mF |2-Days Training

ENGIN SOFT

FOR MORE INFORMATION:

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modeFRONTIER provides an innovative optimization environment with modular, profiled-based access. This integration platform for multi-objective and multi-disciplinary optimization offers a seamless coupling with third party engineering tools, enables the automation of the design simulation process and facilitates analytic decision making.

modeFRONTIER streamlines the design process with powerful workflows, innovative algorithms and sophisticated post-processing tools allowing the user to perform statistical analysis, data visualization and decision making. Its multidisciplinary design enabling technology, critical to successful new product development today, keeps it at the forefront of engineering technology.

The advanced course consists of two days and it is addressed to modeFRONTIER users. The aim of the course is to support the user in the modeFRONTIER advanced modules application (RSM "Response Surface Methodologies", Multi – Variate analysis, SOM "Self Organizing Maps", MCDM "Multi Criteria Decision Making", etc.) and to provide the theoretical and practical knowledge which is necessary for an expert use of the code (construction of complex workflows, also in view of distributed computing, theoretical treatment and conscious use of non – conventional optimization algorithms that are highly efficient for specific applications, design for a better optimization strategy, overall theoretical treatment of RSM algorithm, etc.).
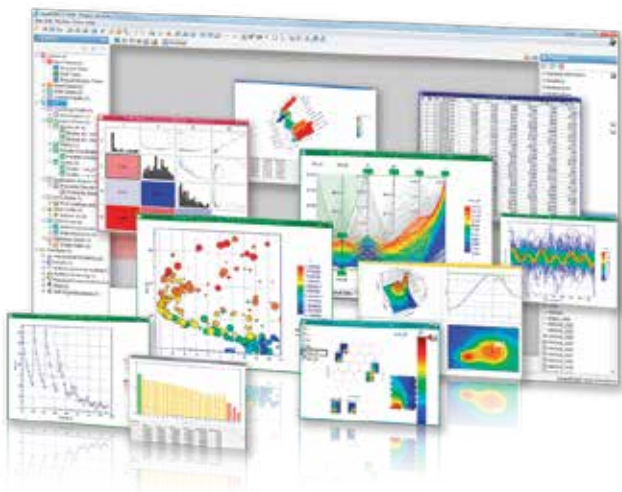
Duration: 2 days

AGENDA

The prerequisites are the theoretical knowledge of the basic techniques for an in-depth study and the basic use of the modeFRONTIER standard modules.
The advanced course will be focused on:

- Workflow implementation with complex optimization logics with modeFRONTIER
- Advanced nodes
- Advanced optimization algorithms and their benchmarking with modeFRONTIER
- "Curve fitting" description and its application in modeFRONTIER
- Response Surface Modelling (RSM) techniques – theory and practice and their direct optimization in modeFRONTIER
- Multi – Criteria Decision Making (MCDM) – decision – making support for multi – objective problems
- Self – Organizing Maps (SOM) and data clustering in modeFRONTIER

modeFRONTIER
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