
Date: 2013. 05. 14-24.
9:00-12:00

Location: Research Center of Vehicle Industry - lecture room - Inno-Share building 2nd floor

Topics:

- Introductions, Course Objectives
- Operations Research, Optimization Models, and Solution Techniques
- The Relevance of Nonlinear and Global Optimization
- Local Nonlinear Optimization: Key Concepts
- The Global Optimization Model and Several Important Special Cases
- Exact and Heuristic Algorithms for Global Optimization
- Mixed Integer Nonlinear Optimization: Models and Solution Approaches
- Modeling Environments and Solver Engines
- Global (and Local) Nonlinear Optimization Software Implementations

- Software Demonstrations

- Modeling Tips and Solver Tuning for Better Performance

- Numerical Tests and Benchmarking of Optimization Software

- A Review of Existing and Prospective GO Applications

- Illustrative Case Studies, Applications in Engineering

- References and Further Information Sources