

Static Optimization with MATLAB

In Cooperation with the GRADE Center GSEFM

Trainer



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Christian Wierschem is a doctoral candidate in Economics at the Graduate School of Economics, Finance, and Management (GSEFM). He holds a Bachelor's and a Master's degree in Economics from the University of Bonn.

Objective

The GRADE Center GSEFM opens its „pre-semester courses“, held by advanced PhD candidates, to all PhD candidates registered at GRADE. These courses cover different topics. Please check pp 54-58.

Description

1. Canonical programming problem
2. Unconstrained maximization
 - a. Necessary and sufficient conditions
 - b. Concave and generalized concave problems
3. Maximization with equality constraints
 - a. Necessary and sufficient conditions
 - b. Concave and generalized concave problems
4. Maximization with equality and inequality constraints
 - a. Necessary and sufficient conditions
 - b. Concave and generalized concave problems
5. Comparative statics and value functions

Conditions

Participants are expected to have a basic undergraduate background in mathematics and/or statistics. Participants lacking this background are recommended one of the following references:

- 1) *Simon, C. P. and L. Blume (1994): Mathematics for Economists, Norton & Company.*
- 2) *Chiang, A.C. and K. Wainwright (2005): Fundamental Methods of Mathematical Economics, Mc Graw-Hill Irwin.*

Further Literature

Please check the workshop description for “Real Analysis” for more information.

The workshop will take place on Campus Westend.



Organizational Information

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| Language | English |
| Target group | Doctoral candidates at all stages from all faculties |
| Date | Monday-Thursday, 23-26 September 2019, 9:00 – 15:00 |
| Registration | For registration click here |