

Static Optimization with MATLAB

In Cooperation with the GRADE Center GSEFM

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.

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
6. Numerical Illustration in MATLAB: Newton's Method and Quasi-Newton Methods

Conditions

Students are expected to have a solid undergraduate background in mathematics. Students missing some of this background are expected to have worked through the following reference prior to the beginning of the course:

Chiang, A.C. and K. Wainwright (2005): Fundamental Methods of Mathematical Economics, Mc Graw-Hill Irwin.

On-site sessions will take place if the epidemiological situation and the prevention guidelines issued by Goethe University make it possible. Otherwise, they will be replaced by online sessions. Information on the subject will be shared by email at least one week before the beginning of the program

Organizational Information

Language	English
Target group	Doctoral Candidates at all stages from all faculties
Date	Tuesday-Friday, 13-16 October 2020, 9:00 – 15:00
Registration	For registration click here

Trainer



Teresa Schildmann

GSEFM, Goethe University

After completing her Bachelor studies at the University of Bonn, Teresa Schildmann also received her degree of Master of Economics from Bonn.

In the meantime, she did an internship at Deutsche Bundesbank and worked as a research assistant at the Institute of Labor Economics (IZA) in Bonn.

She joined the GSEFM in Fall 2017 and since then conducts research in the fields of labor economics, fiscal policy and economics of the family, employing empirical as well as structural, quantitative modelling methods.