

COURSE DETAIL

QUANTITATIVE DECISION MAKING FOR BUSINESS OPERATIONS

Country

Germany

Host Institution

Technical University Berlin

Program(s)

Technical University Summer

UCEAP Course Level

Upper Division

UCEAP Subject Area(s)

Computer Science Business Administration

UCEAP Course Number

109

UCEAP Course Suffix**UCEAP Official Title**

QUANTITATIVE DECISION MAKING FOR BUSINESS OPERATIONS

UCEAP Transcript Title

DECISION MAKING

UCEAP Quarter Units

6.00

UCEAP Semester Units

4.00

Course Description

This course provides an introduction into how automated and model-based problem solving works, as applied by machines, and the flaws these decisions might have. Students analyze examples from operations management considering supply chains, as well as production and service environments, in a quantitative manner. Students work with real world data, analyze, visualize, draw conclusions, and come up with optimal management decisions. Students are given a short introduction into analyzing and visualizing data using Excel spreadsheets, if time allows, using the R and Julia programming languages. The course instructs students on how to draw conclusions using different kinds of regression and smoothing methods on the data provided. To handle uncertainty in real world environments, students cover methods like simulation and different models of stochastic programming. This course is aimed at participants interested in quantitative modeling (including the math and probabilistic background) who are motivated to learn programming to apply the newly learned methods.

Language(s) of Instruction

English

Host Institution Course Number

Host Institution Course Title

QUANTITATIVE DECISION MAKING FOR BUSINESS OPERATIONS

Host Institution Campus

TUBS

Host Institution Faculty

Host Institution Degree

Host Institution Department

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