ME2723 Business Analytics 6.0 credits

Datadriven analys och affärsutveckling

This is a translation of the Swedish, legally binding, course syllabus.

If the course is discontinued, students may request to be examined during the following two academic years

Establishment

Course syllabus for ME2723 valid from Spring 2019

Grading scale

A, B, C, D, E, FX, F

Education cycle

Second cycle

Main field of study

Industrial Management

Specific prerequisites

Higher education of at least 120 credits as well as documented knowledge in English B or the equivalent.

Special requirements:
Statistics equivalent: 6 credits

Economics equivalent: 6 credits

Language of instruction

The language of instruction is specified in the course offering information in the course catalogue.

Intended learning outcomes

After passing the course, the student should be able to:

- Describe fundamental problems of statistical nature that must be handled at analysis of quantitative data and relate these problems to different analytical methods
- Connect concepts and understanding from probability theory and statistical theory to applied analytical problems
- Carry out and justify choice of method and methods for a set of business contexts commonly occurring analytical problems
- Reflect on common limitations in data driven analytical methods
- Discuss application of data driven analysis and business development considering ethical and their integrity issues critically

Course contents

The major aim of the course is to learn the student tie together understanding of mathematical statistics and probability theory with modern applications of data driven analysis of business problems and with data driven business development. Thereby, the course prepares for tasks with selected clients in the fast growing "data science" professional field.

The student comes through the course to obtain possibility to get familiar with a number of important tools to extract, analyse and visualise data. Further, the course gives an orientation in the most important methods for advanced data analysis, such as different forms of multivariate regression analysis, methods for machine learning and system identification.

The work in the course is built around a project work that is carried out in groups. Halfway through the course, an examination around central concepts and relationship in quantitative data analysis is carried out.

Course literature

Will be announced at the beginning of the course

Examination

- PRO1 - Project, 4.0 credits, grading scale: A, B, C, D, E, FX, F
- TEN1 - Exam, 2.0 credits, grading scale: A, B, C, D, E, FX, F

Based on recommendation from KTH's coordinator for disabilities, the examiner will decide how to adapt an examination for students with documented disability.

The examiner may apply another examination format when re-examining individual students.

Ethical approach

- All members of a group are responsible for the group's work.
- In any assessment, every student shall honestly disclose any help received and sources used.
- In an oral assessment, every student shall be able to present and answer questions about the entire assignment and solution.