Minor in Quantitative Methods in Economics, Business and Finance

Description

The Minor Concept

A minor gives you the opportunity of having a second specialization in your degree. The minor is a bundle of three to four electives that can be chosen separately but if chosen together rewards a minor.

Purpose

The minor has a progressive nature. It is designed for students who have already acquired knowledge in quantitative methods (compare course prerequisites for each the three courses). The minor focuses on statistical, quantitative and data science skills in general with a twist towards applications in economics, business and finance. Motivated by the increased availability of data, the student can acquire analysis skills that can be applied to forecasting, estimation of partial relationships, pattern recognition and predictive analysis among others. The delivery of the material is centered around hands on practical work in combination with a presentation of the statistical frameworks. Thus, students that choose this minor will not only acquire practical data handling and analysis skills but also an understanding of the statistical frameworks. Students who intend to write an empirical master's thesis by applying quantitative methods are also encouraged to take this minor. Their thesis will benefit from a broad set of practical competences that is acquired through the range of courses.

Prerequisites

Knowledge of the multiple linear regression model and its estimation by ordinary least squares (OLS) as is required. The minor also presupposes that the students possess a thorough knowledge corresponding to one of the following courses: Quantitative Methods (BA-BHAAV1016U), Applied Econometrics (KAN-CAEFO1080U)" or "Quantitative Methods (KAN-CFIVO1001U)".

Structure

The below table lists the structure and the ECTS credits of the individual courses. The course descriptions are available in the online course catalogue. Direct links are inserted in the below table.

Course	ECTS
Econometric Analysis of Firm Data	7.5
Time Series for Economics, Business and Finance	7.5
Data Science: Data Driven Decision Making	7.5

Content

The suggested courses cover methods such as advanced regression analysis, time series analysis and time series forecasting, data mining, visualization and machine learning. Analysis skills for these methods are in high demand both in financial institutions, consultancy and larger companies.

The courses provide hands-on experience with comprehensive statistical software packages such as R or Stata. Students will acquire the skills that enable them to write command script files rather than clicking though ribbon icons. The minor consists of the three courses described below.

Examinations

The minor consists of the examinations listed below. The learning objectives and the regulations of the individual examinations are prescribed in the online course catalogue. Direct links to the individual examinations are inserted in the table below.

Exam name	Exam form	Gradingscale	Internal/external exam	ECTS
Econometric Analysis of Firm Data	Home assignment - written product	7-point grading scale	Internal exam	7.5
Time Series for Economics, Business and Finance	Oral exam based on written product	7-point grading scale	Internal exam	7.5
Data Science: Data Driven Decision Making	Home assignment - written product	7-point grading scale	Internal exam	7.5

Further information

For a Master dissertation to be written as a part of this minor, it must contain analysis that is related to quantitative methods that have been covered by at least two of the courses that form the minor.

Minor coordinator

Ralf Andreas Wilke rw.eco@cbs.dk

Study Board

The minor in the Quantitative Methods in Economics, Business and Finance is offered by the Study Board for the Master of Science Programme in Economics and Business Administration.

How to sign up

If you want to sign up for the Minor in Quantitative Methods in Economics, Business and Finance you have to select CCMVM1940U Minor in Quantitative Methods in Economics, Business and Finance when you sign up for electives. You will then subsequently be signed up for all three courses. You do not have to select all three courses individually.