

# 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 as it requires that students 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.

### 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
<a href="#">Econometric Analysis of Firm Data</a>	7.5
<a href="#">Time Series for Economics, Business and Finance</a>	7.5
<a href="#">Data Science: Data Driven Decision Making</a>	7.5

### Content

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

presentations at the CBS conference “[Statistical Analysis of Intra-Firm Data](#)” held in May 2016. 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.

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 through 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	Grading scale	Internal/external exam	ECTS
<a href="#">Econometric Analysis of Firm Data</a>	Home assignment - written product	7-point grading scale	Internal exam	7.5
<a href="#">Time Series for Economics, Business and Finance</a>	Home assignment - written product	7-point grading scale	Internal exam	7.5
<a href="#">Data Science: Data Driven Decision Making</a>	Home assignment - written product	7-point grading scale	Internal exam	7.5

## Further information

*Minor coordinator*

Ralf Andreas Wilke [rw.eco@cbs.dk](mailto: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: the Quantitative Methods in Economics, Business and Finance you have to select CCMVM1940U Minor: the 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