



# AI1177 Financial Econometrics

## 7.5 credits

Finansiell ekonometri

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

### Establishment

Course syllabus AI1177 valid from Spring term 2021

### Grading scale

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

### Education cycle

First cycle

### Main field of study

Technology

### Specific prerequisites

Completed course: AI1178 Applied mathematics and statistics for economists.

### Language of instruction

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

# Intended learning outcomes

After a passed course, the student should be able to:

- Analyse the prices and returns of key economic time series with a focus on real estate and financial markets
- Estimate linear univariate and multivariate econometric models for economic time series with statistical software
- Perform predictions and hypothesis tests with statistical software
- Interpret and analyse results that are based on econometric methods for time-series data

## Course contents

- Financial time series and data sources
- Classical linear regression analysis
- Descriptive statistics of financial and real estate time-series
- Econometric analysis of univariate time-series
- Econometric analysis of multivariate time-series
- Time-varying parameters, volatility and correlations

## Examination

- INL1 - Assignment, 3.5 credits, grading scale: P, F
- TEN1 - Written Exam, 4.0 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.

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

Re-examination for a higher grade: There is no possibility to retake already passed (A-E) exams.

## 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.