



# FAI3002 Quantitative Methods with Real Estate Applications 7.5 credits

## Quantitative Methods with Real Estate Applications

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 FAI3002 valid from Spring 2019

## Grading scale

P, F

## Education cycle

Third cycle

## Specific prerequisites

Admission to postgraduate studies.

## Language of instruction

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

# Intended learning outcomes

After taking this course you should be able to use, understand och interpret quantitative methods, e.g., regression analysis, to examine the real estate market, analyse trends, conduct forecasting and construct index series.

## Course contents

The course is divided into the following main parts:

### **1. Regression analysis using cross sectional data.**

In this part, we study how to establish and quantify relationships between variables, mainly on the real estate market. To do this we will first discuss the technique of regression analysis, both for simple regression analysis and for multiple regression analysis.

### **2. Regression analysis using time series data.**

In this part, we study the central issues regarding regression analysis when applied to data over longer periods, i.e., a time series. We look at both time series analysis and residual analysis.

## Course literature

Announced when the course starts.

## Examination

- RAP1 - Report, 7.5 credits, grading scale: P, 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.