



AI2153 Financial Economics with Real Estate Applications 7.5 credits

Finansiell ekonomi med fastighetstillämpningar

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

Establishment

Course syllabus for AI2153 valid from Autumn 2021

Grading scale

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

Education cycle

Second cycle

Main field of study

The Built Environment

Specific prerequisites

Knowledge in financial economics equivalent to the content in the course AI2135.

Language of instruction

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

Intended learning outcomes

Upon completion of the course, students will be able to

- analyze and compare risk and return characteristics for different real estate financing solutions, both from borrower's and lender's perspectives,
- apply different investment analysis methods to analyze direct and indirect real estate investment alternatives,
- calculate optimal asset allocations with real estate as one of several asset classes in a portfolio,
- give examples of how actors in the real estate and financial markets work to develop solutions that can lead to sustainable economic, environmental and social development.

Course contents

Mortgage loans, commercial property loans, bonds, fixed and floating interest rates, interest rate derivatives, financial leverage, credit risks, interest rate risks, capitalization rates and property yields, real estate valuation, investment analysis, net operating income, property before tax cash flows, risk analysis, securitization, real options, land valuation, REITs and listed property shares, optimal portfolio theory, multi-asset portfolios with real estate and other assets.

Examination

- INL1 - Assignment, 3.0 credits, grading scale: P, F
- TEN1 - Written Exam, 4.5 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.

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.

