



# AI1144 Fundamentals of Residential Real Estate Finance 7.5 credits

Fastighetsfinansiering och investering

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

## Establishment

Course syllabus for AI1144 valid from Autumn 2019

## Grading scale

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

## Education cycle

First cycle

## Main field of study

The Built Environment, Technology

## Specific prerequisites

AI1128 Economics of the Built Environment or equivalent

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 passing the course, the student should be able to:

- describe the function, structure, instruments and actors of financial and real estate markets
- describe and analyze how different financing alternatives affect real estate investments' cash flows and profitability,
- explain and analyze how various factors can determine the development of interest rates, and how changes in interest rates might affect the valuation of credit market instruments and properties,
- interpret and analyze some key financial ratios presented in banks' and real estate companies' financial reports,
- describe and analyze various measures to increase financial stability and counteract financial imbalances,
- explain how knowledge in real estate finance and investment analysis can be used to analyze and develop activities that can lead to sustainable economic, environmental and social development.

## Course contents

Real estate investments, the financial system, financial intermediaries, credit market instruments, short- and long-term interest rates, financial leverage, present value mathematics, mortgage markets, loans with fixed and variable rates, loan amortization schedules, interest rate margins, yield curves, financial analysis of debt-financed property investments, banking, capitalization rates, credit risk, interest rate risks, financial stability and financial regulations, financial crisis.

## Examination

- INL1 - Assignment, 3.5 credits, grading scale: P, F
- TEN1 - Examination, 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.

## Other requirements for final grade

Coursework 3,5 credits (INL1)

Written exam 4 credits (TEN1)

## 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.