



AF1772 Circular construction economy 7.5 credits

Cirkulär byggekonomi

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

Establishment

The official course syllabus is valid from the autumn semester 2026 as decided by the Faculty Board decision HS-2025-1765. Date of decision: 2025-10-02.

Grading scale

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

Education cycle

First cycle

Main field of study

Technology

Specific prerequisites

Course registred at:

- AF1737 Building Technology 1 7.5 credits
- AF1744 Building Techniques, Heat and Moisture Transfer 7.5 credits
- AF1745 Building Techniques, Detached Housing Project 10.0 credits

Intended learning outcomes

After passing the course, the student should be able to:

- explain economic concepts related to construction production
- explain the basic principles of the circular economy and its applications in the construction sector
- perform investment calculations using various methods (net present value, payback, internal rate of return, annuity)
- perform product calculations for cost and revenue analysis in construction operations
- analyze different organizational models based on their structure, performance, and application
- analyze market strategy aspects of business operations
- develop and argue for a business model that supports circular construction operations
- describe the main features of the practical application of Swedish labor law.

Course contents

- Basic business economics
- Fundamental principles of circular economy
- Economics linked to sustainability goals and life cycle costs (LCC)
- Material flows and resource management
- Investment calculations
- Cost and revenue analysis
- Organizational theory
- Labor law

Examination

- PRO1 - Project, 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.