



AF1742 Business Economics and Quality Systems 7.5 credits

Byggekonomi och kvalitet

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 AF1742 valid from Spring 2012

Grading scale

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

Education cycle

First cycle

Main field of study

Technology

Specific prerequisites

Students in year 1 of the Higher Education Diploma Programme in Construction Management

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:

- understand the economics, organisation, and environment of a construction company
- understand and interpret annual reports and relevant key ratios
- be able to calculate the effects of tied-up capital on construction operations
- be able to prepare capital investment appraisals using various methods (present value, annual repayment, etc.)
- be able to use several models for cost-benefit and income analyses and their application in construction operations, using calculation tools
- understand how quality assurance systems are used in construction management

Course contents

Product costing and capital budgeting, corporate forms, organisational principles, corporate cultures in the building trade, and quality systems in construction management

Disposition

- The course is taught through lectures, featuring elements of practical implementation
- Application of theory project, in the form of a life-cycle analysis of a chosen engineering element, focusing on financial aspects, quality and application in a CAD environment
- Lab work in Excel, obligatory project module
- Guest lecture on the subject of quality systems
- Calculation workshop

Course literature

Skärvad, Per-Hugo & Olsson, Jan: Företagsekonomi 100, faktabok, Liber ekonomi, latest edition

Skärvad, Per-Hugo & Olsson, Jan: Företagsekonomi 100, övningsbok, Liber ekonomi, latest edition

Handouts, etc

Examination

- PRO1 - Project, 2.0 credits, grading scale: P, F

- TEN1 - Examination, 5.5 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.

TEN1

The exam consists of two parts, theory and calculation in the form of problems to solve, with the potential points awarded distributed 50 % on theory and 50 % on calculation, with a possible variation of +/-10 % between these parts.

To pass the exam (grade E), a minimum of 50 % of the potential points awarded for each part is required.

- A student who fails in both parts, i.e., who earns less than 50 % of the potential points, will receive a failing grade (F).
- A student who earns between 40 and 50 %, of the potential points on one of the parts will have the chance to take a supplementary exam (FX).

The scope and content of the supplementary exam will be based on the knowledge gaps displayed in the exam.

PRO1

Individual assignments during the placement period, which may for example include a construction process. In order to ensure organised and orderly work conditions, and to follow up on how the work is progressing – accounting for time and resources spent compared to the original plan – a well-considered division of responsibility is required. The ability to consume resources such as time and funds according to the established plan affects the financial outcome of construction projects, for example. Use available documents, carry out interviews with the persons in charge and find out how the work with calculations/purchasing/logistics/deliveries is handled and how it is organised at the company/organisation where you have your placement.

The project assignment is submitted after completion of the placement and constitutes component PRO1, corresponding to 2 credits with a credit scale of P/F.

Other requirements for final grade

To receive a final grade for this course, a passing grade on the project as well as grade E or higher on the written examination are required.

Overall course grade is based on grading scale A-F.

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.