



HS1733 Concrete Structures 7.5 credits

Betongkonstruktion

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 HS1733 valid from Autumn 2011

Grading scale

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

Education cycle

First cycle

Main field of study

Built Environment, Technology

Specific prerequisites

Students in year 2 of the Higher Education Diploma programme in Construction Management

HF1700 Mathematics

HS1721 Building Technology

HS1722 Statics and Strength of Materials

AF1717 Technical Work, Methods and Tools

Language of instruction

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

Intended learning outcomes

Outcomes to receive an E grade.

Upon completion of the course, students will:

Be able to describe the mode of action when under load

Be able to identify and account for the parameters that influence the strength and workability of concrete

Be able to account for the material properties of steel when under load

Be able to draw up reinforcement documents based on construction plans

Demonstrate basic knowledge of formwork

Possess basic knowledge of exposure and durability classes for concrete structures

Be able to design singly reinforced concrete constructions

Be able to identify and account for the parameters relating to drying and hardening times of concrete

Course contents

Basic materials strength
Basic concrete technology
Exposure and tensile strength classes
Reinforcement steel
Reinforcement documents
Formwork
Design of reinforced concrete structures
Drying and hardening times

Course literature

Reading materials will be announced at the start of the course.

Examination

- TEN1 - Examination, 6.0 credits, grading scale: A, B, C, D, E, FX, F

- ÖVN1 - Exercises, 1.5 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.

Other requirements for final grade

Passing grade on examination, (TEN1, 6.0 credits), grade scale: A-F

Passing grade on exercises, (ÖVN1 1.5 credits), grade scale: P/F

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.