HS1003 Structural Mechanics 1 7.5 credits

Byggmekanik 1

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

Establishment

Course syllabus for HS1003 valid from Autumn 2014

Grading scale

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

Education cycle

First cycle

Main field of study

The Built Environment, Technology

Specific prerequisites

Students in year 1 of the Bachelor of Science in Engineering programmes Constructional Engineering and Design or Engineering and Economics specialising in Constructional Engineering and Design.

Language of instruction

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

Intended learning outcomes

Upon completion of this course, students shall be able to draw load, shear and moment diagrams and calculate the deformations and normal stresses in statically determinate beams and bars. Students shall also be able to analyse statically determinate trusses.

Course contents

- Support reactions
- Normal force, shear force and bending moment
- Hooke's law
- Axially loaded members. Trusses.
- Normal stresses in beams
- Deflections of beams

Course literature

Own compendium

Examination

- INLA - Written Assignment, 2.5 credits, grading scale: P, F
- TENA - Examination, 5.0 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

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

Overall course grade i based on grade 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.