



# HS1003 Structural Mechanics 1

## 7.5 credits

### Byggmekanik 1

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 HS1003 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

General entry requirements and specific entry requirements for the programme

### 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

- TEN2 - Examination, 2.5 credits, grading scale: P, F
- TEN3 - 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.

## 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.