



MG1207 Solid Mechanics 3.0 credits

Hållfasthetslära

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

Establishment

Grading scale

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

Education cycle

First cycle

Main field of study

Technology

Specific prerequisites

MG1203 Applied mechanics

Intended learning outcomes

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

1. calculate stress and strain states of structures from one-dimensional models of slender bodies (bars, shafts, beams)

2. design the above structures in terms of material and geometry using knowledge of the load and mechanical properties of the material
3. formulate and follow the appropriate solution strategy, present free-body diagrams, dimensionally correct and plausible solutions for idealised engineering problems.

Course contents

Basic concepts of strength

Calculations

Load cases

Material properties

Examination

- TENA - Written exam, 2.5 credits, grading scale: A, B, C, D, E, FX, F
- LABA - Laboratory work , 0.5 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.

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.