

SYLLABUS

Strength of Materials 3 credits B0001T

Hållfasthetslära

Course syllabus admitted: Autumn 2012 Sp 1 - Spring 2013 Sp 4

DECISION DATE
2012-04-03

Strength of Materials 3 credits B0001T

Hållfasthetslära

First cycle, B0001T

Education level	Grade scale	Subject	Subject group (SCB)
First cycle	G U 3 4 5	Hållfasthetslära	Mechanical Engineering

Entry requirements

In order to meet the general entry requirements for first cycle studies you must have successfully completed upper secondary education and documented skills in English language

Selection

The selection is based on final school grades or Swedish Scholastic Aptitude Test.

Examiner

Hans-Åke Häggblad

Course Aim

Upon completion of the course the student should:

- Make simple rough estimates of stress in the different load cases
- Be able to choose a safety factor for loaded structures
- Be able to calculate stresses and deformations applied to examples from Materials Science and Mining and Mineral Engineering

Contents

The course deals with tensile, compressive and shear stresses; torsion and bending; buckling; fatigue; notch effect and overall strength.

Realization

Each course occasion's language and form is stated and appear on the course page on Luleå University of Technology's website.

Lectures and assignments.

Examination

If there is a decision on special educational support, in accordance with the Guideline Student's rights and obligations at Luleå University of Technology, an adapted or alternative form of examination can be provided.

Written exam after the course. Results from three quizzes during the course are credited towards results in the final exam.

Remarks

The course corresponds to MP1038.

Literature. Valid from Autumn 2012 Sp 1

Lönnelid, Sture & Norberg, Rune. (2006) Formelsamling för Teknologi och Konstruktion M.. 5 uppl. Stiftelsen Kompendieutgivningen. (46 s).

Lönnelid-Norberg. (2009) Grundläggande hållfasthetslära. 4 uppl. Stockholm: Stiftelsen Kompendieutgivningen. (115 s). ISBN 91-7582-168-0

Course offered by

Department of Engineering Sciences and Mathematics

Items/credits

No items/credits available

Syllabus established

by Dept TVM Mats Näsström 2012-04-03