



Course syllabus

Faculty Board of Science and Engineering
School of Engineering

2MT007 Maskinkonstruktion III, 7,5 högskolepoäng
Machine Design III, 7.5 credits

Main field of study

Mechanical Engineering

Subject Group

Mechanical Engineering

Level of classification

First Level

Progression

G2F

Date of Ratification

Approved by Organisational Committee 2009-07-24

The course syllabus is valid from spring semester 2010

Prerequisites

Machine design I or the equivalent

Expected learning outcomes

After completing the course the student is expected to:

- have gained knowledge concerning the application of construction processes
- have gained knowledge and understanding of some important machine components
- have a basic understanding of acoustics
- have a basic understanding of the application of noise reduction measures already at the design stage of a machine

Content

The course comprises the following elements:

- the design process
- selection and dimensioning of machine elements that have not been dealt with in previous courses
- basic concepts of acoustics
- constructive measures for noise reduction
- projects with practical elements
- exercises in calculation and dimensioning

Type of Instruction

The teaching consists of lectures, laboratory work, and exercises. Information about obligatory course elements will be provided at the beginning of the course.

Examination

The course is assessed with the grades U,3,4 or 5.

The assessment of student performances usually takes place during special examination periods, and can be in oral and/or written form. Submission of exercise reports is also a possible form of examination.

Course Evaluation

When the course has finished, an evaluation is compiled. The results are reported to the students and then archived according to the rules of the school.

Required Reading and Additional Study Material

Required reading

Juvinall, R. och Marshek, *M Fundamentals of Machine Component Design* 3rd Edition, John Wiley & Sons, INC. 200 pages.

Bodén H. m fl, *Ljud och vibrationer*, Kompendium från KTH Standardblad och företagskataloger.

TD, Compendiums will be supplied by the department