



## Course syllabus

Faculty Board of Science and Engineering  
School of Engineering

1MT013 Teknikintroduktion, 7,5 högskolepoäng  
Introduction to Engineering, 7.5 credits

**Main field of study**

Mechanical Engineering

**Subject Group**

Mechanical Engineering

**Level of classification**

First Level

**Progression**

GIN

**Date of Ratification**

Approved by Organisational Committee 2009-12-15

The course syllabus is valid from autumn semester 2010

**Prerequisites**

Mathematics C. (Specific entry requirement 12 with the exception of Biology B, Physics A and Chemistry B)

### Expected learning outcomes

After completing the course the student is expected to

- have knowledge of and be able to apply common engineering methods on simple problems
- be able to describe the connection between the structure and physical properties of metals as well as the

application areas for different metals

- have an understanding of the function of the most common machine elements/construction elements
- have an understanding of the interaction between machine elements and their interplay with machine design
- show skills at handling engineering tools and construction-related issues.

### Content

The course comprises the following elements:

- Introduction to basic mechanics of materials (tension and shearing) and classical

- mechanics
- Basic knowledge of metals and production methods
- Basic knowledge of machine elements and machine designs

## Type of Instruction

The teaching consists of lectures, exercises, laboratory work and project work. Some elements require compulsory attendance. Information on compulsory elements will be given at the beginning of the course.

## Examination

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

On request, students may have their credits translated to ECTS-marks. Such a request must be sent to the examiner before the grading process starts.

The assessment of student performances usually takes place during special examination periods and may be written and/or oral. The assessment can also be based on written presentations of assignments.

## Course Evaluation

A written course evaluation will be carried out at the end of the course in accordance with the guidelines of the University. The course evaluation will be filed at the department.

## Credit Overlap

The course partly overlaps with MT9301(MTA930) Engineering Fundamentals A.

## Required Reading and Additional Study Material

### Required reading

Alfredsson, A. m.fl, *Teknisk basbok*. 222 pages.

Eriksson, F., *Maskinelement, Faktadel*, Liber. 96 pages.

Eriksson, F., *Maskinelement, Övningshäfte*, Liber. 42 pages.

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