



Course syllabus

Faculty Board of Science and Engineering

School of Computer Science, Physics and Mathematics

OTG001 Teknik, 12 högskolepoäng

OTG001 Technology, 12 credits

Main field of study

Technology

Subject Group

Other Subjects within Technology

Level of classification

Pre-university level

Progression

G1N

Date of Ratification

Approved by Organisational Committee 2009-12-01

The course syllabus is valid from autumn semester 2010

Prerequisites

General entry requirements and Mathematics 2a / 2b / 2c, Physics 1b1 / 1a or Mathematics B, Physics A (Field-specific entry requirements 7/A7).

Objectives

Having completed the course the student should:

- have acquired a general knowledge of technology and the historical development of society
- have learned about and be able to use basic engineering methods to solve simple problems
- be able to describe the relationship between the structure and physical characteristics of metals as well as the uses of different metals
- understand the function of the most common machine parts/construction details
- understand the relationship between machine parts and their interplay with the construction of machines
- be able to demonstrate proficiency in handling engineering tools and the ability to deal with questions related to construction
- understand and have a general knowledge of technical drawings
- have a knowledge of elementary electronics.

Content

The course includes the following elements:

- An introduction to the history of technology
- Instruction in basic metal manufacturing methods
- Instruction in the fundamentals of machine parts and construction of machines
- Instruction in the fundamentals of technical drawing
- Basic knowledge of Electricity and Electronics.

Type of Instruction

The teaching consists of lectures, exercises, laboratory work and project work.

Obligatory attendance is required for some parts of the course. Information concerning this and other necessary information will be given at the beginning of the course.

Examination

The course is assessed with the grades Fail (U), Pass (G) or Pass with Distinction (VG).

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.

Assessment of the student's achievements usually takes place during a specific examination period and may be written and/or oral. Assessment may also be based on submitted written tasks and exercises.

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.

Other

The course 0TG001 is on an upper secondary school level. The course will not be included in an academic degree.

On request, a Swedish University Course Certificate will be awarded upon successful completion of the course.

Required Reading and Additional Study Material

Required reading

Eriksson, F, *Maskinelement*, Faktadel, Liber, 2003. Pages 96.

Eriksson, F, *Maskinelement*, Övningshäfte. Liber, 2003. Pages 42.

Inst för Teknik och Design, *Laborationshäfte/arbetsmaterial*, Linnæus Universitet. Pages 200 (appr.)

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