MF1034 Electronics and Digital Technology 7.5 credits

Elektroteknik och digitalteknik

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

Establishment

Course syllabus for MF1034 valid from Autumn 2008

Grading scale

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

Education cycle

First cycle

Main field of study

Technology

Specific prerequisites

It is presumed that students starting this course will have attended the compulsory mathematics and physics courses for Media.

**Compulsory for
**TIMEH2

Language of instruction

The language of instruction is specified in the course offering information in the course catalogue.

Intended learning outcomes

The course should help students to

- understand the function of components and equipment
- acquire the skills to properly utilize the aids that modern electrical technology can offer.

The course also aims at

- facilitating active cooperation with specialists in electrical engineering
- provide a basis for further studies in this area.

Course contents

Circuit and network theory. Elementary electronic circuits. Operational amplifiers. Measuring instruments and measurements.

Transducers for mechanical and thermal quantities. Fundamentals of digital systems. Introduction to microprocessor computer systems and assembly language programming.

Disposition

Period 1
Lectures 14h
Tutorials 21h
Laboration 13h

Course literature

Elektroteknik (is sold bu the department)

Examination

- INL1 - Assignments, 3.0 credits, grading scale: P, F
- TEN1 - Examination, 3.0 credits, grading scale: A, B, C, D, E, FX, F
- LAB1 - Laboratory Work, 1.5 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.

Other requirements for final grade

Written exam (TEN1; 3 credits), hand in assignment (INL1; 3 credits),. Laboratory work (LAB1; 1,5 credits)

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.