

# MF1035 Electrical Engineering, Basic Course Media 6.0 credits

Elektroteknik, media

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

If the course is discontinued, students may request to be examined during the following two academic years

## Establishment

Course syllabus for MF1035 valid from Spring 2009

## Grading scale

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

#### **Education cycle**

First cycle

#### Main field of study

Electrical Engineering, Technology

#### Specific prerequisites

CMETE1: SF1608, SF1609/5B1115,5B1116, 5B1118

CLMDA1: CF1623/5B1143

#### Language of instruction

Course syllabus for MF1035 valid from Spring 09, edition 2

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 4 Lectures 12h Tutorials 21h Laboration 13h

#### Examination

- INL1 Hand in Task, 3.0 credits, grading scale: P, F
- LAB1 Laboratory Work, 1.5 credits, grading scale: P, F
- TEN1 Written examination, 1.5 credits, grading scale: A, B, C, D, E, FX, 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.

## Other requirements for final grade

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

## 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.