



El1101 Applied Electrical Engineering 1.5 credits

Tillämpad elektronik

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

Establishment

Course syllabus for El1101 valid from Autumn 2007

Grading scale

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

Education cycle

First cycle

Main field of study

Electrical Engineering, Technology

Specific prerequisites

Language of instruction

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

Intended learning outcomes

The course gives a “hands on” experience of design of electronic equipment.

The dominant part is a project during which the student will build a working prototype, solve EMC problems and design a scheme for fault finding.

To give the student

- understanding of information from component manufacturers
- ability to build a working prototype from a drawing
- basic knowledge about solving of EMC problems.
- use and modify common analog and digital building blocks

Course contents

Passive och aktive components. Tolerances. Frequency-, power- and tensions limitations. Discrepancies from simple models. Analog och digital building blocks. EMC. Security. Electronic design. Conventions. Printed circuits. Soldering. Faultfinding.

Course literature

Compendium, lecture notes.

Examination

- INL1 - Assignment, 0.0 credits, grading scale: A, B, C, D, E, FX, F
- LAB1 - Laboratory Work, 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.

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

Other requirements for final grade

Project work.

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.