



ML1607 Electrical and Control Engineering 6.0 credits

Ellära och styrteknik

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 ML1607 valid from Autumn 2023

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

After completing the course, the student should be able to:

- Calculate and measure electrical quantities in direct and alternating current circuits
- Realize solutions to control technical problems with PLC and microprocessor

Course contents

- Direct voltage - Direct current
- Alternating voltage – Alternating current
- Three phase system
- Electrical machines
- Sensors
- OP amplifier
- Digital circuits
- GRAPHICS
- Simple control systems, PLC and microcontrollers

Examination

- INL1 - Assignments, 1.5 credits, grading scale: P, F
- LAB1 - Laborations and exercises, 4.5 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.

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.