Linnæus University

Jnr: 2017/5705-3.1.2.2

Course syllabus

Faculty of Technology
Department of Physics and Electrical Engineering

0TG003 El- och datateknik bas, 7,5 förutbildningspoäng

Electronics and Computer Technology, Preparatory Course, 7.5 pre-education credits

Subject Group
Other Subjects within Technology

Level of classification
Pre-university level

Progression
G1N

Date of Ratification
Approved 2014-06-24
Revised 2017-09-20 by Faculty of Technology. Course Evaluation and translation of the titel is revised.
The course syllabus is valid from spring semester 2018

Prerequisites
0FY100 Physics, Preparatory course 1 or equivalent.

Objectives

After completion of the course the student is expected to:

- have knowledge on basic circuit theory, electronics, digital technology and computer technology
- be able to perform calculations on simple electrical circuits
- be able to perform measurements on simple circuits
- be able to use the computer to control a simple process

Content

The course includes the following topics:

- fundamental circuit theory and electronics
- introduction to digital and computer technology
- analog and digital IC circuits
- laboratories in electronics and computer technology
- applied programming exercise

Type of Instruction

The teaching consists of lectures, tutorials and laboratories. Some parts require mandatory attendance. Information about compulsory elements etc. will be announced.

Examination

The course is assessed with the grades Fail (U), Pass (G) or Pass with Distinction (VG).
The assessment of student performance usually takes place in special examination periods and is generally written. The assessment is also based on submitted reports of laboratory experiments.

The course 0TG003 is a preparatory course that can not be credited as part of a college education.

Course Evaluation

During the course or in close connection to the course, a course evaluation is to be carried out. The result and analysis of the course evaluation are to be communicated to the students who have taken the course and to the students who are to participate in the course the next time it is offered. The course evaluation is carried out anonymously. The compiled report will be filed at the Faculty.

Required Reading and Additional Study Material

Required reading

Jonas Forsberg, Börja med Elektronik och Arduino, Studentlitteratur, latest edition. 164 (268) pages

Additional literature

Jonas Forsberg, Börja med Elektronik och Arduino - Arbetsbok, Studentlitteratur, latest edition. 122 pages