Linnæus University

Course syllabus

Faculty Board of Science and Engineering
School of Computer Science, Physics and Mathematics

1ED162 Elektronik - projektkurs, 7,5 högskolepoäng
Electronics project, 7.5 credits

Main field of study
Electrical Engineering

Subject Group
Electrical Engineering

Level of classification
First Level

Progression
G1F

Date of Ratification
Approved by the Board of the School of Computer Science, Physics and Mathematics 2011-11-25

The course syllabus is valid from autumn semester 2012

Prerequisites
1ED012 Analogue electronic circuits (7.5 credits) or the equivalent.

Objectives
Upon completion of the course, the student is expected to:

- have reached deeper knowledge within the subject electronics
- with some supervision be able to complete a smaller project in the field of electronics
- have increased ability in project planning and problem definition
- have increased ability in documentation, writing a report and oral presentation.

Content
An electronics project is done in a group of 3-6 persons. The course consists of the following:

- determine specifications for the chosen application
- design of an electrical circuit for this purpose
- simulations in LTSPICE
- construction of a prototype including the choice of components for the project assembling, testing and measuring
- documentation of the project
- presentation of the project

Type of Instruction
Introductory lecture and laboratory time. Supervision during the project period.

Examination
The course is assessed with the grades U,3,4 or 5.
On request, students may have their credits translated to ECTS-marks. Such a request must be sent to the examiner before the grading process starts.

Assessment of student performance is made through written test and/or oral examinations and/or presentation of mandatory assignments. The assessment method is decided at the start of the course.

Students who do not pass the regular examination will be offered retrials close to the regular examination.

Course Evaluation
A course evaluation will be carried out at the end of the course in accordance with the guidelines of the University. The result of the course evaluation will be filed at the department.

Required Reading and Additional Study Material
Reference literature
Molin, Bengt, *Analog elektronik*, 2nd ed., Studentlitteratur, 2009.