



## Course syllabus

Faculty Board of Science and Engineering

School of Computer Science, Physics and Mathematics

1ED162 Elektronik - projektkurs, 7,5 högskolepoäng

1ED162 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 2011-11-25

Revised 2012-08-17 by School of Computer Science, Physics and Mathematics.  
Content and examination are revised.

The course syllabus is valid from spring semester 2013

### **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 electrical engineering project is done in a group of 3-6 students. 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 the student's performance is made during demonstration of the laboratory sessions and by means of a written report and an oral presentation of the project.

## 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.