

# Microprocessor Project

Programme course

2 credits

Mikrodatorprojekt

TNE100

Valid from: 2017 Spring semester

**Determined by**

Board of Studies for Electrical  
Engineering, Physics and Mathematics

**Date determined**

2017-01-25

## Main field of study

Computer Science and Engineering, Electrical Engineering

## Course level

First cycle

## Advancement level

G2X

## Course offered for

- Electronics Design Engineering, M Sc in Engineering

## Entry requirements

Note: Admission requirements for non-programme students usually also include admission requirements for the programme and threshold requirements for progression within the programme, or corresponding.

## Prerequisites

Micro Computer Systems

## Intended learning outcomes

After the course students should be able to:

- design digital systems with microprocessors or microcontrollers
- develop software in C/C++ for microprocessors or microcontrollers for various applications
- develop and implement different algorithms to utilize available hardware resources in the systems

## Course content

Digital system design with microprocessors or microcontrollers on system and algorithm level. Software development for implementation of various algorithms. Debugging and testing skills

## Teaching and working methods

Education in form of project work

## Examination

PRA2 Oral and written examination 2 credits U, G

The examination of the course includes writing a project report and oral presentation of the project.

## Grades

Two-grade scale, U, G

## Department

Institutionen för teknik och naturvetenskap

## Director of Studies or equivalent

Adriana Serban

## Examiner

Qin-Zhong Ye

## Education components

Preliminary scheduled hours: 8 h

Recommended self-study hours: 45 h

## Course literature

### Additional literature

Other

## Common rules

Regulations (apply to LiU in its entirety)

The university is a government agency whose operations are regulated by legislation and ordinances, which include the Higher Education Act and the Higher Education Ordinance. In addition to legislation and ordinances, operations are subject to several policy documents. The Linköping University rule book collects currently valid decisions of a regulatory nature taken by the university board, the vice-chancellor and faculty/department boards.

LiU's rule book for education at first-cycle and second-cycle levels is available at [http://stydokument.liu.se/Regelsamling/Innehall/Utbildning\\_pa\\_grund-\\_och\\_avancerad\\_niva](http://stydokument.liu.se/Regelsamling/Innehall/Utbildning_pa_grund-_och_avancerad_niva).