

# Automatic Control, Advanced Course

Programme course

4 credits

Industriella styrsystem

TSIU04

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

Electrical Engineering

## Course level

First cycle

## Advancement level

G2X

## Course offered for

- Engineering Electronics
- Computer Engineering, B Sc in Engineering
- Chemical Analysis Engineering, B 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

Basic course in Automatic Control

## Intended learning outcomes

The course is to give basic knowledge of sequence control techniques and modern industrial control systems.

## Course content

Sequence control: Logic functions. Functional diagrams (GRAFCET).

Programmable logic controllers. Common components.

Process controllers: Supervision and control

## Teaching and working methods

Lectures, problem solving sessions and laboratory work. A mandatory study visit.

## Examination

LAB1	Laboratory work	4 credits	U, G
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Grades are given as 'Fail' or 'Pass'.

## Grades

Two-grade scale, U, G

## Department

Institutionen för systemteknik

## Director of Studies or equivalent

Johan Löfberg

## Examiner

Svante Gunnarsson

## Course website and other links

<http://www.control.isy.liu.se/>

## Education components

Preliminary scheduled hours: 26 h

Recommended self-study hours: 81 h

## 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).