

SYLLABUS

Project in Engineering Physics and Electrical Engineering - Electrical Engineering 15 credits E7025E

Projekt Teknisk fysik och Elektroteknik - Elektroteknik

Course syllabus admitted: Autumn 2016 Sp 1 - Present

**DECISION DATE
2016-06-15**

Project in Engineering Physics and Electrical Engineering - Electrical Engineering 15 credits E7025E

Projekt Teknisk fysik och Elektroteknik - Elektroteknik

Second cycle, E7025E

Education level	Grade scale	Subject	Subject group (SCB)
Second cycle	U G#	Elektroteknik	Electrical Engineering

Entry requirements

Good knowledge in signal processing, electronics and measurement technology, for example courses S0001E Signal analysis, E0007E Electronics, E7021E Measurement technology and uncertainty analysis. In addition, in depth knowledge is required in one of the two areas Electronics or Microcomputer engineering and Automatic control according to the following two options (course chains);

Option 1 (Electronics):

E7009E Electronic design

E7012E Mechatronics

E7014E Electronics II

E7022E Electronics production

Option 2 (Microcomputer engineering and Automatic control):

D0013E Microcomputer engineering

E7020E Embedded System Design

R7003E Automatic Control

R7004E Nonlinear and Optimal Systems OR R7005E Multivariable and Robust Control Systems

Selection

The selection is based on 30-285 credits

Examiner

Jan van Deventer

Course Aim

The course will develop the student's aptitude to, alone and within the group, formulate and solve measurement, actuation and control problems. With previously taken courses as foundation, the student will in part deepen his understanding of fundamental principles and in part broaden his or her overview over complete systems. Throughout the course, the student will develop his or her presentation skills and ability to cooperate in a group.

Contents

The course content will be specified, by the examiner, in a detailed course description at course start.

Realization

Each course occasion's language and form is stated and appear on the course page on Luleå University of Technology's website.

The course is guided to a great extent by its participants. The instructor defines the industrial problem to be solved. The students plan and execute their solutions to the problem. The students present their progress, including self evaluation, weekly in verbal and written forms. The project is normally performed in cooperation with companies.

The realization of the course will be specified, by the examiner, in a detailed course description at course start.

Examination

If there is a decision on special educational support, in accordance with the Guideline Student's rights and obligations at Luleå University of Technology, an adapted or alternative form of examination can be provided. The examination of the course will be specified, by the examiner, in a detailed course description at course start and can consist of a public seminar and a written report.

Remarks

The course can not be combined with other project course at advanced level from the Department of Computer Science, Electrical and Space Engineering.

Literature. Valid from Autumn 2013 Sp 1

Project courses on advanced level at the Department of Computer Science, Electrical and Space Engineering are of different character and can contain project work, seminars, and lectures. Therefore, it is hard to set the literature in advance. Contact the examiner for more information.

Course offered by

Department of Computer Science, Electrical and Space Engineering

Items/credits

Number	Type	Credits	Grade
0001	Project	15	U G#

Study guidance

Study guidance for the course is to be found in our learning platform Canvas before the course starts. Students applying for single subject courses get more information in the Welcome letter. You will find the learning platform via My LTU.

Last revised

by Jonny Johansson, HUL SRT 2016-06-15

Syllabus established

by Jonny Johansson, HUL SRT 2013-02-13