SYLLABUS

Project in Engineering Physics and Electrical Engineering - Physical Measurements and Sensor Systems 15 credits S7014E

Projekt teknisk fysik och elektroteknik, inriktning fysikaliska mätmetoder och sensorsystem

Course syllabus admitted: Autumn 2023 Sp 1 - Present

DECISION DATE
2020-02-21

Luleå University of Technology 971 87 Luleå, Sweden
Phone: +46 (0)920 49 10 00 • Corporate Identity: 202100-2841

LULEÅ TEKNISKA UNIVERSITET

Project in Engineering Physics and Electrical Engineering - Physical Measurements and Sensor Systems 15 credits S7014E

Projekt teknisk fysik och elektroteknik, inriktning fysikaliska mätmetoder och sensorsystem

Second cycle, S7014E

Education level	Grade scale	Subject	Subject group (SCB)
Second cycle	U G#	Signalbehandling	Computer Technology

Entry requirements

At least 210 hp completed of the degree requirements as well as the following specialisation courses, S7001E Stochastic Signals, F7028T Technical Wave Physics, S7011E Applied Signal Processing, and F7037T Modern Experimental Methodology.

Selection

The selection is based on 30-285 credits

Course Aim

Within the frame of the course the student will develop his/her ability to model and solve an arbitrary engineering problem. With the previously read courses as a basis the student will pursue a deeper understanding of fundamental knowledge as well as a better overview of a specific field. The broadening and deepening follows within the framework of the specialization. The course will also further develop the participants' presentation skills and ability to work in groups.

Contents

The contents of the course is specified by the examiner, in the form of a detailed course description at that particular event of the course and may include topics such as: Problem formulation within the area of the discipline. Exact realization of content is depends on the project in question.

Realization

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

The realization of projects within the programme Engineering Physics and Electrical Engineering is aimed to let student groups collaborate with complementary competences from other groups or specializations.The aim is to give the participants knowledge and experience required to work in research and development projects.

Participants will make assessments of the possibilities and limitations of technology, its role in society and people's responsibility for its use, including social and economic aspects as well as environmental, work environment and equality aspects.

The group works under the guidance of a supervisor. The supervisor will help the group to structure their work and also support them as they acquire and build new knowledge and abilities.It is normal for the group to have meetings with the supervisor on a regular basis. In these meetings the group presents its progress.Within the course the students will give oral presentations. One in mid term where a peer assessment is done and a final presentation where also a written report is presented. This is the general idea and deviations may occur.

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.

Midterm and peer assessed presentation is given and the finished project is presented as a written report and an oral presentation at LTU. In case of industrial partners the group also gives a presentation at the industrial partner. The group of teachers will have meetings with the students to assess their performance. The final grade will be based on the student’s contribution to the project.

Unauthorized aids during exams and assessments

If a student, by using unauthorized aids, tries to mislead during an exam or when a study performance is to be assessed, disciplinary measures may be taken. The term “unauthorized aids” refers to aids that the teacher has not previously specified as permissible aids and that may assist in solving the examination task. This means that all aids not specified as permissible are prohibited. The Swedish version has interpretative precedence in the event of a conflict.

Remarks

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

Course offered by

Department of Computer Science, Electrical and Space Engineering

Modules

Code	Description	Grade scale	Cr	Status	From period	Title
0001	Project	U G#	15	Mandatory	A18	Yes

Last revised

by Jonny Johansson, HUL SRT 2020-02-21

Syllabus established

by Jonny Johansson, HUL SRT 2018-02-15