

# Advanced Project Work in Applied Physics

Programme course

6 credits

Projektlaborationer i fysik

TFYA17

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

Applied Physics, Physics

#### **Course level**

Second cycle

#### Advancement level

A1X

#### Course offered for

- Applied Physics and Electrical Engineering, M Sc in Engineering
- Physics and Nanoscience, Master's programme
- Materials Science and Nanotechnology, Master's programme
- Applied Physics and Electrical Engineering International, M Sc in Engineering

### Specific information

Exchange students may apply for the course after arrival to LiTH but before it starts. The international officer for exchange studies must be contacted before applying.

#### 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

Former courses in physics.

#### Intended learning outcomes

The objective is to give experience, i.e. knowledge and understanding, of tackling and solving a theoretical or experimental problem. The course should also provide training in



the ability to write a scientific report and in oral presentation.

#### Course content

Depends on project but in general

- associated theory
- measurement or computational principles,
- evaluation of measured or calculated data

### Teaching and working methods

At an introductory lecture the ongoing research at the Department och Physics and Measurement technology is presented. The attendees annouce their interest in some area(s). Researchers in these areas try to formulate minor problems that can be separated from a larger research project and under the guidance of the researcher the probleme shall be solved. The students normally work 2 together. The work gives experience of/contact with

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- planning and carrying out a small project
- writing a report on a original work
- methods of research in physics

The course runs over the entire autumn semester.

#### Examination

LAB1 A written report in the form of a "scientific article U, G 6 credits Grades are given as 'Fail' or 'Pass'.

#### Grades

Two-grade scale, U, G

#### Department

Institutionen för fysik, kemi och biologi

#### Director of Studies or equivalent



Magnus Johansson

#### Examiner

Per Eklund

### Course website and other links

http://www.ifm.liu.se/undergrad/fysikgtu/coursepage.html?selection=all&sort=kk

#### **Education components**

Preliminary scheduled hours: 8 h Recommended self-study hours: 152 h

#### **Course literature**

#### Additional literature

Articles

Current scientific articles.



## **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://styrdokument.liu.se/Regelsamling/Innehall/Utbildning\_pa\_grund-\_\_och\_avancerad\_niva.

