Engineering Project

Programme course

6 credits

Ingenjörsprojekt

TFYA46

Valid from: 2017 Spring semester

Determined by
Board of Studies for Chemistry, Biology and Biotechnology

Date determined
2017-01-25

Main field of study
Biotechnology, Chemical Engineering, Engineering Biology

Course level
First cycle

Advancement level
G1X

Course offered for
- Engineering Biology, M 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.

Intended learning outcomes
The course should give the students a perspective on engineering and the future role as an engineer. In specific, the course should introduce basic methods for project work. Administration, planning, communication, documentation, and presentation of project work are part of the course and the students should contribute as a member of a project work team. After the examination of this course the students should know how to:

- work in a project according to a project model
- plan a project work from a given specification and document this in project- and timeplans.
- find knowledge of relevance to solve the project tasks
- collaborate to make the work in a project group successful
- administrate and document an ongoing project work
- present the results from the project work both orally and in a written report

Course content

The lectures aim to prepare the students for the project work bringing up information on CDIO and model for project work used at LiU (LIPS model). Are also included lectures with topics on group work, written and oral communication and information search. Lectures given by inviting guest lecturers graduated from the Engineering program should give to the students an insight in their future role as engineers. The lectures on information search are given for smaller groups at the library.
The project work is done in groups of 5-9 students. Each group is assigned to a specific project task and a teacher is acting as a customer. The groups are put together by the course management, which also assigns a project to each group. The customer presents a specification of the project task to the project group. All projects are described in brief on the course homepage. From this specification the group will make a project plan and perform a project work according to the project model LIPS. Each group has frequent meetings with a teacher acting as a mentor/supervisor. During the work the students have a given maximum time for supervision. The project work should be documented during the work, and at the end presented in the form of a demonstration and a written report. Both the demonstration and the report is a part of the examination. At the end of the course the work is also presented for the other students at a project conference.

Teaching and working methods

The course will connect to a number of lectures and project work . At the end of the course each project will be presented for the other students at a project conference. A reflection on the finished work as well as suggestion for improvements will conclude the course.
The course runs over the entire spring semester.

Examination

PRA1	Project work	4.5 credits	U, G
UPG1	Active participation at lectures, exercises and conference	1.5 credits	U, G

Grades are given as ‘Fail’ or ‘Pass’.
To pass UPG1 attendens to a minimum of 75% of the lectures and to the project conference is required.
PRA1 corresponds to the project work with work in a group following a model,information research, elaboration of report(s) and oral presentation of results.

Grades

Two-grade scale, U, G

Other information
Supplementary courses: The course will connect to a number of courses that will follow in the programmes.

Department
Institutionen för fysik, kemi och biologi

Director of Studies or equivalent
Magnus Boman

Examiner
Elke Schweda

Course website and other links

Education components
Preliminary scheduled hours: 35 h
Recommended self-study hours: 125 h

Course literature
Projektmodellen LIPS (T. Svensson, C. Krysander) ISBN 9789144075259 (svensk) 9789144075266 (engelsk)

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.