

Project Course Advanced - Design and Manufacturing Engineering

Programme course

12 credits

Projektkurs avancerad - Konstruktion och
produktion

TMPM03

Valid from: 2017 Spring semester

Determined by
Board of Studies for Mechanical
Engineering and Design

Date determined
2017-01-25

Main field of study

Mechanical Engineering

Course level

Second cycle

Advancement level

A1X

Course offered for

- Design and Product Development

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

Knowledge from the first years in a Mechanical Engineering program.

Intended learning outcomes

This course is aimed at applying skills from previous courses in machine design in a product development project. After the course the student should

- Be able to apply concept generation and concept selection in a realistic project.
- Be able apply modelling of product/system properties in the concept phase
- Be able to do a project plan
- Have experience fom working in a team with product development.

Course content

The course is based on a project that could be from industry or a relevant in-house project. The project contains concept generation and concept selection, modelling of product/system properties in the concept phase,. project planning. To a varying degree, students will work with CAD-modelling, dynamic simulation and other analysis techniques, and bring that to a physical realization. The course also contains some lectures on project specific technology. One theme that has been used several years is based on sustainable personal transport.

Teaching and working methods

The course is carried as a project with regular meetings. In addition there are lectures in project specific technology. The result from the project is a design of product, a physical demonstrator a written report.
The course runs over the entire autumn semester.

Examination

PRA1	Project work	12 credits	U, 3, 4, 5
------	--------------	------------	------------

Grades

Four-grade scale, LiU, U, 3, 4, 5

Department

Institutionen för ekonomisk och industriell utveckling

Director of Studies or equivalent

Olika studierektorer beroende på projekt

Examiner

Olika examinatorer beroende på projekt

Course website and other links

Education components

Preliminary scheduled hours: 0 h

Recommended self-study hours: 320 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.