

# Project Course Advanced - Mechatronics

Programme course

12 credits

Projektkurs avancerad - Mekanik

TMPM06

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

- Mechanical Engineering, Master's programme
- Mechanical Engineering, M 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.

## Prerequisites

The project requires knowledge from the first three years in a Mechanical Engineering program.

## Intended learning outcomes

This course is aimed at applying skills from previous courses in machine design with special focus on fluid power systems and mechatronics in a product development project. After the course the student should

- Be able to use and follow a project model Kunna använda och följa en projektmodell.
- Be able to apply and systematically integrate the knowledge acquired during the studies and if necessary produce new knowledge to run a mechanical engineering projects.
- Be able to create, analyze and evaluate technical solutions.
- Be able to professionally express themselves in writing and orally.
- Be able to actively contribute to a well-functioning project.
- Have experience of working in a group with product development

## Course content

The course consists of a current project of an appropriate scale that is taken from the industry or the academy. The project is conducted then by the students in collaboration with the client and includes different phases of product development, from problem definition, requirements specification, modeling and also end of construction. The project concludes with a written report and oral presentations at the University.

## Teaching and working methods

The course is carried as a project with regular meetings with the supervisor. Students are expected to assume major responsibility for the project work is completed.

The course runs over the entire autumn semester.

## Examination

PRA1	Project work	12 credits	U, 3, 4, 5
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## Grades

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

## Department

Institutionen för ekonomisk och industriell utveckling

## Director of Studies or equivalent

Peter Hallberg

## Examiner

Liselott Ericson

## Course website and other links

## Education components

Preliminary scheduled hours: 0 h

Recommended self-study hours: 320 h

## Course literature

Aktuella artiklar anpassade för projektet.

## 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](http://stydokument.liu.se/Regelsamling/Innehall/Utbildning_pa_grund-_och_avancerad_niva).