



Course syllabus

Faculty of Technology

Department of Mechanical Engineering

4MT350 Avancerad projektkurs i Maskinteknik, 30 högskolepoäng

Advanced Project Course in Mechanical Engineering, 30 credits

Main field of study

Mechanical Engineering

Subject Group

Mechanical Engineering

Level of classification

Second Level

Progression

A1N

Date of Ratification

Approved by Faculty of Technology 2019-12-02

The course syllabus is valid from autumn semester 2020

Prerequisites

A minimum of 90 credits within the field of mechanical engineering: or equivalent

Objectives

The aim with this course is to provide the ability to independently accomplish a project. The student shall display the ability to apply the skills that has been acquired during the course of education and therefore be able to define a problem, carry through a project, asses the results in the light of prior knowledge, critically analyze and present the results.

Content

The course comprises the following elements:

- Analyze the background of the project and define the problem,
- Define the aim of the project and choose a suitable scientific method,
- Develop and propose an approach to solve the defined problem,
- Choose, gather and critically evaluate relevant literature; and summarize the literature in a critically manner,
- Develop and propose metrology and/or modelling methods, inclusive data acquisitioning; when appropriate
- Carry through an experiment and/or calculation and if applicable,
- Analyze and critically value the given results and/or experimental data; and draw conclusions from the completed work,
- Compose recommendations based on the conclusion
- Present the project both orally and in a written, scientific engineering report.

Type of Instruction

The teaching consists of project supervision by a Senior Lecturer or Professor

Examination

The course is assessed with the grades A, B, C, D, E, Fx or F.

The grade A constitutes the highest grade on the scale and the remaining grades follow in descending order where the grade E is the lowest grade on the scale that will result in a pass. The grade F means that the student's performance is assessed as fail (i.e. received the grade F).

The examination consists of the following assessment methods:

- A written report of the planned project and initial phase, 5 credits (A-F)
- Execution of the project's investigation, 10 credits (A-F)
- Documentation, academic reporting and oral examination of the project, 15 credits (A-F)

The final grade is a weighted average of assessment methods.

Repeat examination is offered in accordance with Local regulations for courses and examination at the first and second-cycle level at Linnaeus University.

If the university has decided that a student is entitled to special pedagogical support due to a disability, the examiner has the right to give a customised exam or to have the student conduct the exam in an alternative way.

Course Evaluation

During the implementation of the course or in close conjunction with the course, a course evaluation is to be carried out. Results and analysis of the course evaluation are to be promptly presented as feedback to the students who have completed the course. Students who participate during the next course instance receive feedback at the start of the course. The course evaluation is to be carried out anonymously.

Other

Grade criteria for the A–F scale are communicated to the student through a special document. The student is to be informed about the grade criteria for the course by the start of the course at the latest.

Required Reading and Additional Study Material

The literature for the course is chosen by the student in consultation with the supervisor and is based on relevant study material and scientific articles.