



Faculty of Health, Science and Technology
Materials Engineering

Syllabus

Degree Project for Bachelor of Science in Mechanical Engineering

Course Code:	MTGC11
Course Title:	Degree Project for Bachelor of Science in Mechanical Engineering <i>Examensarbete för kandidatexamen i maskinteknik</i>
Credits:	15
Degree Level:	Undergraduate level
Progressive Specialisation:	First cycle, has at least 60 credits in first-cycle course/s as entry requirements, contains degree proj. for B.A./B.Sc. (G2E)

Major Field of Study:
MTA (Mechanical Engineering)

Course Approval

The syllabus was approved by the Faculty of Health, Science and Technology 2023-09-11, and is valid from the Spring semester 2024 at Karlstad University.

Prerequisites

120 ECTS credits completed, including 60 ECTS credits in Mechanical Engineering and Materials Engineering

Learning Outcomes

Upon completion of the course, students should be able to:

Knowledge and understanding

- demonstrate in-depth knowledge in a chosen area of engineering.

Competence and skills

- demonstrate the ability to critically and independently deal with mechanical engineering problem,
- demonstrate the ability to plan and carry out tasks with an assigned method and within a given time limit,
- demonstrate the ability to critically and systematically integrate knowledge and skills acquired in previous courses in solving a mechanical engineering problem,
- demonstrate the ability to give an account of and discuss their results and the knowledge and the arguments on which these are based, orally and in writing,
- perform information searches and independently identify relevant information, and
- write reports in accordance with standard scientific practice in terms of disposition and formal aspects as well as correct referencing.

Judgement and approach

- assess another degree project in Mechanical Engineering in terms of relevant scientific and ethical aspects.

Content

Students carry out a project, individually or in groups. In the case of several students collaborating on a major project, the individual contributions and areas of responsibility must be clearly announced at the start of the project.

This is an independent project and students are required to plan, control, carry out, and present the project.

Students are responsible for the process and the results. Instruction is in the form of supervision and seminars.

Reading List

See separate document.

Examination

Assessment is based on documentation of the project in an individual report, which is normally written in Swedish with a summary in English but can also be written in English. Reports written in a language other than Swedish must have a Swedish title and a summary in Swedish.

The final seminar where the degree project is presented orally is mandatory. Students are also required to provide peer review of another degree project.

If students have a decision from Karlstad University entitling them to Targeted Study Support due to a documented disability, the examiner has the right to give such students an adapted examination or to examine them in a different manner.

Grades

One of the grades Fail (U), Pass (G) or Distinction (VG) is awarded in the examination of the course.

Quality Assurance

Follow-up relating to learning conditions and goal-fulfilment takes place both during and upon completion of the course in order to ensure continuous improvement. Course evaluation is partly based on student views and experiences obtained in accordance with current regulations and partly on other data and documentation. Students will be informed of the result of the evaluation and of any measures to be taken.

Course Certificate

A course certificate will be provided upon request.

Additional information

The local regulations for studies at the Bachelor and Master levels at Karlstad University stipulate the obligations and rights of students and staff.