



# SD2432 Lightweight Design 20.0 credits

## Lättviktsdesign

This is a translation of the Swedish, legally binding, course syllabus.

If the course is discontinued, students may request to be examined during the following two academic years

## Establishment

The course syllabus is valid from Spring 2022 according to the school principal's decision:  
S-2022-0529 Decision date: 2022-02-24

## Grading scale

A, B, C, D, E, FX, F

## Education cycle

Second cycle

## Main field of study

## Specific prerequisites

The course is primarily intended for students in the specialisation program Lightweight Structures.

English B / English 6

## Language of instruction

The language of instruction is specified in the course offering information in the course catalogue.

## Intended learning outcomes

The technical aim is to develop an advanced lightweight application from specification to product, constrained by a given budget.

After completion of the course the participants should be able to

- work effectively in a project environment and understand mechanisms behind progress and difficulties in such a setting
- communicate in writing, orally and graphically
- to analyze technical problems from a systems (holistic) perspective
- choose and use adequate engineering methods and tools
- handle technical problems which might be incompletely stated and subject to multiple constraints
- pursue own ideas and realise them practically
- assess the quality of work, performed by themselves and others

## Course contents

The course consists mainly of project-oriented teamwork such as planning, technical design, experimental investigations and manufacturing. In addition, regular informative and decisive project meetings are held, and frequent informal discussions with teachers. Opportunities to practice leading roles such as project manager, group leader and treasurer could occur. A number of relevant guest lectures in topics ranging from purely technical to project management and communication techniques are planned, normally after consultation with the course participants.

## Examination

- ÖVN1 - Exercises, 5.0 credits, grading scale: P, F
- ÖVN2 - Exercises, 5.0 credits, grading scale: P, F
- ÖVN3 - Exercises, 5.0 credits, grading scale: P, F
- ÖVN4 - Exercises, 5.0 credits, grading scale: P, F

Based on recommendation from KTH's coordinator for disabilities, the examiner will decide how to adapt an examination for students with documented disability.

The examiner may apply another examination format when re-examining individual students.

## Other requirements for final grade

Course work (ÖVN1-5) and completed project.

## Ethical approach

- All members of a group are responsible for the group's work.
- In any assessment, every student shall honestly disclose any help received and sources used.
- In an oral assessment, every student shall be able to present and answer questions about the entire assignment and solution.