

# Computers as Design Tools

Programme course

6 credits

Datorn som designverktyg

TMKT59

Valid from: 2017 Spring semester

**Determined by**  
Board of Studies for Mechanical  
Engineering and Design

**Date determined**  
2017-01-25

## Main field of study

Product Development, Mechanical Engineering

## Course level

First cycle

## Advancement level

G2X

## Course offered for

- Design and Product Development
- 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.

## Intended learning outcomes

The purpose of the course is to provide good skills in how to use the computer as a design tool during the design process. The ability to create 3D-modells using various computer programs is the most important ingredients. The student will after completed course;

- have knowledge of how the computer can be used as design and construction tool in the design process.
- gained the ability to use wide range of computer programs in combination with other aids for visual representation.
- being able to construct complex models using CAD-program.
- have the ability to analyze and evaluate design qualities on a conceptual level.
- show an experimental attitude were the computer tool is integrated.

## Course content

Three dimensional CAD program for design purposes. Object based graphic programs. Sketching and presentation techniques. The design project includes a total product based on the man-machine interaction. During the design project the team will deal with the products design, production capability, esthetics, practical function, etc.



## 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).