



MF1042 Vizualisation and Communication 6.0 credits

Visualisering och kommunikation

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

Establishment

Course syllabus for MF1042 valid from Autumn 2008

Grading scale

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

Education cycle

First cycle

Main field of study

Technology

Specific prerequisites

The courses MF1012 and MF1014 or MF1015 or MG1003

Language of instruction

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

Intended learning outcomes

After finalising of this course, students should have been given training in:

- Problem formulation and search for solutions by means of model based methods and modern computer tools;
- Transfer of hand-drawn sketches into surface and solid model computer geometry models, during early phases of design;
- Active use of surface modeling as a tool for sketching;
- Transfer of surface models into solid models, in Solid Edge, as a basis for rapid manufacturing of physical models, e.g. by milling in 5-axis machine tools;
- Animation for project presentations, e.g. over the Internet;
- Final presentation of a product concept by means of poster presentation and computer based presentation;

Oral presentation and discussion of a technical solution, at a seminar with critics

Course contents

Exercises are carried out in groups of 3-4 students. One individual project, to be discussed in groups of students.

The course comprises the following five tasks:

A Surface modeling, from sketch to computer model

B Solid modeling, from surface model to solid model

C Manufacturing of a physical model, from the CAD-solid model

D Animation of the computer model

E Reporting with model, poster and oral presentation

Course literature

Will be announced at course start.

Examination

- INL1 - Home Assigments, 2.0 credits, grading scale: P, F
- INL2 - Home Assigments, 2.0 credits, grading scale: P, F
- INL3 - Home Assigments, 2.0 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.

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

Other requirements for final grade

Passed written report on course sections A-B, (INL1; 3 cr)

Passed presentation on course sections C-E at a common course seminar with critics, (PRO1; 3 cr)

For a passed course, passed will be required for all course sections

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.