



MG1028 Introductory 3D CAD

1.5 credits

Grundläggande 3D-CAD

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

On 11/04/2019, the Dean of the ITM school has decided to establish this official course syllabus to apply from autumn term 2019 (registration number M-2019-0870).

Grading scale

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

Education cycle

First cycle

Main field of study

Technology

Language of instruction

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

Intended learning outcomes

After passing the course, the student should be able to:

- independently and in a structured manner create:
 - parameterised solid models of 3D parts
 - assembly models containing part models
 - mechanism models and animations
 - simple drawings of parts with dimensioned orthographic, detail and section views
 - assembly drawings with parts lists and exploded viewsin a modern CAD system

Course contents

- System introduction and basic part modelling in a modern 3D CAD system
- More part modelling and assembly modelling
- Documentation: How to create part and assembly drawings
- Individual work with the homework assignment outside scheduled classes

Disposition

Three short lectures introducing different parts a modern CAD system are followed immediately by a related CAD exercise.

A homework assignment where the skills acquired during the CAD exercises are used on an assigned model and presented to a course responsible teacher.

Specific prerequisites

Course literature

Course material in Introductory CAD, Lasse Wingård & Per Johansson, (pdf documents can be downloaded from the LMS by registered course participants).

Equipment

The CAD programme used is available in all general computer labs at KTH campus, but can also be downloaded for Windows computers from KTH software download site

Examination

- INL1 - Laboratory and Homework Assignment, 1.5 credits, grading scale: A, B, C, D, E, FX, 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.

The CAD exercises and the homework assignment must be presented to a teacher at the computer. A higher grade can be achieved through an extended homework assignment.

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.