



Course syllabus

Faculty of Technology

Department of Mechanical Engineering

1MT322 3D CAD - Maskin, 7,5 högskolepoäng

3D CAD - Mechanical Engineering, 7.5 credits

Main field of study

Mechanical Engineering

Subject Group

Mechanical Engineering

Level of classification

First Level

Progression

G1F

Date of Ratification

Approved 2018-01-15

Revised 2020-03-27 by Faculty of Technology. Assessment methods are revised.

The course syllabus is valid from spring semester 2021

Prerequisites

Basic eligibility and Introduction to Mechanical Engineering, 7,5 credits or equivalent.

Objectives

After completing the course the student is expected to:

- create solid models and surface models.
- create assemblies
- create drawings from 3D-models and assemblies
- create presentations in 3D-CAD tools.

Content

The course includes the following moments:

- Detail modelling in 3D
- Assembly modelling in 3D
- Detail- and assembly drawings from 3D models
- Import/Export models
- Surface modelling, an introduction
- Standard details, an introduction
- Moduls for sheet metal modelling, an introduction
- e-Drawings
- Visualization
- Animation
- FEM-calculation

Type of Instruction

The teaching consists of lectures and exercises. Some elements are compulsory. The extent of compulsory elements is announced at the start of the course.

Examination

The course is assessed with the grades A, B, C, D, E, Fx or F.

The grade A constitutes the highest grade on the scale and the remaining grades follow in descending order where the grade E is the lowest grade on the scale that will result in a pass. The grade F means that the student's performance is assessed as fail (i.e. received the grade F).

Students are assessed both continuously during the course and through a comprehensive final computer based exam.

- Computer Based Exam, 5.5 credits (A-F)
- Project Work, 2 credits (P/F)

Repeat examination is offered in accordance with Local regulations for courses and examination at the first and second-cycle level at Linnaeus University.

If the university has decided that a student is entitled to special pedagogical support due to a disability, the examiner has the right to give a customised exam or to have the student conduct the exam in an alternative way.

Course Evaluation

During the implementation of the course or in close conjunction with the course, a course evaluation is to be carried out. Results and analysis of the course evaluation are to be promptly presented as feedback to the students who have completed the course. Students who participate during the next course instance receive feedback at the start of the course. The course evaluation is to be carried out anonymously.

Credit Overlap

The course cannot be included in a degree along with the following courses of which the content fully, or partly, corresponds to the content of this course: 1MT022, 7.5 credits

Other

The course is offered in English if there are international participants.

Grade criteria for the A–F scale are communicated to the student through a special document. The student is to be informed about the grade criteria for the course by the start of the course at the latest.

Required Reading and Additional Study Material

Required reading

Solid Works Essentials, Solid Works Corporation 532 p.