Linnæus University

Course syllabus

Faculty Board of Science and Engineering
School of Engineering

1MT005 Avancerad CAD i 3D, 7,5 högskolepoäng
Advanced CAD in 3D, 7.5 credits

Main field of study
Mechanical Engineering

Subject Group
Mechanical Engineering

Level of classification
First Level

Progression
G1F

Date of Ratification
Approved by the Board of the School of Engineering 2009-07-24

Revised 2010-11-29. Translated to English.

The course syllabus is valid from spring semester 2011

Prerequisites
Basic eligibility and Engineering Tools, 7,5 credits or Machine Design 1, 7,5 credits or equivalent.

Expected learning outcomes
After completing the course the student is expected to:

- have the skills to use 3D-CAD in product development.
- create solid models and surface models.
- have the skills to create assemblies and create 2D-drawings.
- make analysis of products and 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.
- Standard details.
- Sheet metal modelling.
- e-Drawings.

- Visualization with PhotoWorks.
- Animation.
- FEM-calculation with COSMOSExpress.

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 U,3,4 or 5.
On request, students may have their credits translated to ECTS-marks. Such a request must be sent to the examiner before the grading process starts.

Course Evaluation
When the course has finished, an evaluation is compiled. The results are reported to the students and then archived according to the rules of the school.

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

Required Reading and Additional Study Material
Required reading
Solid Works Essentials, Solid Works Corporation 532 p.