Introduction to CAD

Programme course

6 credits

Ingenjören och CAD-verktyget

TMKT94

Valid from: 2017 Spring semester

Determined by
Board of Studies for Mechanical Engineering and Design

Date determined
2017-01-25

Offered for the last time
Autumn semester 2021

Replaced by
TMPR02

Main field of study
Product Development, Mechanical Engineering

Course level
First cycle

Advancement level
G1X

Course offered for
- Mechanical Engineering, M Sc in Engineering
- Mechanical Engineering, B Sc in Engineering
- Energy-Environment-Management 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 course gives knowledge about the role of the CAD-tool during different stages of the product development process. After the course, students are expected to:
- Be able to prepare and plan for a modelling task that involves products that consists of multiple parts.
- Be able to describe the concepts of Top-Down/Bottom-Up-Design when using an advanced CAD system.
- Be able to describe the concept of parametric modelling.
- To be able to produce basic technical drawings

Course content
Basic solid modeling using Creo Parametric. Assemblies. Drawing technique. Parametric models. Efficient modeling. Analyzing and optimizations of models. Project assignment.

Teaching and working methods
Teaching involves seminars, lectures and supervised laboratory sessions in computer classrooms. Assessment includes hand-in exercises and engagement in a project. The final project is conducted in groups of 2-4 students. The course runs over the entire autumn semester.

Examination

PRA1	Project	2 credits	U, G
UPG3	Hand-in assignment	1 credits	U, G
UPG2	Hand-in assignment	2 credits	U, G
UPG1	Hand-in assignment	1 credits	U, G

Grades are given as ’Fail” or ”Pass”.

Grades

Two-grade scale, U, G

Department

Institutionen för ekonomisk och industriell utveckling

Director of Studies or equivalent

Peter Hallberg

Examiner

Peter Hallberg

Course website and other links

http://www.iei.liu.se/machine/courses/tmkt94

Education components

Preliminary scheduled hours: 102 h
Recommended self-study hours: 58 h

Course literature

Fastställs senare

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://styrdokument.liu.se/Regelsamling/Innehall/Utbildning_pa_grund-_och_avancerad_niva.