

# 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.

