



# ML1209 Computer Based Product Development Tools, Basic Course 7.5 credits

Datorbaserade produktutvecklingsverktyg, grundkurs

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

Course syllabus for ML1209 valid from Spring 2018

## Grading scale

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

## Education cycle

First cycle

## Main field of study

Technology

## Specific prerequisites

## Language of instruction

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

## Intended learning outcomes

On completion of the course, the student should be able to:

- Read and interpret as well as produce simple two-dimensional engineering drawings.
- Use CAx systems to create and modify simple parametric solid models (part models)
- Based on solid models, create and modify parametric assemblies (Products)
- Create drawings based on solid models and assemblies
- Store and handle CAx files in a PLM system, considering the whole life cycle of a product/part
- Describe and apply a modelling strategy that for creating high-quality robust models
- Describe the life cycles of parts and products
- Describe advantages and disadvantages of various types of CAx systems and their use in a product development phase

## Course contents

- Drawings
- Basic sketching
- Solid modelling in 3D programs
- 3D assemblies
- Drawing generation
- File management and life-cycle management

## Course literature

Meddelas 10 veckor innan kursstart

## Examination

- CADA - Individual submissions, 3.0 credits, grading scale: P, F
- DEXA - Examination in Computer Laboratory, 3.0 credits, grading scale: A, B, C, D, E, FX, F
- PROA - Individual project, 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.

Course grade be based on 40% CADA 20% PROA, 40% DEXA

## Other requirements for final grade

CADA 3.0 credits (P/F) individual submissions

PROA 1.5 credits (A, B, C, D, E, F, Fx) individual project

DEXA 3.0 credits (A, B, C, D, E, F, Fx) individual examination

## 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.