



MF2034 Integrated Product Development 6.0 credits

Integrerad produktutveckling

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 MF2034 valid from Spring 2011

Grading scale

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

Education cycle

Second cycle

Main field of study

Mechanical Engineering

Specific prerequisites

TIPUM, TIPDM and 10 credits

CDEPR4, CMAST3, CFAST4

Language of instruction

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

Intended learning outcomes

The overall objective of the course is that students should be able to describe, compare and explain different aspects of working in complex product development. The pedagogical model of the course is reflective learning through the theory section mixed with practical exercises, critical discussion and project work.

After completion of the course, you will be able to

- Describe, compare and critically examine various product development processes and their properties
- Apply and evaluate support methods in complex product development
- Analyze the impact of different ways of organizing product in development
- Describe factors supporting a creative working environment, and provide recommendations for how a group can achieve a creative working environment
- Identify integration mechanisms for product development projects and critically examine their usefulness
- Realise a specification and a project plan for a product development project
- To use your good knowledge to run a complex multifunctional development project

Course contents

Creative climate

Product development processes

Support methods for Integrated product development

Organizing - Project management

Roles in the team - group dynamics

Integration mechanisms

Information management - requirements

Project planning

Disposition

To be run 4 + 2 hp, 4 hp in class, 2 hp to be examined related to a following project course.

Course literature

Product Design and Development, Ulrich & Eppinger, research papers,

Examination

- PRO1 - Project, 1.0 credits, grading scale: P, F
- PRO2 - Project, 2.0 credits, grading scale: P, F
- TEN1 - Written Exam, 3.0 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.

Oral presentations, reports, peer to peer evaluations, logbook-reflections

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.