

ML1333 Product Development, Project Course 15.0 credits

Produktutveckling, projektkurs

This is a translation of the Swedish, legally binding, course syllabus.

Establishment

Course syllabus for ML1333 valid from Autumn 2019

Grading scale

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

Education cycle

First cycle

Main field of study

Technology

Specific prerequisites

ML1209 Computer Based Product Development Tools, Basic Course ML1213 Product development and design ML1108 Decision Models and Impact Assessment

and ML1213 Product Development and Design, or the equivalent

Language of instruction

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

Intended learning outcomes

Having passed the course, the student should be able to:

- prepare and execute a project plan for a product development project
- account for the importance of teamwork and cooperation in multi-disciplinary and multicultural project groups
- Identify and evaluate ones own behaviour in working groups and relate this to the dynamics of the working group
- evaluate new technologies and describe the changes that the technical development means for society
- identify, prioritise and apply relevant design parameters for the product development
- orally, in writing and by means of required physical models present the result of a product development project
- identify and apply different approaches and positions with regard to ethnicity, diversity, ethics and gender

Course contents

The course includes carrying out industrially relevant product development in project form. Further, it includes specialisation in decision models and design parameters from previous courses. Course include concepts such as: Quality Function Deployment (QFD), Pugh concept development, Failure Mode and Effect Analysis (FMEA), the Kesselring method, and Theory of Inventive Problem Solving (TRIZ) for modelling of technical development.

Course literature

- Produktutveckling, av Karl Ulrich och Steven Eppinger. ISBN 978-91-44-07421-4.
- StrengthsFinder 2.0, av Tom Rath. ISBN 978-1-59562-015-6.
- Uppgift om ytterligare kurslitteratur meddelas i kurs-PM

Equipment

- Folding rule
- 15cm sliding caliper

Examination

- RED1 Written and/or oral assignment, 7.5 credits, grading scale: A, B, C, D, E, FX, F
- PRÖ1 Project and assignments, 7.5 credits, grading scale: P, 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.

If the course is discontinued, students may request to be examined during the following two academic years.

Examiner determines, in consultation with KTH's coordinator for disabilities (Work), about possible adapted examination for students with documented, permanent disabilities. The examiner may permit other examination formats at the re-examination of individual students.

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.