



MF2032 Eco Design 6.0 credits

Eco Design

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

Establishment

Course syllabus for MF2032 valid from Autumn 2010

Grading scale

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

Education cycle

Second cycle

Main field of study

Mechanical Engineering

Specific prerequisites

MF101X/MF102X/MF104X/MF111X/MF112X/MF114/MF116/MF106X/MF107X/MF109X
or Bachelor in Mechanical engineering

TIPUM, TIPUD, TAEEM

Language of instruction

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

Intended learning outcomes

The main goal is to provide the students with basic knowledge on environmental demands and eco-design tools in product development, and to give basic competence in designing products for sustainability.

After completed the course a student shall be able to:

- value and handle environmental demands in product development,
- conduct a simplified environmental performance analyses on a consumer product,
- propose and document design solutions improving products environmental performance in manufacturing, use and recycling,
- use a set of methods for eco-design.

Course contents

Life Cycle Assessment; Recycling of materials and components; Design for disassembly; Design rules for materials choice, surface treatment, structural layout; Relevant EU directives and laws.

Disposition

Lectures and exercises (14 x 3 hours)

Written exam

Course literature

Published course material

- Reports.

Examination

- INL1 - Hand in Task, 3.0 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.

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

Other requirements for final grade

- INL1 - Group assignment, 3,0 credits, grade scale: A, B, C, D, E, FX, F
- TEN1 - Written exam, 3,0 credits, grade scale: A, B, C, D, E, FX, F

Final grading is based on INL1 and TEN1.

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.