ML1332 Computer-aided Mechanical Design, Continuation Course 7.5 credits

Datorbaserade konstruktionsverktyg, fortsättningskurs

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 ML1332 valid from Autumn 2023

Grading scale

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

Education cycle

First cycle

Main field of study

Technology

Specific prerequisites

- Passed Cources ML1000, ML1101 and ML1209
- Passed modules PDX1 och PRO1 in ML1213

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:

- independently structure, implement and document CAx tasks that include modelling and FE analysis
- use a finite element programme to solve multidimensional elastic problems
- develop a product's geometry and function considering the FE analysis
- identify and apply appropriate modelling strategies considering FE analysis
- describe how finite element programmes are structured and which input that must given, to solve a hands-on problem
- compare, evaluate and document the results of FE analyses

Course contents

Examination

- DEX1 - Computer Based Examination, 2.5 credits, grading scale: A, B, C, D, E, FX, F
- INLA - Assignments, 3.0 credits, grading scale: A, B, C, D, E, FX, F
- RED1 - Seminar, 2.0 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.

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 format for 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.