MG1208 Engineering calculations 3.0 credits

Tekniska beräkningar

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

Establishment

Grading scale

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

Education cycle

First cycle

Main field of study

Technology

Specific prerequisites

MG1202 Engineering Mathematics

Language of instruction

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

Intended learning outcomes

After passing the course, the student shall be able to:

1. Explain how different types of errors affect calculations

2. Make approximations suitable for calculations

3. Justify and evaluate different numerical methods

4. Solve numerical problems and assess the relevance and accuracy of the results

Course contents

Error analysis

Approximations

Solving equations

Basics of computer arithmetic

Examination

- TEN1 - Written exam, 3.0 credits, grading scale: A, B, C, D, E, FX, F
- KON1 - Partial Exam, 0 credits, grading scale: P, F
- KON2 - Partial Exam, 0 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.

Two optional quizzes are organised during the course. Their results may be counted for the examination. A pass in both control tests (KON1 and KON2) within one (1) year is a pass (grade E) in the module TEN1, without writing the exam. For higher grades, the student is required to write the exam.

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.