



# MG1208 Engineering calculations 3.0 credits

Tekniska beräkningar

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

## Establishment

The course syllabus is valid from the autumn semester of 2026, according to the decision of the Head of Undergraduate Education: HS-2025-2442. Decision date: 16 October 2025

## Grading scale

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

## Education cycle

First cycle

## Main field of study

Technology

## Specific prerequisites

MG1202 Engineering Mathematics

## 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

- TENA - Written exam, 2.0 credits, grading scale: A, B, C, D, E, FX, F
- LABA - Laboratory work , 1.0 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 voluntary tests are organized during the course, the results of which can be credited towards the exam. Passing both tests (KON1 and KON2) within one (1) year results in a pass (grade E) for the TEN1 module, without having to take the exam. For higher grades, students must take 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.