

# 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

## 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.

#### 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.