# MG1202 Engineering Mathematics 6.0 credits

## Ingenjörsmatematik

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

The official course syllabus is valid from the fall semester 2024 in accordance with the decision by the Director of First and Second Cycle Education on ITM School: M-2024-0502. Date of decision: 2024-03-25

## Grading scale

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

## Education cycle

First cycle

## Main field of study

Technology

## Specific prerequisites

General entry requirements.

## 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 should be able to:

1. Calculate basic linear algebra and calculus in one variable

2. Model mechanical problems and solve these mathematically

3. Discuss reasonableness and limitations in mathematical models

For higher grades it is required that the student in addition to the above can:

4. Explain and provide arguments for mathematical problem-solving in industrial applications

## Course contents

The student get training in using mathematical concepts and methods – mainly calculus in one variable and linear algebra and apply these on issues in production engineering.

## Examination

- KONA - Partial exam, 2.0 credits, grading scale: P, F
- KONB - Partial exam, 2.0 credits, grading scale: P, F
- KONC - Partial exam, 2.0 credits, grading scale: P, F
- TEN1 - Written exam, - 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.

## 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.