



HN1009 Introduction to Mathematics 1.5 credits

Introduktionskurs i matematik

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

Establishment

Course syllabus for HN1009 valid from Autumn 2009

Grading scale

P, F

Education cycle

First cycle

Main field of study

Mathematics, Technology

Specific prerequisites

Knowledge corresponding to admission requirements for Bachelor of Science in Engineering.

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, students should be able to:

- simplify algebraic expressions
- determine function domains and carry out calculations involving powers, roots, logarithms, rational and trigonometric functions
- solve quadratic equations
- determine derivatives and integrals of commonly used functions, including simple applications
- solve logarithmic and trigonometric equations

Course contents

- Algebraic expressions
- Linear equations
- Completing the square
- Quadratic equations
- Derivatives and applications
- Integrals and applications
- Powers
- Indices
- Exponential equations
- Logarithms and logarithmic equations
- Trigonometric functions
- Trigonometric equations

Course literature

Material delas ut vid första kurstillfället.

Examination

- RED1 - Report, 1.5 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.

Other requirements for final grade

Passed Report, grade scale P/F

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.