



Faculty of Health, Science and Technology
Mathematics

Syllabus

Mathematics: Degree Project

Course Code: MAGC00

Course Title: Mathematics: Degree Project
Matematik, examensarbete

Credits: 15

Degree Level: Undergraduate level

Progressive Specialisation: First cycle, has at least 60 credits in first-cycle course/s as entry requirements, contains degree proj. for B.A./B.Sc. (G2E)

Major Field of Study:
MAA (Mathematics)

Course Approval

The syllabus was approved by the Faculty of Health, Science and Technology 2022-01-31, and is valid from the Autumn semester 2022 at Karlstad University.

Prerequisites

Completed courses totalling 120 ECTS credits with at least 75 ECTS credits in Mathematics, including two of the following courses: Fourier analysis, Linear algebra II, Introduction to partial differential equations, Algebraic structures, codes and cryptosystems; or 105 ECTS credits in Mathematics, including two of the following courses: Fourier analysis, Linear algebra II, Introduction to partial differential equations, Algebraic structures, codes and cryptosystems, or equivalent.

Learning Outcomes

The aim of the course is to give students the opportunity to meet the requirements for a Bachelor degree with a Major in Mathematics by independently carrying out a science project in a chosen area.

Upon completion of the course, the students should be able to

- search for and collect relevant information, critically evaluate its reliability and quality, and correctly interpret and refer to it,
- give an account of mathematical theories and methods in the chosen problem area,
- independently identify and formulate problems on the basis of a mathematical question and solve them within given time limits,
- discuss and present problems and solutions, orally and in writing, conforming to standard disciplinary practice in content, structure and language, and with consideration of relevant links to current research and possible ethical and societal aspects.

Content

The course is an independent degree project presented in an individually written report and an oral presentation at a seminar.

The content of the course, that is, the mathematical problem or problem area treated in the thesis, is chosen in consultation with the supervisor.

Before the project is begun, the student must complete a project description for the examiner's approval.

Reading List

See separate document.

Examination

Assessment is based on an individually written report and an individual oral presentation at a seminar. The completion of the project and project description approved by the examiner are included in the assessment.

If students have a decision from Karlstad University entitling them to Targeted Study Support due to a documented disability, the examiner has the right to give such students an adapted examination or to examine them in a different manner.

Grades

One of the grades U (Fail), G (Pass), or VG (Distinction) is awarded in the examination of the course.

Quality Assurance

Follow-up relating to learning conditions and goal-fulfilment takes place both during and upon completion of the course in order to ensure continuous improvement. Course evaluation is partly based on student views and experiences obtained in accordance with current regulations and partly on other data and documentation. Students will be informed of the result of the evaluation and of any measures to be taken.

Course Certificate

A course certificate will be provided upon request.

Additional information

The local regulations for studies at the Bachelor and Master levels at Karlstad University stipulate the obligations and rights of students and staff.