



LUNDS UNIVERSITET

Naturvetenskapliga fakulteten

Degree projects for a Bachelor's degree in Mathematics

The Bachelor's degree programme concludes with a degree project that consists of an independent assignment selected in consultation with a supervisor. It can be a minor mathematical research task, or an assignment where, through searching various sources, one arrives at a new way of presenting a mathematical theory. Furthermore, the degree project can concern the application of mathematics, for example a computational task or an assignment within mathematical statistics. This can also be carried out on a commission from outside the University. The degree project shows how the student's knowledge can be applied to solve a concrete problem and is thus a potential shortcut to a first job after completion of the programme. A completed degree project at the Bachelors' degree level is an admission requirement for a Master's programme, both nationally and internationally.

The degree project is worth 15 higher education credits and can be done within mathematics, mathematical statistics or numerical analysis.

Before choosing a degree project

- Specialisation

On completion of the compulsory and elective course modules in the Bachelor's degree programme, students have achieved the required breadth in their subject to choose a particular specialisation for further studies within the programme in one of the following disciplines: mathematics, mathematical statistics and numerical analysis. This choice will naturally determine the choice of subject for the degree project.

The degree project is run in the form of a course and the following course codes apply to the various disciplines:

- MATK01, Bachelor's degree project, mathematics
- MASK01, Bachelor's degree project, mathematical statistics
- NUMK01, Bachelor's degree project, numerical analysis

The various degree projects have specific prior knowledge requirements, set out in the relevant course syllabus. Students who need help choosing a specialisation can address their questions to their study advisor or the subject directors.

- Contact with the director of studies, choice of supervisor and project

Once students have decided on a specialisation, they are to contact the relevant director of studies/subject director to discuss possible projects as well as the choice of supervisor. The supervisor is a permanently employed lecturer at the department. Seeing to this in good time is an important condition for ensuring that there is time to evaluate different options and to minimise any loss of time in the initial stages of the degree project work.

- Applying for the course

Application for the degree project is done in the usual manner via antagning.se. The application deadline is 15 October for the following spring semester and 15 April for the autumn semester.

At the start of the course

- Setting up a work plan and schedule

At the start of the course, the supervisor and the student are to set up a work plan and a schedule containing a description and delimitation of the topic of the degree project. A template for this can be found on the website for degree projects or from the programme administrator responsible for the course. The work plan is to be handed in to the relevant programme administrator for archiving. The supervisor can register the work as ongoing in the database for degree projects at the Centre for Mathematical Sciences.

- Registration on the course

At the start of the course, students are to be registered for it (in Ladok). This is done by contacting the relevant programme administrator, possibly in connection with the submission of the work plan.

During the execution of the project

The supervisor and the student should meet regularly to discuss in more detail the progress of the degree project and to check it against the schedule. If necessary, the work plan can be revised. The supervisor's total working time set aside for the entire execution of a Bachelor's degree project is 40 hours.

The work is to be presented in a written report. If the report is not in English, it is to include an abstract in English. A popular science description is also to be attached.

In the final phase

- Appointment of a reviewer

The written report is to be reviewed by another lecturer. The reviewer is appointed by the supervisor in consultation with the director of studies. The reviewer is to be given access to the written report and is to submit a preliminary assessment within a suitable timeframe, in agreement with the student and the supervisor.

- Printing the degree project

The report is published in the Centre for Mathematical Sciences' degree project series. (Prior to publication, the programme administrator is to be notified of the title of the report and he or she will then attribute a series number to the work and generate its front and back pages. The report containing the abstract in English and the popular science summary in Swedish, together with the front and back pages is then sent to the caretaker for printing.) Printed copies are to be made available at the Students' Office and at the Mathematics library.

- Oral presentation

The degree project is to be presented orally at a seminar once the reviewer has given a preliminary assessment of the written report. The date of the seminar is decided by the student and the supervisor in consultation with the reviewer. The established date is then communicated to the programme

administrator who books a room and posts information on the seminar on the notice boards and web pages of the Centre for Mathematical Sciences. After the seminar, the student is to be given an assessment of his or her presentation.

- Digital publishing

The degree project is to be archived and published digitally. The abstract in English and the popular science summary of the work are to be published on the web pages of the Centre for Mathematical Sciences and in LUP student papers. The supervisor is responsible for ensuring that the work is published on the web pages of the Centre for Mathematical Sciences whereas the student is responsible for publication in LUP student papers. Information on publishing in LUP student papers is available on <http://www.lu.se/studera/examen-och-karriar/examensarbete-och-uppsats>.

- Grading and criteria

The degree project is awarded one of the following grades: pass with distinction, pass, fail. For a pass grade, the work must be correct and both the written and the oral presentation must be satisfactory. For a pass with distinction, the work must be of good quality and the student must have shown a good ability to keep to his or her schedule.

The grade is awarded by the supervisor in consultation with the reviewer. The reviewer acts as the examiner. The grade is reported by the supervisor to the relevant programme administrator who ensures that it is registered in Ladok.

- Course evaluation

On completion of the degree project, a course evaluation is to take place.