

NUMM11, Numerical Analysis: Master's Thesis, 30 credits

*Numerisk analys: Examensarbete för masterexamen, 30
högskolepoäng*

Second Cycle / Avancerad nivå

Details of approval

The syllabus was approved by Study programmes board, Faculty of Science on 2007-04-12 to be valid from 2007-07-01, autumn semester 2007.

General Information

The course is a compulsory course for second-cycle studies for a Degree of Master of Science (120 credits) in mathematics with specialisation numerical analysis.

Language of instruction: Swedish

Main field of studies

Mathematics

Depth of study relative to the degree requirements

A2E, Second cycle, contains degree project for Master of Arts/Master of Science (120 credits)

Learning outcomes

The aim of the course is that students on completion of the course should have acquired the following knowledge and skills:

Advanced knowledge within numerical analysis.

Insight in numerical research methodology and training in oral and written reporting.

Course content

The course consists of one subpart of 30 credits.

A computational task linked to current numerical research is carried out.

The task is chosen in consultation with the supervisor, who is assigned by the department.

Course design

The student treats a larger research project/assignment under supervision, carries out literature studies in connection to this and participates in seminar exercises within the subject. The course is completed with a written report and an oral presentation of the results. The written presentation should have a summary in English and be accompanied by a short description in Swedish intended for a broader audience. The oral presentation takes the form of a seminar at which the degree project should be defended.

Assessment

Subcourses that are part of this course can be found in an appendix at the end of this document.

Grades

Marking scale: Fail, Pass, Pass with distinction.

To pass the entire course, it is required that both the report and the presentation pass.

The final grade is based on the joint results on these parts.

Entry requirements

For admission to the course general entry requirements and knowledge equivalent to a Bachelor's degree are required. Furthermore, second-cycle courses in numerical analysis of 22.5 credits are required. Within other mathematical subjects (mathematics and mathematical statistics), courses for second-cycle studies of 22.5 credits are required. Within applied subjects where mathematical models are central, courses corresponding to 15 credits are required.

Further information

The course may not be included in a higher education qualification together with NUM191 Degree Project in Numerical analysis 30 credits or NUMM01 numerical analysis: Degree Project, 30 credits.

After permission from the supervisor/examiner the student may complete parts of the course outside the university. The student should be in frequent contact with the supervisor assigned by the department.

Subcourses in NUMM11, Numerical Analysis: Master's Thesis

Applies from V10

0701 Master's Degree Project, 30,0 hp
Grading scale: Fail, Pass, Pass with distinction