Faculty of Science

NUMK01, Numerical Analysis: B.A. Degree Project, 15 credits

Numerisk analys: Examensarbete för kandidatexamen, 15 högskolepoäng

First Cycle / Grundnivå

Details of approval

The syllabus was approved by Study programmes board, Faculty of Science on 2007-04-12 and was last revised on 2012-10-02. The revised syllabus applies from 2012-10-03, spring semester 2013.

General Information

The course is a compulsory course for first-cycle studies for a Bachelor of Science in mathematics.

Language of instruction: Swedish and English
If desired, the course is given in English.

Main field of studies	Depth of study relative to the degree requirements
Mathematics	G2E, First cycle, has at least 60 credits in first-cycle course/s as entry requirements, contains degree project for BA/BSc

Learning outcomes

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

Knowledge and understanding
On completion of the course, you, the student, should have:

- Advanced knowledge within numerical analysis.

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

Course content

A computational task linked to current numerical research is treated. The task is chosen in consultation with the supervisor, who is assigned by the department.

Course design

The student treats a smaller research project/assignment under supervision, carries out literature studies in connection to this and participates in seminar exercises within the subject.

Assessment

The course is terminates with written and oral presentations of the results. The written presentation should have a summary in English as well as 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.

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.
For a pass grade on the entire course, both the written report and the seminar presentation must receive pass grades. The final grade is decided by joining the results on these parts.

Entry requirements

For admission to the course, general entry requirements and knowledge equivalent to 75 credits in the main field of study mathematics, in which should be included 22.5 credits in Numerical analysis (Tools of Computational Mathematics NUMA22, 7.5 credits, Numerical Linear Algebra NUMA11, 7.5 credits, and Numerical Approximation NUMA12, 7.5 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. After permission from the supervisor/examiner the student may complete parts the course outside the university. The student should be in frequent contact with the supervisor assigned by the department.

Subcourses in NUMK01, Numerical Analysis: B.A. Degree Project

Applies from V08

0701   Bachelor's Degree Project in Numerical Analysis, 15,0 hp
         Grading scale: Fail, Pass, Pass with distinction