Department of Mathematics
(incl. Math. Statistics)

Stockholm University

Education plan

for

Bachelor's Programme in Mathematics
Kandidatprogram i matematik

180.0 Higher Education Credits
180.0 ECTS credits

Programme code:	NMATK
Valid from:	Autumn 2009
Date of approval:	2006-10-18
Changed:	2008-10-13
Department:	Department of Mathematics (incl. Math. Statistics)

Decision

This syllabus has been approved by the Board of the Faculty of Science at Stockholm University.

Prerequisites and special admittance requirements

Swedish upper secondary school course Mathematics D, or equivalent.

Programme structure

The programme is a three year full-time study programme leading to a Bachelor's degree. It is composed of an obligatory part of 97.5 credits with courses in mathematics, mathematical statistics, numerical analysis and computor science and an optional specialization part of 82.5 credits in either mathematics or mathematical statistics.

Goals

The main field of study is mathematics, applied mathematics or mathematical statistics. For a Degree of Bachelor students must
- demonstrate knowledge and understanding in their main field of study, including knowledge of the scientific basis of the field, knowledge of applicble methods in the field, in-depth knowledge of some part of the field and a general sense of current research issues,
- demontrate an ability to seek, gather and critically interpret information that is relevant to a problem and to critically discuss phenomina, issues and situations,
- demonstrate an ability to independently identify, formulate and solve problems and to perform tasks within specified time limits,
- demonstrate an ability to present and discuss information, problems and solutions in dialogue with different groups, orally and in writing,
- demonstrate the skills required to work independently in the field that the education concerns,
- demonstrate an ability to make assessments in the main field of study, taking into account relevant scientific, social and ethical aspects,
- demonstrate insight into the role of knowledge in society and into people's responsibility for how knowledge is used, and
- demonstrate an ability to identify their need of further knowledge and to upgrade their capabilities.

Courses

Obligatory courses: Mathematics I, FL, 30 credits, Algebra and combinatorics, FL, 7.5 credits, Linear algebra II, FL, 7.5 credits, Mathematical analysis III, FL, 7.5 credits, Mathematical analysis IV, FL, 7.5 credits, Probability theory I, FL, 7.5 credits, Statistical analysis, FL, 7.5 credits, Computor science I, FL, 15 credits,

Numerical methods, FL, 7.5 credits.
Specialization in mathematics: Mathematics, degree project, FL, 15 credits, optional courses in mathematics 15 credits, optional courses 52.5 credits.
Specialization in applied mathematics: Mathematics, degree project, FL, 15 credits, optional courses in applied mathematics 15 credits, optional courses 52.5 credits.
Specialization in mathematical statistics: Stochastic processes I, FL, 7.5 credits, Probability theory II, FL, 7.5 credits, Linear statistical models, FL, 7.5 credits, Statistic inference theory, FL, 7.5 credits, Mathematical statistics, degree project, FL, 15 credits, optional courses in mathematical statistics 15 credits, optional courses 22.5 credits.

Degree

Bachelor's degree.

Misc

The Department of numerical analysis and computor science (Nada) at Stockholm University also takes part in the education.