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Reg No EHL 2007/67

SCHOOL OF ECONOMICS AND MANAGEMENT

Lund University

Department of Statistics

English translation of the Swedish original, which remains the only authentic original.

Syllabus for the Third Cycle Programme for the degree of Licentiate in Statistics at Lund University

The syllabus for the Programme for the degree of Licentiate in Statistics was adopted by the Board of the School of Economics and Management on 13 April 2007. See also Instructions for third cycle studies at the School of Economics and Management, adopted on 13 April 2007, Reg No EHL 2007/66.

Third cycle studies are offered to the extent that available resources allow.

1 Learning outcomes

The syllabus for the Licentiate in Statistics at the Department of Statistics, Lund University, may be a separate degree programme in itself or a stage on the way to a doctoral degree.

For a degree of Licentiate in Statistics, students must have attained the following outcomes:

- broad theoretical and methodological knowledge of the main elements of the field of Statistics, as well as in-depth knowledge within a chosen area of specialisation in Statistics
- sufficient skills in research and investigative methods to carry out independent research projects with other researchers, for example interdisciplinary projects
- the ability to apply statistical methods to practical problems in society where in-depth knowledge of statistics is of significance, such as qualified work in research and planning
- the ability to remain up to date with the literature on the subject and to carry out scientific research

This third cycle programme in Statistics results in the degree of Licentiate of Philosophy.

2 Admission requirements

An applicant has basic eligibility for third cycle studies if he or she has been awarded a second cycle degree, has completed course requirements of at least 240 higher education credits, including at least 60 credits at second cycle level, or has acquired the equivalent knowledge in some other way, either in Sweden or abroad (Higher Education Ordinance Chapter 7 Section 39).

An applicant is eligible to be admitted to the third cycle degree programme in Statistics if he or she fulfils the basic eligibility requirements (see Instructions for third cycle studies at the School of Economics and Management) and has completed at least 90 higher education credits in Statistics or in a subject that is judged to be the equivalent, as well as an independent project (degree project) in Statistics that is worth at least 15 credits, and knowledge in Mathematics equivalent to at least 30 credits.

An applicant is also eligible if he or she has acquired the equivalent knowledge in some other way, either in Sweden or abroad.

3 Admission and selection

Admission to third cycle studies takes place twice a year. The Head of Department decides upon the admission of research students.

If there is more than one qualified applicant for a position, selection will take place between the candidates. Selection is based on the applicant's qualifications at the time of application, with special emphasis on achievements at the second cycle level and the department's ability to provide supervision within the applicant's area of interest. The most significant selection criterion is the applicant's ability to benefit from the programme.

Students who are admitted according to the earlier provisions have basic eligibility if they have graduated from a degree programme comprising at least 120 credits according to the earlier provisions, or if they have the equivalent knowledge. An applicant is also eligible if he or she has acquired the equivalent knowledge in some other way, either in Sweden or abroad.

A financing plan is required at the time of admission, i.e. financial support for the student for the entire study period should be clearly established. Admission presupposes that the student has sufficient financing to successfully complete the licentiate programme within four years.

4 Programme information

4.1 Programme structure

The programme for a licentiate degree normally requires two years of study. This time frame is based on the assumption that students study full-time and apply themselves effectively to their coursework.

The programme comprises 120 higher education credits, divided into literature studies of 60 credits and a licentiate thesis worth 60 credits. Instruction is given in the form of courses and seminars.

All research students should have the opportunity to participate in the university's teacher training course in teaching and learning in higher education, and those involved in teaching shall participate in at least two weeks of the university's course in teaching and learning in higher education.

Two supervisors are to be appointed for each student. At least one of the supervisors must have undergone a training course for supervisors. At the beginning of the programme an individual study plan and a financial plan should be jointly drawn up by the student and supervisor.

An important prerequisite of the programme of study is that an intellectually stimulating environment is created through collaboration between the teacher and the student.

4.2 Courses and other components

- a. The following courses are mandatory:
- a) Probability Theory, 15 credits
 - b) Statistical Inference Theory, 15 credits

The remaining courses are selected from other courses available in the study programme. Examples of such elective courses are: Stochastic Processes, Time Series Analysis, Survey Sampling, Multivariate Analysis, Design of Experiments, Exploratory Data Analysis, Econometrics, Analysis of Generalised Linear Modelling, Demography, Regression and Variance Analysis, Survival Analysis, Non-parametric Methods, Epidemiology, Computer Intensive Methods, Statistical Data Analysis, Event History Analysis.

Second cycle courses or courses within the Master's degree programme may be credited on the third cycle programme. Other courses offered at Lund University or at other higher education institutions may be considered, on consultation with the thesis supervisor, as part of the student's licentiate studies.

b. Research seminars

As a part of their studies and thesis work, students are required to participate actively in seminars related to the department's research activities and to the students' thesis work.

4.3 Licentiate thesis

In order to be awarded a licentiate degree students must write a thesis worth 60 higher education credits. The thesis must demonstrate that the student is able to use and develop statistical methods, as well as being able to present the problem and results in a precise and relevant manner.

4.4 Supervision

Supervision comprises assistance in working out the focus of the student's studies and the thesis, as well as assistance during the work. The right to supervision for more than two years (full-time studies) or four years (part-time studies) when admitted to the programme requires that the student is active and works according to the individual study plan.

5 Teaching and examination

Instruction is carried out through lectures and seminars, based on a plan decided on each year by the department in response to the interests of the teachers and students.

In addition, open seminars are arranged in which the department's researchers, research students and invited guests present and discuss research and investigative work. Participation in these advanced seminar activities is mandatory during the student's studies, unless special circumstances arise.

Examinations are arranged during or in connection with the relevant courses. Examinations are oral and/or written and are graded Pass or Fail.

The licentiate thesis must be defended orally at a public seminar. The licentiate thesis can be awarded the grade Pass or Fail.

For a licentiate degree the student must have completed and passed the courses included in the degree programme and must also have received a Pass on the licentiate thesis.

Further information regarding the thesis, public seminar and the grading committee is given in “Instructions for third cycle studies at the School of Economics and Management (Reg no EHL 2007/66).

6 Further information

Information about admission and application dates is provided by the Department.