# GENERAL STUDY PLAN FOR RESEARCH EDUCATION (THIRD LEVEL HIGHER EDUCATION) IN ENVIRONMENTAL ASSESSMENT at the Faculty of Natural Resources and Agricultural Sciences at SLU

# 1. Objective and purpose of the programme

The objective of the programme is to familiarise research students with general scientific tools, as well as the research methods that are typical of environmental assessment/biology with specialisation in ecology. The purpose is to meet the qualifications for research education specified by Chapter 6, Sections 4-5 of the Higher Education Ordinance (HEO).

Students are also to acquire knowledge about, and an attitude to, ethical issues associated with research in the subject. In addition, students are to obtain education in, and experience of, pedagogy and research information.

Research education can lead to both a degree of Licentiate and a degree of Doctor. The degree of Licentiate can be credited toward continuing studies for a degree of Doctor.

# 2. Eligibility

People are eligible for admission to research education who have taken a second level (Master level) qualification and meet the requirements for basic eligibility (Chapter 7, Section 39 of HEO (2006:1053)), i.e., at least 240 higher education credits, including 60 credits at the second level (Master level) or acquired essentially the same knowledge in some other way, either in Sweden or abroad. The Faculty Board may exempt an individual applicant from the requirement for basic eligibility if special grounds exist. In such cases, SLU demands that the applicant has taken a first level (Bachelor level) qualification and presents a written account of an independent project the scope of which is equivalent to 15 higher education credits and the content of which corresponds to the knowledge and skills required for a degree project toward a degree of Master, or a relevant independent project of similar difficulty and extent. The project should be written in English.

Those who are admitted must also meet the special eligibility requirements adopted for the subject (Chapter 7, Section 40 of HEO (2006:1053)).

Special eligibility in the subject of environmental assessment normally requires knowledge of aquatic ecology, aquatic biogeochemistry, statistics or ecotoxicology.

#### 3. Selection and admission

Applicants are to be selected on the basis of their ability to benefit from the research education programme (Chapter 7, Section 41 of HEO (2006:1053)). The head of the department to which the applicant wishes to be admitted as a research student proposes admission to the Faculty Board. The board makes admissions decisions.

### 4. Scope, content and organisation

## 4.1 Scope

The programme for a degree of Doctor consists of four years of full-time studies (240 higher education credits). Two years of full-time studies (120 higher education credits) are required for a degree of Licentiate.

#### 4.2 Content

The programme contains two primary components: a scientific project and course-related studies (see annex).

# Scientific project

During the period of education, the research student shall conduct an independent research project corresponding to at least 120 higher education credits in the form of a compilation thesis consisting of 3-5 papers.

If the papers of the thesis have multiple authors, the contribution of the research student must be clearly specified in the thesis.

#### Coursework

The coursework shall consist of 45 higher education credits for a degree of Doctor and 25 higher education credits for a degree of Licentiate. Coursework shall include suitable basic courses (approximately 1/3 of the course credits), as well as individually selected courses on special subjects (approximately 2/3 of the course credits – see annex).

## 4.3 Organisation

The individual study plan (Chapter 6, Section 36 of HEO (2006:1053)) for research education is drawn up in consultation between the research student and supervisor/supervisor group during the application process for admission. The faculty's guidelines for research education specify what should appear in the individual study plan. Evaluation and any modifications of the plan are to be on an annual basis. The research student and supervisor shall attest in writing that they have read the plan and any modifications to it. The study plan signed by the research student and supervisor is subsequently ratified in writing by the head of the department.

Evaluations shall be performed when 50% and 75% of the net period of studies has been used (see annex).

#### 5. Examination

A doctoral thesis must be defended orally in public and assessed by a grading committee consisting of three or five members appointed by the Faculty Board. A licentiate thesis is to be defended orally at a public seminar and approved by a grading committee appointed by the Faculty Board. The grading committee consists of three members.

The faculty's guidelines for research education specify the provisions that apply to the examination of doctoral theses and licentiate theses at the Faculty of Natural Resources and Agricultural Sciences.

The degrees of Doctor and Licentiate require that the student receives a grade of Pass on examinations and the thesis.

# 6. Supervision

Anyone admitted as a research student is entitled to supervision throughout the period of study, i.e., full-time studies toward a degree of Doctor for four years. Each student is assigned at least two supervisors, one of whom is the principal supervisor (Chapter 6, Section 31 of HEO (2006:1053)). Without a decision having been made in each individual case, the principal supervisor must have documented qualifications as a docent and hold a position at SLU. At least one of the assistant supervisors must hold a position at SLU.

The supervisors group consists of the principal supervisor and one or more assistant supervisors. The supervisors assist the research student on both practical and theoretical issues, while continually monitoring the progress of studies in cooperation with the student. The supervisors are also to help the student select literature and courses. The student must keep the supervisors up to date about the progress of studies so that corrections can be made when needed.

#### 7. Additional information

Additional information about research education appears in Swedish Code of Statutes 2006:1053, including information about study grants in 1995:938 with amendments 1998:81 (reprint), as well as 1998:161 and 2006:1053. Information about research education at SLU appears in Guidelines for research education (third level programmes) in the Faculty of Natural Resources and Agricultural Sciences (Reg. no. SLU ua 40-1244/08).

# Appendix es

## 1: Courses specific to the department

- general literature course: 7.5 higher education credits
- individual literature course, including report writing: 7.5 higher education credits
- advanced multivariate statistics: 4.5 higher education credits

# 2 The department expects the research student to

- document raw data in accordance with quality assurance regulations
- participate in the department's internal work
- assist with instruction and supervision of degree projects when needed
- take part in the department's seminar activities
- participate in applying for research grants

#### 3. Evaluations

After 1 year: update of the study plan, which the head of the department signs

After 2 years: Half-time evaluation in the form of a public seminar. One external reviewer acts as the opponent, a form evaluates the current status and is signed by the external reviewer, director of studies and head of the department

After 3 years: 75% evaluation. Session at which supervisors, the research student, the head of the department (or delegated person) and director of studies discuss the current status