General syllabus for the doctoral programme in the subject of:

Economics

Valid from 1 December 2018

The objectives and design of courses in this subject may vary between faculties (see point 3. Miscellaneous).

The subject of economics concerns interactions between economic agents, including how these interactions are linked to the properties and development of economies, and how they can be managed through policy interventions to achieve societal objectives. Focus is often on the allocation of scarce resources - such as capital, labour, and goods and services - between alternative uses. At SLU there is an emphasis on economic research in which biological natural resources play a central role. This research includes agricultural economics, international trade, environmental economics, natural resource economics, forest economics, and society's transition to a bio-based economy.

Regulations for third-cycle (doctoral) education at SLU

Third-cycle (doctoral) education is regulated by the Higher Education Ordinance (SFS 1993:100) and the Ordinance for the Swedish University of Agricultural Sciences (SFS 1993:221).

In addition, SLU has regulations for the following:

- recruitment and admission, in Admission regulations for third-cycle (doctoral) education (SLU-ID: SLU.ua.2018.1.1.1-930)
- joint programmes leading to a double or joint degree
- supervision
- scope and content of programmes
- planning and follow-up of programmes
- procedure when a course or study programme is unsatisfactory
- examination
- degrees.

These can be found in Guidelines for third-cycle (doctoral) education (SLU-ID: SLU.ua.2018.1.1.1-4677).

A general study plan shall indicate the following: the main content of the programme, specific entry requirements and any other regulations required. All general study plans must be approved by the faculty board.

The programme is organised in a way that allows doctoral students to meet the qualitative targets for third-cycle courses and programmes specified in the *Higher Education Ordinance's Annex 2 – Qualifications Ordinance*:

Qualitative targets according to the Qualifications Ordinance: Degree of Doctor

Outcomes

For the Degree of Doctor the third-cycle student shall

Knowledge and understanding

- demonstrate broad knowledge and systematic understanding of the research field as well as advanced and up-to-date specialised knowledge in a limited area of this field, and
- demonstrate familiarity with research methodology in general and the methods of the specific field of research in particular.

Competence and skills

- demonstrate the capacity for scholarly analysis and synthesis as well to review and assess new and complex phenomena, issues and situations autonomously and critically;
- demonstrate the ability to identify and formulate issues with scholarly precision critically, autonomously and creatively, and to plan and use appropriate methods to undertake research and other qualified tasks within predetermined time frames and to review and evaluate such work;
- demonstrate through a dissertation the ability to make a significant contribution to the formation of knowledge through his or her own research;
- demonstrate the ability in both national and international contexts to present and discuss research and research findings authoritatively in speech and writing and in dialogue with the academic community and society in general;
- demonstrate the ability to identify the need for further knowledge and
- demonstrate the capacity to contribute to social development and support the learning of others both through research and education and in some other qualified professional capacity.

Judgement and approach

- demonstrate intellectual autonomy and disciplinary rectitude as well as the ability to make assessments of research ethics, and
- demonstrate specialised insight into the possibilities and limitations of research, its role in society and the responsibility of the individual for how it is used.

Outcomes

For a Degree of Licentiate the third-cycle student shall

Knowledge and understanding

 demonstrate knowledge and understanding in the field of research including current specialist knowledge in a limited area of this field as well as specialised knowledge of research methodology in general and the methods of the specific field of research in particular.

Competence and skills

- demonstrate the ability to identify and formulate issues with scholarly precision critically, autonomously and creatively, and to plan and use appropriate methods to undertake a limited piece of research and other qualified tasks within predetermined time frames in order to contribute to the formation of knowledge as well as to evaluate this work;
- demonstrate the ability in both national and international contexts to present and discuss research and research findings in speech and writing and in dialogue with the academic community and society in general, and
- demonstrate the proficiency required to participate autonomously in research and development work and to work autonomously in some other qualified capacity.

1. Programme content and scope

The programme has two main components, courses and research work. A doctorate degree comprises 240 higher education credits (HEC). A licentiate degree comprises 120 HEC. This corresponds to four and two years of full-time study, respectively.

Research

The thesis should be a compilation thesis or, exceptionally, a monograph. The doctoral thesis must be presented and defended orally in public.

The papers of the thesis should be published in a scientific journal of good quality, or be of such quality that they can be published in such a journal without extensive prior editing. These journals should be available in one of the databases Web of Science, Web of Knowledge or Scopus.

In cases where the papers included in the thesis have multiple authors, the doctoral student's contributions must be clearly specified in the thesis, or in an annex to the thesis.

Scope

A doctoral programme comprises at least 90 HEC in the form of courses and a thesis consisting of 3–5 papers and a summarising chapter ("kappa").

A licentiate programme comprises at least 55 HEC in the form of courses and a thesis consisting of 1–2 papers and a summarising chapter ("kappa").

Courses

The courses required for the Degree of Doctor must include:

- compulsory courses in mathematical methods, econometrics, micro and macro economics corresponding to a total of 60 HEC with 15 HEC in each subject area;
- elective general and subject-specific courses corresponding to 30 HEC. This may include courses in teaching and learning in higher education.

The compulsory courses for a licentiate degree must comprise 55 HEC and include courses in mathematical methods, econometrics, micro and macro economics and elective courses, both general and subject-specific. This can include a limited number of credits from courses in teaching and learning in higher education.

According to the current guidelines for doctoral education (SLU ua 2018.1.1.1-4677), all doctoral and licentiate degrees at SLU must include credit awarding courses of philosophy of science and research ethics at PhD-level. These courses should also cover rules on cheating and plagiarism.

2. Specific entry requirements

Those admitted must meet the following specific entry requirements.

The specific entry requirement for the subject of economics is at least 90 HEC within economics-related subjects, with at least 30 HEC awarded at second-cycle level.

3. Miscellaneous

Each faculty offering the third-cycle subject can choose to specify specialisations or requirements in addition to the general syllabus. These requirements must be documented in an appendix.

4. Annexes

Annex 1 – Faculty of Forest Sciences, Department of Forest Economics, specific requirements.

Annexe 1

Faculty of Forest Sciences, Department of Forest Economics: specific entry requirements

Scope of third-cycle education

A programme aiming at a doctoral degree must comprise at least 90 credits of courses, together with a thesis consisting of at least 3 papers and a summarising chapter (kappa), or at least 60 credits of courses and a thesis of at least 4 papers and a summarising chapter (kappa).

A programme aiming at a licentiate degree must comprise at least 45 credits of courses, together with a thesis consisting of at least 1 paper and a summarising chapter (kappa), or at least 30 credits of courses and a thesis of at least 2 papers and a summarising chapter (kappa).

For a monograph, the third-cycle programme must consist of at least 90 credits of courses, together with a thesis corresponding to 150 credits (2.5 years) or at least 60 credits of courses and a thesis corresponding to at least 180 credits (3 years).

Courses

The supervisor and doctoral student together agree on the courses to include in the programme. The supervisor has the final say as to how many courses, and which ones, may be included.

In economics, students are expected to have or acquire knowledge corresponding to the following:

- microeconomics (at least 7.5 credits)
- mathematics for business and economics (at least 7.5 credits)
- econometrics (at least 7.5 credits)
- natural resource economics (at least 7.5 credits)
- teaching in higher education (at least 3 credits)

In special cases, courses can be offered as self-study courses or project work.

Seminars, conferences and guest lectures

Doctoral students are expected to actively take part in seminars, guest lectures, conferences and activities at the department.

They are also expected to submit conference papers and, with the help of their supervisor, actively apply for grants to take part in international scientific conferences.