

# General syllabus for third-cycle study programmes in Logic

Decision-maker	Faculty Board of Humanities
Executing officer	Ulrika Josefsson
Date of decision	2023-10-19
Period of validity	2023-11-01 - Until further notice
Summary	The syllabus describes the objectives, content and examination of the study programme as well as admission and selection.
Translation	This document is a translation of the Swedish original. In the event of problems of interpretation or differences between the Swedish and English text, the Swedish text which constitutes the basis of the information, shall always take precedence

#### Name of degree and subject area description

The degree obtained is the Degree of Doctor and Degree of Licentiate in Logic. Logic involves stringent and correct reasoning, and is used and studied within all areas of philosophy. However, it has also developed into its own specialisation for the study of formal language.

## **General national outcomes for Degree of Doctor**

According to the Qualifications Ordinance for the Degree of Doctor in the Higher Education Ordinance, Appendix 2, the outcomes for the Degree of Doctor are as follows:

- Demonstrate broad knowledge in and a systematic understanding of the field of research as well as in-depth and up-to-date specialist knowledge within a defined area of the field of research, and
- Demonstrate familiarity with scientific method in general and with the specific methods used in the field of research in particular.
- Demonstrate an ability to scientifically analyse and synthesise and to independently and critically evaluate and assess new and complex phenomena, issues and situations
- Demonstrate an ability to critically, independently, creatively and with scholarly thoroughness, identify and formulate research questions as well as to plan and conduct research and perform other qualified tasks using appropriate methods within specified time limits and to review and assess such work
- Demonstrate through a dissertation the ability to make a significant contribution to the formation of knowledge through their 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 an ability to identify needs for additional 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
- 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.

#### **General national outcomes for Degree of Licentiate**

According to the Qualifications Ordinance for the Degree of Licentiate in the Higher Education Ordinance, Appendix 2, the outcomes for the Degree of Licentiate are as follows:

- 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
- 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
- Demonstrate the skills required to participate autonomously in research and development work and to work autonomously in some other qualified capacity
- Demonstrate the ability to make assessments of ethical aspects of their own research
- Demonstrate insight into the possibilities and limitations of research, its role in society and the responsibility of the individual for how it is used, and
- Demonstrate the ability to identify the personal need for further knowledge and take responsibility for their ongoing learning.

#### Subject area specific and supplementary outcomes

#### Knowledge and understanding

For the Degree of Doctor and Degree of Licentiate, the doctoral student shall:

 demonstrate a deepened understanding of the possibilities and limitations of Logic, its role in society and its relationship to other disciplines, in addition to the ability to critically reflect upon their own activities from this perspective

#### Competence and skills

For the Degree of Doctor and Degree of Licentiate, the doctoral student shall:

- demonstrate written and spoken communicative and pedagogical skills, both within and outside an academic context
- demonstrate the ability to plan and conduct courses at first and second cycle levels within several areas of Logic
- demonstrate the ability to plan, lead and implement research projects
- demonstrate the ability to participate in related areas within the public or private sector

## **Entry and admission requirements**

In order to be admitted to the study programme, the applicant must fulfil the general entry requirements and specific entry requirements in accordance with Chapter 7 of the Higher Education Ordinance.

According to the Higher Education Ordinance Chapter 7 Section 39, a person meets the general entry requirements for third-cycle courses and study programmes if they:

- 1. have been awarded a second-cycle qualification, or
- 2. have satisfied the requirements for courses comprising at least 240 credits of which at least 60 credits were awarded in the second-cycle, or
- 3. have acquired substantially equivalent knowledge in some other way in Sweden or abroad.

To be admitted to doctoral education in Logic, in addition to general entry requirements, the student is required to have the Swedish and English skills needed to be able to benefit from compulsory parts of the course and to be able to actively participate in seminars and similar activities.

#### Admission and selection

Admission to doctoral education in Logic normally occurs in connection with the Department's advertising of doctoral positions. For admission, funding for the applicant's doctoral studies must be secured.

According to Chapter 7 Section 41 of the Higher Education Ordinance, the selection shall take into account the ability of the applicants to benefit from the course or study programme. The applicant must attach the following as grounds for this selection:

- 1. Advanced study project within Logic, worth 15 higher education credits, or other project that documents the equivalent knowledge.
- 2. Bachelor's essays and other advanced study projects at second-cycle level or equivalent.
- 3. Official transcript or equivalent from first and second-cycle levels, or the equivalent. These are evaluated based on the following criteria: suitable definition of the subject, relevant questioning, suitable command of the subject and structuring of the academic paper, suitable use of language, formalities, academic quality, independence.
- 4. A project draft of a maximum 3000 words in which the applicant stipulates a research domain that he/she would like to develop, justifies its relevance and discusses which theories, methods and materials would be relevant. The project draft is assessed on the basis of the following criteria:
  - a) whether the draft displays familiarity with previous and current research within the area,
  - b) whether the research questions are viable and grounded in current research,
  - c) whether the draft is judged to be realistic, as regards its implementation at third-cycle level, and
  - d) whether the draft shows that it is likely the applicant will make a valuable contribution to research in the area. The project draft also provides supporting information for assessing the Department's supervisor competence within the research domain stipulated.
- 5. A letter of recommendation can also be included in the application.

In the overall evaluation, greatest importance is placed on the judgment of whether the applicant will complete the third-cycle studies in the allocated time and with good results.

Recruitment and selection take into account the Department's supervision resources in the doctoral student's area of research focus. Admission may include interviews in addition to the examination of the qualifications submitted. The decision on admission is made by the Head of Department after preparation at the Department.

### Content and structure of the programme

Doctoral education in Logic comprises 240 credits for the Degree of Doctor and 120 credits for the Degree of Licentiate.

Third-cycle study programmes include coursework, with each course being examined as it is completed, and the doctoral student's own research project, which leads to a scholarly thesis.

As part of their education, doctoral students are to participate in seminar activities. Doctoral students are also to participate in joint activities within their department unless there are special reasons for not doing so.

The study programme includes a coursework part which in the case of the Degree of Doctor comprises 60 credits, while for the Degree of Licentiate it comprises 40 credits. The credits for coursework are allocated in the following four categories:

Research-oriented courses for the Degree of Doctor comprises 30 higher education credits and for the Degree of Licentiate comprises 20 higher education credits. The component constitutes specialised study within one or more areas of Logic (or closely related subjects). The aim is to provide the third-cycle student with the necessary foundations for the student's degree project work. Further content is decided in consultation with the supervisor and is documented in the individual study plan.

Advanced orientation courses for the Degree of Doctor comprises 20 higher education credits and for the Degree of Licentiate comprises 10 higher education credits. In this component, the third-cycle student deepens or broadens the student's knowledge within Logic (set theory, model theory, recursion theory, proof theory or constructive mathematics) or closely related areas (philosophy, linguistics, mathematics or computer science). The courses are chosen so they best supplement the third-cycle student's previous studies.

Teaching and Learning in Higher Education and Research Methodology, 7.5 higher education credits. The component includes:

- a) basic course in higher education pedagogics worth 5 higher education credits, ideally completed during the first year,
- b) teaching under supervision,
- c) verbal and visual presentation techniques,
- d) the art of academic writing,

Compulsory course in research ethics at the Faculty of Humanities, 2,5 credits

The examination of components or aspects of the course held outside of the Department shall assess whether the accompanying course requirements have been met. Suitable examination methods for additional components are determined by the supervisor or other examiner, for example written tests or assignments, seminar activities, and/or practical didactic exercises. Where a course or part thereof is examined in the form of seminar participation or practical exercises, the examiner is required to ensure that the doctoral students performance is clearly documented in his/her individual study plan. At some point, if possible, the examination is to be in the form of a scholarly article intended for publication, or a presentation for an academic conference authored by the doctoral student together with senior researcher if necessary.

If a doctoral student would like to transfer credits from previous courses and study programmes, this must be specified in their individual study plan.

The thesis prepared for the Degree of Doctor comprises 180 credits. It may take the form of a monograph or a compilation thesis. A licentiate thesis may form part of a doctoral thesis, in either revised or unrevised form.

The licentiate thesis comprises 80 credits.

The doctoral student is expected to report on their thesis work regularly. In the first instance, this should take place via one of the department's seminars.

Further details about this are set out in the Rules for Third-Cycle Education at the Faculty of Humanities.

The doctoral thesis is defended at a public defence. When assessing the thesis, both its content and defence will be taken into consideration. The thesis is assessed using the grades of Pass or Fail.

Licentiate theses are defended at a public seminar. When assessing the Licentiate thesis, both its content and defence will be taken into consideration. The thesis is assessed using the grades of Pass or Fail.

## Supervision

For each doctoral student, at least two supervisors are to be appointed, one of which shall be the main supervisor and the other shall be the co-supervisor. At least one of the supervisors is to be employed at the University of Gothenburg, ordinarily in the department in which the doctoral student is placed. At least one of the supervisors must have the qualifications required for appointment as a docent/reader and at least one of the supervisors must have completed a course in doctoral supervision.

The doctoral student is entitled to a level of supervision that is at a minimum in accordance with the standard determined by the Faculty Board (see Rules for Third-Cycle Education at the Faculty of Humanities).

A doctoral student who so requests is to be permitted to change supervisor.

## Individual study plan

Upon admission, the doctoral student and their supervisors are to draw up an electronic individual study plan in consultation with the doctoral examiner, which is to be established no later than two months after the commencement of studies.

The individual study plan is to be reviewed at least once each year. This follow-up is to clearly state how the doctoral student is progressing within the programme.

In conjunction with drawing up the individual study plan, the doctoral student is entitled to request the transfer of credits from previously passed second- or third-cycle courses and study programmes. Credits that are counted towards the general or specific entry requirements may not also be counted as credits at third-cycle level and must be replaced by another course. Otherwise, the following options apply.

- A doctoral student who has completed and passed a course at second-cycle level which is included among the compulsory or optional courses at third-cycle level is entitled to request that the course be replaced with another course of the same scope in their individual study plan. This does not impact the programme length for the Degree of Doctor.
- A doctoral student who has completed parts of their doctoral studies while admitted to doctoral
  education at another higher education institution or in another subject may request that these credits
  be transferred without being replaced by other courses. This does have an impact on the programme
  length for the Degree of Doctor, which is reduced to the corresponding extent.

The ISP is to include a timetable with an associated funding plan for the entire study period up until the planned date for the defence of the thesis.

#### **Transitional provisions**

Doctoral students admitted prior to 1 November 2023 may, in consultation with their supervisors and doctoral examiner, petition the Head of Department to transfer to this general syllabus.