

Syllabus for doctoral studies in the subject of philosophy

within the department of philosophy and history of technology, School of Architecture and the Built Environment, KTH

This syllabus complements the KTH general rules and guidelines for doctoral studies with specific instructions for the subject area.

1. SUBJECT DESCRIPTION

Philosophical research and doctoral studies conducted at KTH have an emphasis on connections to the engineering sciences. This refers to activities aimed at gaining new philosophical insights in the areas and issues of particular relevance to technology and the engineering sciences. This includes, among other things, problems in epistemology, logic and the philosophy of science in engineering science and the sciences that form its foundations. Decision theory and moral and social aspects of technology are covered, including issues of risk and safety. Special attention is paid to interdisciplinary cooperation with other subject areas represented at KTH.

2. AIMS AND OBJECTIVES

The overall goals for doctoral studies in the subject of philosophy correspond with the goals set out for KTH doctoral studies. They are described in the box below:

The purpose of KTH doctoral studies is to provide society with competent researchers who can contribute to its sustainable development.

The goal of KTH doctoral studies is for doctoral students to become independent and excellent researchers. After completing their studies, doctoral students will be able to:

- describe and explain theories and empirical results in the field in question
- formulate specific research issues in the field in question
- use scientific method and develop new knowledge through their own scientific studies
- critically analyze and evaluate the methods and results from own and others' scientific studies
- present and discuss research findings in the scientific community
- present research in an educational way outside the scientific community and in educational contexts
- assess the ethical aspects of research within the field in question and act on these
- identify needs for new knowledge, and understand how to initiate and direct research projects.

Education at the doctoral level shall also strive to ensure that students after graduation are able to:

- participate in interdisciplinary collaboration within the field in question
- analyze the role of research in sustainable development.

Doctoral studies in philosophy will give the student a good overview of the field and sound theoretical and methodological training. The main objective of the education is to provide a basis for further independent work as a researcher, investigator or teacher. It also aims to provide a capacity for interdisciplinary cooperation.

3. GENERAL STRUCTURE OF THE PROGRAMME

Doctoral studies consist of coursework and a thesis/dissertation. Coursework may be in the form of lectures, literature studies and problem-solving, as well as active participation in seminars and conferences. Courses may be studied within the department or in collaboration with other Swedish or foreign research institutions.

Doctoral studies are conducted under the direction of a main supervisor, along with at least one assistant supervisor, according to the individual study plan. The student's individual study plan will be adapted to the student's prior knowledge and to the contents of the dissertation/thesis. The doctoral students' progress should be assessed at least once a year in connection with the review of the individual study plan and will be carried out by the student and the main supervisor. The study plan is ratified by the director of doctoral studies.

A licentiate degree may be taken as part of a doctor's degree. Courses and dissertation work included in the licentiate degree may also be credited for a doctor's degree.

A licentiate degree consists of courses of 45-60 ECTS and a dissertation of 60-75 ECTS, totalling 120 ECTS. A doctor's degree consists of courses of 90 ECTS and a thesis of 150 ECTS, giving a total of 240 ECTS.

4. COURSES

Courses will be studied in accordance with the agreement made between the student and the main supervisor in the individual study plan.

4.1 *Obligatory courses (45 ECTS)*

The following obligatory courses must be completed for a doctor's degree:

Seminar participation in philosophy, part 1	7.5 ECTS	Seminar participation
Seminar participation in philosophy, part 2	7.5 ECTS	Seminar participation
Philosophy of the engineering sciences	7.5 ECTS	Advanced course
Theory and methodology of science	7.5 ECTS	Advanced course / broadening course
Original texts in philosophy	12 ECTS	Advanced course
Popular science production	3 ECTS	Research skills course

The obligatory courses for a licentiate degree are: Seminar participation in philosophy, part one, Theory and methodology of science and at least 7.5 ECTS from other obligatory courses for a doctor's degree.

4.2 *Other general philosophy courses (30 ECTS)*

The courses shall mainly be selected from among the following

Theory of knowledge	7.5 ECTS	Advanced course
Advanced course in the philosophy of science	7.5 ECTS	Advanced course
Advanced course in logic	7.5 ECTS	Advanced course
Advanced course in formal methods	7.5 ECTS	Advanced course

Advanced course in moral philosophy	7.5 ECTS	Advanced course
Philosophy of mathematics	7.5 ECTS	Advanced course
Philosophy of statistics	7.5 ECTS	Advanced course
Philosophy of the computer and information science	7.5 ECTS	Advanced course
Decision theory	7.5 ECTS	Advanced course
Value theory	7.5 ECTS	Advanced course
Philosophy of language	7.5 ECTS	Advanced course
Philosophical aesthetics	7.5 ECTS	Advanced course
Political philosophy	7.5 ECTS	Advanced course
Environmental philosophy	7.5 ECTS	Advanced course

A student who has completed a doctor's degree should, either through courses in the doctoral programme or otherwise, have acquired good knowledge in the fields of philosophy of science, logic and/or other formal methods, and moral philosophy.

4.3 Literature in the area of the dissertation/thesis (15 ECTS)

Literature is established in the individual study plan after suggestions from the main supervisor in consultation with the student. It may include courses from other scientific disciplines, which contribute to the student's orientation in engineering and natural sciences/mathematics relevant for the dissertation/thesis work. Literature in the dissertation/thesis area may be partially or completely replaced by philosophical literature that contributes to the student's general philosophical orientation and methodological competence.

Doctoral students who teach at first or second levels should have completed initial university teacher training.

5. SEMINARS AND CONFERENCES

The programme involves active participation in research seminars at the department, which includes regularly submitting original texts. This is carried out in accordance with the course requirements for obligatory seminar courses. The doctoral student should also participate in national and international conferences and research networks in the relevant area of knowledge.

6. DISSERTATION/THESIS

Dissertation/thesis work is an obligatory part of doctoral studies. This part of the studies aims at the student developing the ability to make independent contributions to research and the capacity for scientific cooperation, within and outside their own subject. The dissertation/thesis shall contain new research results that the student has developed, alone or in cooperation with others. The main scientific results should meet the quality requirements for publication in internationally recognized journals with peer review. A doctoral student's contribution to a dissertation/thesis text that has multiple authors must be distinguishable.

Dissertations and theses must be written in English. They shall normally be in the form of a collection of scientific articles, together with a special written summary. A licentiate

dissertation must contain material that is sufficient for at least two, and a doctoral thesis at least four, regular articles published in internationally recognized journals with peer review.

A PhD thesis is typically based on a licentiate thesis.

7. ELIGIBILITY REQUIREMENTS AND RECOMMENDED PRIOR KNOWLEDGE

The KTH general eligibility requirements for admission to doctoral level studies apply. Doctoral students are expected to read and write scientific English and speak English fluently. Previous knowledge of philosophy corresponding to at least 60 ECTS is recommended.

8. RULES FOR SELECTION OF APPLICANTS

Admission to studies at the doctoral level is decided by the Head of School after preparation by the programme committee of the programme in philosophy and the proposed main supervisor.

The selection of candidates aims at choosing those who are best equipped to carry out doctoral studies with good results within the stipulated time. Among other things, selection therefore assesses the degree of maturity and capacity for independent judgement and critical analysis, as well as written scientific presentation, which forms the basis of admissions decisions and the selection of applicants. Of great significance in this assessment are previous study results in advanced courses at undergraduate level and independently conducted scientific work. Selection of applicants for doctoral studies is carried out by programme committee in connection with admission.

9. EXAMINATION

Doctoral courses include examinations, which may be written or oral. Examinations shall be designed so that examiners can be satisfied that the student has assimilated the full course content.