

This is an English translation of the original Swedish document. In the event of any discrepancy between the Swedish and English versions, the Swedish version shall prevail.

General study syllabus for doctoral studies in Medical Science

1 Background

Since 2007, the Faculty of Medicine and Health Sciences at Linköping University has offered the doctoral subject of Medical Science, with an associated General study syllabus.

2 Subject description

For doctoral students admitted as of 1 July 2007, the Faculty of Medicine and Health Sciences (Medfak) offers a doctoral subject: Medical Science. The doctoral subject of Medical Science is a broad subject encompassing all areas of research in medicine and the health sciences.

Having a joint doctoral subject allows for an equivalent doctoral education of high quality in medical science. Upon completion of the doctoral studies, each doctoral student shall have acquired a broad orientation within the subject of Medical Science. In order to meet the objectives of the Higher Education Ordinance requiring doctoral students to demonstrate up-to-date and in-depth knowledge within a defined area of medical science, each doctoral student shall, together with their supervisors, define the specialisation within which the doctoral studies will be pursued.

Following the public defence of the doctoral thesis, the doctoral student shall be able to independently, creatively and with accuracy plan, conduct and evaluate scientific studies; possess sound knowledge of their research subject; and be able to communicate scientific findings and subject knowledge to the research community and society at large.

3 Admission

Admission matters are decided by the Research Programmes Board (FUN). Each department is responsible for carrying out the selection of applicants for doctoral studies. Admission is processed by the director of doctoral studies (FUS) and approved by the head of department concerned.

4 Selection

Selection among eligible applicants shall be based on their ability to benefit from doctoral studies. At the Faculty of Medicine and Health Sciences, the following assessment criteria apply:

- the applicant's documented subject knowledge relevant to the research area;
- the applicant's documented knowledge of scientific theory and methodology; and
- the applicant's analytical ability, demonstrated by a scientific report, thesis, degree project or similar.

An overall assessment of the applicants' qualifications will be made.

4.1 Considerations for admission

A maximum of half of the constituent papers included in a thesis may have been published or accepted for publication prior to admission to doctoral studies. No constituent paper included in a thesis may have been published more than five years before admission to doctoral studies.

Employment as a doctoral student may not exceed the equivalent of four years of full-time doctoral studies.

On admission, an assessment shall be made as to whether the applicant can devote sufficient time to doctoral studies to complete the doctoral degree within eight years. This shall be certified by the supervisors and, where applicable, by the head of operations or equivalent both when the individual study plan is confirmed and at annual follow-up.

5 Entry requirements

To be admitted to doctoral studies at the Faculty of Medicine and Health Sciences, general and specific entry requirements must be fulfilled.

5.1 General entry requirements

General eligibility for doctoral studies is held by applicants who have

- been awarded a degree at second-cycle (Master's) level,
- completed course requirements of at least 240 ECTS credits, of which at least 60 credits are at Master's level, or
- in some other way acquired substantially equivalent knowledge.

The university may grant an exemption from the general entry requirements for an individual applicant if there are special grounds.

5.2 Specific entry requirements

Applicants shall have sufficient proficiency in English to study compulsory English-language literature, prepare a thesis in English and, where necessary, defend the thesis in English.

6 Conduct of doctoral studies

6.1 Objectives

Doctoral studies leading to a doctoral degree involve four years of full-time study (or two years of full-time study for a licentiate degree).

6.2 Individual study plan

The individual study plan is the document that governs the specific focus of each individual doctoral student's doctoral studies. The principal supervisor and the doctoral student establish the electronic individual study plan (eISP) no later than two months after admission to doctoral studies. The study plan shall be reviewed at least once each year. The individual study plan includes a research project plan, courses and other credit-bearing educational components, progress towards meeting the learning outcomes, supervision, funding arrangements and study activity.

6.3 Courses

For doctoral students admitted as of 1 November 2012, the course requirement is 30 credits for a doctoral degree, and 18 credits for a licentiate degree.¹

All courses forming part of the doctoral studies shall be included in the individual study plan. In case of changes, the individual study plan shall be revised. Successfully completed courses shall be recorded in Ladok.

Following admission, doctoral students may apply for recognition of approved doctoral courses that have previously been completed at Linköping University or at another university or higher education institution. Knowledge and skills acquired through professional practice or previous education may also be recognised. Applications for the recognition of credits shall be submitted no later than the introductory seminar and approval of the eISP.

¹ For doctoral students admitted before 1 July 2007, the requirement is 15 credits for the award of a doctoral degree and 7.5 credits for the award of a licentiate degree. For doctoral students admitted from 1 July 2007 until 31 October 2012, the course requirement is 33 credits for the award of a doctoral degree and 18 credits for the award of a licentiate degree.

The course requirements for doctoral and licentiate degrees are set out below.

Components of doctoral studies	ECTS credits	
	Doctoral degree	Licentiate degree
<i>Compulsory doctoral courses²</i> Basic Biostatistics 4 credits Scientific Methodology 5 credits Bioethics and Research Ethics 4 credits Scientific Communication and Information Retrieval 3 credits Laboratory Animal Science (compulsory for doctoral students working with laboratory animals) 5 credits	16 credits	16 credits
Elective doctoral courses, of which at least 6 credits are subject-specific (doctoral degree)	8 credits	2 credits
Other credit-bearing activities, such as participation in international conferences, research stays with another research group, participation in seminar series, journal clubs, etc.	6 credits	-
TOTAL	At least 30 credits	At least 18 credits

6.4 Mid-way review

The mid-way review is a compulsory, publicly announced seminar at which the doctoral student's scientific research is discussed. Its purpose is to review the quality of the thesis project and the progress of the doctoral student, and to assist in planning of the remaining work.

² Courses considered equivalent to the compulsory courses: Clinical Research Methodology, Research Ethics and Scientific Communication (Scientific Methodology and Research, Research Ethics and Scientific Communication) 16 ECTS credits; and Scientific Methodology, Research Ethics and Bioethics (Scientific Methodology, Research Ethics and Bioethics) 16 ECTS credits.

The midway review shall be held no later than two years after admission for full-time studies (or no later than four years after admission for part-time studies), or earlier if two papers have been submitted for publication.

6.5 Thesis

Most doctoral theses at the faculty are compilation theses that comprise at least two constituent papers, usually more, but rarely more than four. At least two constituent papers must have been published or accepted for publication in peer-reviewed journals with international circulation. The doctoral student must be the first author of at least one accepted paper. A licentiate thesis should consist of two constituent papers, at least one of which must have been accepted or published, with the doctoral student as first author.

The exact number of constituent papers required depends on the quality, scope and, not least, the contribution of the doctoral student to each paper. There is no limit to how many theses a specific publication can be used in – the determining factor is whether the individual doctoral student has made a significant contribution to the work.

The constituent papers shall be accompanied by a summary (kappa), written in English or Swedish, which together with the constituent papers constitutes the thesis. It is also possible to submit a thesis in monograph format.

6.6 Degree

For the award of a degree, the doctoral student must have an approved scientific thesis of at least 120 ECTS credits (doctoral degree) or 60 ECTS credits (licentiate degree), together with approved courses comprising at least 30 ECTS credits.

7 Transitional provisions

Doctoral students who commenced doctoral studies at the faculty on or before 31 October 2012 shall complete their studies in accordance with the course requirements and specialisation specified in the general study syllabus under which they were admitted (NB: different general study syllabuses apply to doctoral students admitted before and from 1 July 2007). This general study syllabus applies to doctoral students admitted as of 1 November 2012.

The revision implemented on 1 November 2013, including the revised total ECTS credit requirements for doctoral courses for the award of doctoral and licentiate degrees, applies to all doctoral students admitted as of 1 November 2012. Doctoral students admitted from 1 November 2012 until 31 October 2013 shall therefore update their individual study plan to include a new plan for their doctoral courses at the next annual follow-up.

Doctoral students admitted before 31 October 2012, who so wish and who meet the eligibility requirements, may transfer to the general study syllabus that is applicable from 1 November 2012. In such cases, the individual study plan shall be revised to ensure that the doctoral studies can be completed in accordance with the intentions of the general study syllabus for the subject and the overarching regulations governing the programme.