# General study plan for doctoral education in the subject of medical science

(Ref: 6570/10-506)

Applies from 1 July 2009

Established by the Board of Doctoral Education 12 May 2009. Revised\* by the Board of Doctoral Education 7 December 2010

\*Refers only to changes in the law as per the new Higher Education Ordinance (1993:100), which comes into force on 1 January 2011.



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# General study plan at Karolinska Institutet for doctoral courses in the subject of medical science (ref. 6570/10-506)

#### Higher education ordinance Ch. 6 - General study plan

Section 26

For each subject in which third-cycle courses or study programmes are offered a general study syllabus is required. Ordinance (2010:1064).

Section 27

A general study syllabus shall indicate the following: the main content of the study programme, specific entry requirements and any other regulations required. Ordinance (2010:1064).

Doctoral students shall complete their doctoral education following the course requirements and specialisation specified in the general study plan for which they were accepted.

## 1 Content and structure of the education including examinations

There is only one subject for doctoral education at Karolinska Institutet from 1 March 2006, this being "medical science". The overall framework of this subject, pursuant to the Higher Education Ordinance Ch. 6 Section 27, is described in this document.

All doctoral students accepted for doctoral education from 1 July 2009 onwards shall complete the Karolinska Institutet introduction for doctoral education by the half-time review or the licentiate seminar.

Doctoral education at Karolinska Institutet is to a large extent based on the individual research project of each doctoral student, which is supplemented by well-specified demands of knowledge (see chapter 2 below).

For a doctorate, a minimum of four years of full-time doctoral studies are normally required. Doctoral education may be carried out parallel with clinical practice or other occupation, but must be able to be completed within four years for a licentiate degree and within eight years for a doctorate. The progress of doctoral education is followed up annually. In addition there is a more thorough half-time review, or alternatively a licentiate examination, after the equivalent of two years of full-time doctoral education. A doctorate is issued after the approved public defence of a thesis. A licentiate thesis is defended at a licentiate seminar.

#### 2 Courses

Regarding knowledge or course requirements and in relevant cases associated literature, all doctoral students at Karolinska Institutet must achieve a knowledge target equivalent of at least 30 higher education credits (1.5 higher education credits correspond to one week of full-time studies) for a doctorate or at least 15 higher education credits for a licentiate degree. The following knowledge must be

acquired during the doctoral education and be accounted for through a number of credits from a combination of activities as follows:

Basic general science (7.5 higher education credits):

• Presentation of approved knowledge equivalent to at least 7.5 higher education credits from the basic courses in general science (see below), which must have been completed before the half-time review can be carried out or the licentiate degree is taken.

Knowledge equivalent to that acquired through further courses at advanced or doctoral level (at least 9 higher education credits for a doctorate or at least 4.5 higher education credits for a licentiate degree):

- A pass participation in inter-departmental doctoral programme components carrying a specified number of credits..
- A pass (attendance and exam) in individual courses at doctoral level within
  which the doctoral student is required to acquire adequate knowledge as
  specified in the individual study plan or as becomes apparent during the
  doctoral education.
- Other suitable courses with an approved syllabus, including approved clinical specialist courses (SK courses) that have direct relevance for the research project in the individual study plan (maximum 4.5 higher education credits in total).

Other credit-bearing items (at least 6 higher education credits for a doctorate or at least 3 higher education credits for a licentiate degree).

- Participation in and personal presentation at international conferences generates 1.5 higher education credits per conference (requirement of at least 1.5 higher education credits, though a maximum of 4.5 higher education credits in total).
- Attendance at a research laboratory at another university (generates 1.5 higher education credits per week, maximum of 6 higher education credits in total).
- Participation in the department's seminar series, journal clubs etc (1-1.5 higher education credits per term depending on intensity, requirement of at least 1.5 higher education credits, though a maximum of 6 higher education credits in total).
- Participation in teaching in own research area for practical pedagogical training (40 hours' work for preparation and real teaching generate 1.5 higher education credits; maximum 3 higher education credits in total).

### 2.1 Obligatory knowledge for all doctoral students – basic knowledge in general science

Basic knowledge in general science for doctoral students accepted on courses at doctoral level in the subject of medical science (ref. 1993/09-506 and ref. 6570/10-509) at Karolinska Institutet shall include accounted knowledge with approved examination in basic statistics (1.5 – 3 higher education credits) and research ethics (1.5 higher education credits), and a further 3 – 4.5 higher education credits in at least two of the following subjects:

- scientific theory
- teaching/presentation techniques
- bio-informatics
- writing scientific reports
- medical information searching
- applying for research grants
- GLP (Good laboratory practice)/GCP (Good clinical practice)

Approved general basic knowledge shall constitute a total of at least 7.5 higher education credits. For a doctorate, these credits must have been acquired before the half-time review.

#### 2.2 Obligatory knowledge for certain doctoral students

#### 2.2.1 Science of laboratory animals, 4.5 higher education credits

The Karolinska Institutet course in laboratory animal science is obligatory for doctoral students who will use laboratory animals, and the course must have been completed and approved before animal experiments may be started.

#### 2.2.2 Human biology or pathology, 3 higher education credits

For those doctoral students who lack basic medical university education corresponding to the types of education programmes at the Karolinska Institutet, it is obligatory to acquire knowledge of human biology or pathology from courses at doctoral level equivalent to at least three higher education credits. Knowledge of public health science and pathology from a societal perspective is included. The Department's Director of Doctoral Education will decide in individual cases what courses may provide credit transfer for fulfilling this course requirement.

#### 3 Eligibility requirements

#### Higher Education Ordinance Ch. 7 – General eligibility requirements, special eligibility requirements

#### Section 39

A person meets the general entry requirements for third-cycle courses and study programmes if he or she: 1.has been awarded a second-cycle qualification

2.has satisfied the requirements for courses comprising at least 240 credits of which at least 60 credits were awarded in the second-cycle, or

3.has acquired substantially equivalent knowledge in some other way in Sweden or abroad.

The higher education institution may permit an exemption from the general entry requirements for an individual applicant, if there are special grounds. Ordinance (2010:1064).

#### Section 40

The specific entry requirements laid down shall be essential for students to be able to benefit from the course or study programme. These requirements may comprise:

1.knowledge from one or more higher education courses and study programmes or corresponding courses and study programmes

2.specific professional or vocational experience, and

3.requisite language skills or other conditions determined by the course or study programme. Ordinance (2006:1053).

An assessment of the student's general eligibility in accordance with the Higher Education Ordinance shall take place before the application for admission is submitted. This assessment will be carried out by administrative officers at the doctoral unit within the university administration who decides on whether the general eligibility requirements are fulfilled. Karolinska Institutet has no requirements for specific eligibility.

#### Provisional regulations:

Any student seeking general eligibility for third-cycle education who can prove that they have gained 120 credits<sup>1</sup> or equivalent before 1 July 2007 shall be granted general eligibility for doctoral education until 30 June 2015.

#### 4 The selection and admissions process

The selection of doctoral students at Karolinska Institutet takes place in conjunction with the admissions process in accordance with the grounds for assessment stated below.

The admissions procedure shall have the same overall structure at all departments at Karolinska Institutet. The University Board has established admissions regulations which describe the general framework of the admissions procedure.

According to the admissions regulations, there must be an Admissions Board at every department. The Admissions Board is responsible for preparing issues, organising and evaluating the admission seminar, and submitting a proposal for a decision on admissions that serves as a guide for the Head of Department. The following composition applies to the Admissions Board:

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<sup>&</sup>lt;sup>1</sup> Corresponds to 180 university credits.

- The department's Director of Doctoral Education (who should be the chairperson)
- at least three teacher representatives
- at least one doctoral representative
- if necessary, for example if the specialisation of the study plan lies outside the competence of the board, another expert may be called in
- in situations of possible bias, a replacement will be appointed for the chairman or other member for preparation and decision
- the mandate period for the board's ordinary members should be at least three years and the board shall convene two to four times per year, but at least once per term

The meetings and proposals for decision by the Admissions Board shall be documented.

The application for admission to doctoral education shall be addressed to the Admissions Board of the relevant department. The application shall be submitted to the Admissions Board in good time before the board meeting, and shall include the following:

- verified general eligibility
- application for admission to doctoral education
- individual study plan
- account of supervisors' merits

In the case of any doubt about the quality and feasibility of the proposed education, the Admissions Board shall:

- propose a revision of the individual study plan which may then be reconsidered,
- propose to the Head of Department that the application for admission be rejected.

The Head of Department will make the decision on admission or rejection of application. In decisions on admissions, the Head of Department shall also approve the individual study plan. The decision by the

Head of Department cannot be appealed. A rejection does not prevent a new application for admission being submitted.

In conjunction with admission, a doctoral student shall show a valid identification document.