

**Statutes of the Computer Science in Medicine and Life Sciences
Doctoral Degree Preparatory Program (PromSPO)
at the University of Lübeck**

of 22 November 2016 (NBl. HS MSGWG Schl.-H. p. 102)

§ 1

Area of application

These statutes regulate the Computer Science in Medicine and Life Sciences Doctoral Degree Preparatory Program at the University of Lübeck in conjunction with the Framework of Study Regulations and Examination Regulations (PromRPO) of the University of Lübeck for students of the doctoral degree preparatory program in their current version. This degree preparatory program is supported by the Faculties of Computer Science / Engineering and Natural Sciences. The Medical Faculty shall be involved in the Examination Board as is appropriate.

§ 2

Objective of the doctoral degree preparatory program

The Computer Science in Medicine and Life Sciences Doctoral Degree Preparatory Program of the University of Lübeck provides the thematic training of doctoral students, who intend to produce a dissertation in a field on the interface between computer sciences on the one hand, and medicine or life sciences on the other, and earn the academic degree of *Dr. rer. nat.* [Doctor of Natural Sciences], *Dr.-Ing.* [Doctor of Engineering Sciences] or PhD.

The doctoral degree preparatory program includes:

- a) the successful passing of course-related subject examinations according to a personalized curriculum,
- b) the successful completion of a doctoral examination process at the University of Lübeck in accordance with the Doctoral Examination Rules and Regulations of the Faculties of Computer Science / Engineering and Natural Sciences in their current version.

§ 3

Supervision within the doctoral degree preparatory program

The support is provided by a committee, consisting of two supervisors, one of whom is a first, and a co-supervisor. One of the supervisors must be a representative from computer science and one from medicine or life sciences. The doctoral candidate may wish to involve a mentor in the committee who especially supports him or her concerning career planning. In accordance with the rules of the Doctoral Examination Rules and Regulations of the Faculties of Computer Science / Engineering and Natural Sciences, only one of the individuals of the committee may be examiners in the later doctoral examination process.

§ 4

Admission requirements

(1) In addition to the admission requirements from § 3 of the PromRPO, the following additional requirements must be met:

- a) for applicants for the *Dr. rer. nat.* or PhD, the proof of a successfully-completed scientific, medical, computer science or engineering science course of studies,
- b) for applicants for Dr.-Ing., the proof of a successfully-completed computer science or engineering science course of studies.

(2) In case of doubt, the Examination Board of the doctoral degree preparatory program (§ 8 PromRPO) decides what connection a degree could have in relation to the fields referred to in paragraph 1.

(3) If the admission is subject to conditions, the additional qualifications required by the Examination Board of the doctoral degree preparatory program must be successfully completed or equivalent knowledge acquired in other courses of study must be demonstrated.

(4) A further prerequisite for admission is the proof of the assignment of the subject for a doctoral dissertation from a subject of the Computer Science in Medicine and Life Sciences branch, issued by a member of the Faculties of Computer Science / Engineering and Natural Sciences, who is entitled to supervise a doctoral candidate pursuant to § 3 (1) of the Doctoral Regulations of the Faculties of Computer Science / Engineering and Natural Sciences.

(5) If students are admitted in accordance with § 3 (2) d) lit. aa. and bb. of PromRPO, additional qualifications of 30 ECTS must be established. For admissions pursuant to § 3 (2) d) lit. cc. and dd. of the PromRPO, additional qualifications up to the amount of 30 ECTS can be stipulated by the Examination Board in consultation with the applicant's supervisory committee. All additional qualifications are to be selected from one of the master programs of the Faculties of Computer Science / Engineering and Natural Sciences of the University of Lübeck (modules with a graded performance certificate).

§ 5

Structure and duration of the doctoral degree preparatory program, range of courses offered

(1) The structure and duration of the doctoral degree preparatory program is determined by the regulations set out in § 5 of the PromRPO as well as further details from paragraph 2 and the supplement to these statutes. Moreover, additional requirements resulting from membership in an associated research training group are possible.

(2) The scope of the degree preparatory program comprises 24 credit points (KP). To be earned are:

- a) 5 credits in the field of subject-specific skills and proficiencies, of which at least 4 credits are from subject examinations with a graded performance certificate,
- b) 9 credits from the fields of scientific standards, scientific writing, skills in mentoring and teaching, with a minimum of 4 credits from peer-reviewed scientific publications and
- c) 3 credits from the field of Interdisciplinary skills and proficiencies according to the PromRPO,

(3) It is possible to lower the required number of credit points of subject examinations with a graded performance certificate in individual cases, but it requires detailed justification, which must show that the student has all the necessary knowledge from his or her master course of studies and there are no other relevant course offerings available for the further training of the candidate.

§ 6

Entry into force / Area of application

(1) These statutes shall enter into force on the day following their publication.

(2) They apply to all students of the Computer Science in Medicine and Life Sciences branch, who begin their studies after the entry into force of these statutes.

(3) For all students who began their studies before the entry into force of these statutes, the Examination Regulations (Statutes) for the Doctoral Program in Computer Science in Medicine and Life Sciences apply at the Graduate School for Computing in Medicine and Life Sciences of the University of Lübeck of 14 January 2009 (NBI HS MBW Schl.-HS 13), as last amended by the Statutes of 23 May 2013 (NBI HS MBW Schl.-HS 56) apply.

Supplement: Curriculum for the Computer Science in Medicine and Life Sciences Doctoral Degree Preparatory Program at the University of Lübeck

This supplement serves to give more detailed information concerning the curriculum for the Computer Science in Medicine and Life Sciences Doctoral Degree Preparatory Program in the Supplement to the Framework of Study Regulations and Examination Regulations (PromRPO), pursuant to § 5 (3) PromRPO. Unless otherwise specified, this shall prevail.

To 1. Subject-specific skills and proficiencies

Courses in the field of subject-specific skills and proficiencies must be project-specific. In the case of courses from degree programs, they must come from degree programs of the Faculties of Computer Science / Engineering and Natural Sciences or the Human Medicine degree program. Professional internships are generally to be completed in the industry and should last at least 3 months.

To 2. Scientific standards, scientific writing, supervision, teaching

In principle, the lowest value is set for a publication (item 2e)) or a conference contribution (item 2g)). If higher values are to be awarded, the journal or conference must be contained in a list created and maintained by the Examination Board.

To 3. Interdisciplinary skills and proficiencies

Freely-selectable courses according to number 3 d) from the field of interdisciplinary skills and proficiencies must be allocated to the following areas:

- a) Modules from the degree programs of the Faculties of Computer Science / Engineering and Natural Sciences, which are not attributable to the technical background of the students.
- b) training sessions from the curriculum of Human Medicine, which are not attributable to the technical background of the students,
- c) interdisciplinary workshops of the Computer Science in Medicine and Life Sciences branch and
- d) suitable training sessions from the continuing education offerings of the Graduate School Lübeck, the University of Lübeck and the Lübeck University of Applied Sciences (KP as in the supplement of the PromRPO).

Suitable modules and training sessions are, for example:

- i. Introduction to project management,
- ii. Job application training for doctoral students,
- iii. Conduct of a meeting/negotiations,
- iv. Successfully raising third-party funding,
- v. Career planning for academia or industry,
- vi. Basic principles of intellectual property rights,
- vii. Venture capital and creating start-ups.