Freie Universität Berlin - Department of Mathematics and Computer Science

Registration for the Conferral of a University Degree
(Computer Science Bachelor's Degree Program, **Study Regulations / Examination Regulations July 16th 2014 – 086c**)

Surname:_____ First Name:_____

Date of Birth_____ Place of Birth:_____

Address:_____

Enrollment No.: _____ Tel.:_____ Email: _____

I hereby declare that I have successfully completed § 16 of the Examination Regulations 07/16/2014 (Official Register 35/2014, 08/27/2014), namely the course and examination requirements for degree conferral.

Furthermore, I hereby declare that I have not completed any courses or examinations, within the area of validity of basic law, for the same degree program, for the same subject, or for a module which is comparable to one of the modules studied in the Bachelor's degree program in Computer Science, or that I have failed to pass examinations, or that I have outstanding examinations at another institution of higher education.

Berlin,_____   _____
                                                                  Signature of applicant

_____

Admission to the university degree

□ granted
□ not granted, as the admission requirements have not been met.

Berlin,_____   _____
                                                        The Chairperson of the Examining Board

Examination Regulations 07/16/2014 (Official Register 35/2014, 08/27/2014)

§ 16 Graduation

(1) The prerequisites for the conferral of a Bachelor's university degree is that the requisite accomplishments as stated in §§ 7 and 10 of these regulations have been completed.

(2) The university degree will not be awarded so long as the student has not completed his or her academic records for the same degree program, or for a module which is comparable or identical to one of the modules studied in the Bachelor's degree program and which is taken into account for determining the final grade, or if he or she has failed to pass examinations, or if he or she still has outstanding examinations at an institution of higher education.

(3) The application for determining the conferral of the university degree shall be accompanied by evidence that the prerequisites as detailed in paragraph 1 exist, and by an assurance that none of the cases in paragraph 2 apply to the applicant. The The relevant examining board will make a decision on the application.

(4) On the basis of the passed examination, the university degree Bachelor of Science (B.Sc.) will be awarded. The student will receive certificates (Appendices 2 and 3), as well as a Diploma supplement (German and English).

Furthermore, a supplement to the certificate (Transcript) detailing individual modules and their components will also be issued. Upon application, additional English versions of certificates will be issued.

§ 7 Design and Structure; Scope of Attainments

(1) Within the Bachelor's degree program, there are a total of 180 credit points which must be demonstrated. The Bachelor's degree program is structured as follows:

1. The Computer Science area, totaling 135 credit points:

a) a compulsory area comprising 108 credit points, b) an advanced module comprising 15 credit points and c) the Bachelor's thesis and presentation of results comprising 12 credit points,
2. the area of application comprising 15 credit points and
3. General professional skills courses comprising 30 credit points.

(2) The compulsory area within Computer Science comprises 108 credit points structured around the following topics:

1. Topic area: Algorithms and Programming totaling 35 credit points
a) The following three modules should be passed:

— Module: Functional Programming (9 credit points),

— Module: Algorithms, Data Structures and Data Abstraction (9 credit points) and

— Module: Non-sequential and Distributed Programming (9 credit points).

b) one of the following two modules is to be completed as befitting the result of the assessment test sat prior to beginning:

— Module: Object-oriented Programming for Students with Programming Knowledge (8 credit points) or

— Module: Object-oriented Programming for Students without Programming Knowledge (8 credit points).

2. Topic area: Technical Computer Science totaling 10 credit points; the following module must be completed:

— Module: Computer Architecture, Operation and Communication Systems and (10 credit points).

3. Topic area: Applied Computer Science totaling 22 credit points; the following modules must be completed:

— Module: Impacts of Computer Science (5 credit points),

— Module: Database Systems (7 credit points) and

— Module: Software Technology (10 credit points).

4. Topic area: Theoretical Computer Science totaling 7 credit points; the following module must be completed:

— Module: Fundamentals of Theoretical Computer Science (7 credit points).

5. Topic area: Mathematics for Computer Scientists totaling 29 credit points; the following modules must be completed:

— Module: Logic and Discrete Mathematics (9 credit points),

— Module: Linear Algebra for Computer Science (10 credit points) and

— Module: Analysis for Computer Scientists (10 credit points).

6. Topic area: Scientific Work totaling 5 credit points; the following module must be completed:

— Module: Scientific Work in Computer Science (5 credit points).

(3) Within the advanced module for Computer Science, modules totaling 15 credit points in total must be chosen and completed. All the differentiated evaluated modules offered by the Department of Mathematics and Computer Science at Freie Universität Berlin as part of the Master's degree program in Computer Science maybe be considered for this purpose. Furthermore, the following modules may be selected and completed:

— Module: Fundamentals of Technical Computer Science (10 credit points),

— Module: Research Internship (5 credit points),

— Module: Introductory Didactics of Computer Science (10 credit points),

— Module: Scientific Work in Applied Computer Science (5 credit points),

— Module: Scientific Work in Theoretical Computer Science (5 credit points),

— Module: Scientific Work in Technical Computer Science (5 credit points).

(4) Modules within the Area of Applications totaling 15 credit points may be considered as modules within scientific fields of study, excepting Computer Science. Modules with differentiated scores of at least 5 credit points must be completed. Modules within the Area of Application must be selected and passed from the Bachelor's degree program of another field of study. The following selection criteria should be noted: The module "Linear Algebra 1" within the Bachelor's degree program in Mathematics at the Department of Mathematics and Computer Science at Freie Universität Berlin cannot be taken at the same time as the module "Linear Algebra". The module "Analysis 1" within the Bachelor's degree program in Mathematics at the Department of Mathematics and Computer Science at Freie Universität Berlin cannot be taken at the same time as the module "Analysis". Within the Area of Application for Computer Science, the module "Algorithmic Bioinformatics" within the Bachelor's degree program at the Department of Mathematics and Computer Science at Freie Universität Berlin should be taken. A personal academic advisor will advisee students in the selection of their own modules. If modules are to be completed at other universities or departments or if a module has restricted admission, then it must be demonstrated that the offering body is willing and able to provide a place.

(5) Within the Bachelor's degree program it is necessary to choose and complete modules from both the range of modules which are worth 123 to 133 credit points and which have differentiated evaluated module examinations, and from the range of modules worth 35 to 45 credit points which do not have differentiated evaluated module examinations or do not have module examinations.

(6) The module descriptions in Appendix 1 give further details concerning admission requirements, content and qualification objectives, workload, types of active participation, examinations to be taken during the courses, mandatory and regular participation for teaching and types of learning, credit points allocated to the modules, module standard duration, and their frequency of offer for modules in the Bachelor degree programs.

(7) For modules in the Master's degree program in Computer Science refer to the study and examination regulations for the Master's degree program in Computer Science at the Department of Mathematics and Computer Science at Freie Universität Berlin. For the modules Linear Algebra 1" and Analysis 1", refer to the study and examination regulations for the Bachelor's degree program in Mathematics at the Department of Mathematics and Computer Science at Freie Universität Berlin. For modules in the Area of Application refer to the relevant study and examination regulations of the corresponding Bachelor's degree program.