INFORMATION ABOUT THE APPLICATION PROCEDURE FOR THE MASTER´S PROGRAM IN COMPUTER SCIENCE

Dear applicants,

Thank you for your interest in our Master's program in Computer Science. Due to the results of the last application periods in which less than 5% of the applicants fulfilled our requirements and could be admitted to the program, we have compiled the information posted below for you.

Please pay particular attention to the explanation referring to Theoretical Computer Science and read this information sheet carefully before submitting your application documents to uni-assist. We are not able to offer pre-checks of application documents at any office at TU Berlin!

1 Content-related entry requirements for the Master's program in Computer Science

The **consecutive Master's program in** Computer Science is based on a full-time bachelor's program in computer science and the extensive basics[1] taught within. In order to be admitted to the Master's program in Computer Science and as stipulated in the entry regulations, you are required to provide proof of your English language skills (see 6) and **proof of completed and passed examinations in the following fields** of at least

- **36 CP[2] in foundations of computer sciences, including**
  - **12 CP in the field of Theoretical Computer Science**
  - **12 CP in the field of Methodical-Practical Computer Science**
  - **12 CP in the field of Computer Engineering**
- **18 CP in Mathematics**
- **30 CP in the field of advanced computer science, not including your thesis** in addition to the 54 credits listed above

by the day that you submit your application.

The Examination Board converts the credits you have received at the university at which you obtained your first university degree into ECTS, if need be.

[1] The **basic contents of the Bachelor program of Computer Science at the TU Berlin** have the following structure:

Area	**Topics**
Theoretical Computer Science for 24 CP[2]	formal languages and automata, calculability and complexity, logic and at least one specialization in one of the three mentioned topics
Methodical-Practical Computer Science for 30 CP	programming, algorithms and data structures, software engineering and programming paradigms, information systems and data analysis, scientific computing
Computer Engineering for 24 CP	computer organization, system programming, computer networks and distributed systems as well as at least one specialization in one of the three mentioned topics
Mathematics for 27 CP	analysis, linear algebra, discrete structures, stochastics

Students also take additional courses in the field of social studies. The basic studies are followed by in-depth studies.

[2] 1 CP ≙ 1 Credit Point in the European Credit Transfer and Accumulation System (ECTS) ≙ 30 working hours. In a regular semester at TU Berlin, courses of 30 CPs have to be taken.

Bachelor students of Computer Science at TU Berlin have to complete compulsory courses in the four above-mentioned areas of basic studies in the amount of 105 CP, whereas external applicants to the master program only have to prove 54 CP in this subject area to be admitted. Therefore, strict criteria are applied when the contents of your previous course of study is checked to find out if you fulfill the entry requirements. Only if these requirements are fulfilled, it will be possible for you to successfully study the Master's program at TU Berlin.
The only applications that will not be checked with regard to contents are the ones of students who clearly graduated with a "Bachelor Informatik". All other applications, even if the study course might have been closely related to the German "Bachelor Informatik" or if it was translated into "Bachelor Informatik" from the original "Computer Science", will be checked for the contents that was studied in the previous degree program.

2 Field of Theoretical Computer Science

In the last application periods, it became apparent that many Computer Science graduates from other, mostly foreign universities had not taken enough credits in the field of Theoretical Computer Science[3]. However, knowledge of Theoretical Computer Science is essential to be able to successfully graduate with a Master's degree in Computer Science from TU Berlin. Therefore, please make sure that you have sufficient knowledge in this field, which also needs to be proven by the required number of CPs. We expect to see courses on the topics listed in footnote 1 on your transcript. We will not recognize parts of other courses in which you might have coincidentally covered single aspects of Theoretical Computer Science. As an example, the following modules/courses are **not** recognized as proof of your knowledge of Theoretical Computer Science: Discrete Structures, Discrete Mathematics, Algorithms, Data Structures, Digital Logic, Design & Analysis of Algorithms. This list is not complete but it is intended to help you understand what will **not be** recognized.

3 Admission rate of the applicants

In the last admission periods, less than 8% of the applications were able to prove more than one course or more than 6 CPs in the field of Theoretical Computer Science, and in total, less than 5% of the applicants were admitted after their applications had been checked for the contents studied during the Bachelor's program. Therefore, we would like to ask you to apply only **if you meet all of our entry requirements. Please check yourself whether you have taken the required 12 CP in Theoretical Computer Science and if you have the documents to prove this. We are not able to offer pre-checks of application documents at any office at TU Berlin!**

4 No conditional admission, no preparatory courses

It is not possible to be conditionally admitted to the Master's program.[4] This means that only those who have a first university degree qualifying for a professional career (e.g. Bachelor) and who also fulfill the requirements laid down in the entry regulations for the Master's program in Computer Science are formally entitled to start a Master's program at a university in Berlin. **You need to fulfill all requirements at the time of your application.**

TU Berlin does not offer preparatory courses which the applicant could take to make up for missing qualifications.

[3] What is Theoretical Computer Science? http://www.tu-berlin.de/?197080&L=1

[4] § 10 Abs. 5 Satz 2 Berliner Hochschulgesetz (BerlHG) i.V.m. § 23 Absatz 3 Nummer 1 Buchstabe a BerlHG.

5 Options for improving your chances to meet the entry requirements

If you currently do not meet the entry requirements and you are applying from abroad without having any knowledge of German, then check whether you are able to attend further classes and also pass the relevant exams at your former university in order to meet TU Berlin's entry requirements, especially in the field of Theoretical Computer Science. Prospective students with sufficient knowledge of German to get admitted to regular German-language Bachelor programs within Germany are able to apply to a Bachelor's program at TU Berlin or another university in Germany and can try to take missing classes as a Bachelor student. Credit points need to be certified by the time you apply. Please contact the admission office of the university you might be interested in to inquire about entry requirements. TU Berlin authorities will not support you finding a university filling the gap.

6 Proof of English as additional entry requirement

In addition to knowledge of the technical side of the program, applicants also have to provide proof of their knowledge of the English language at an intermediate level (at least B2 according to the Common European Framework of Reference for Languages (CEFR)). You can find the list of tests and test scores that we accept here: http://www.tu-berlin.de/?162729&L=1

HINWEISE ZU DEN ZUGANGSVORAUSSETZUNGEN FÜR DEN INTERNATIONALEN MASTERSTUDIENGANG COMPUTER SCIENCE (INFORMATIK)

Um eine Zulassung zum internationalen Masterstudiengang Computer Science (Informatik) zu erhalten, müssen zum Zeitpunkt der Bewerbung folgende Zugangsvoraussetzungen erfüllt werden:

- **ein erster berufsqualifizierender Hochschulabschluss in einem Studiengang der Fachrichtung Informatik oder der Fachrichtung Computer Science oder einem fachlich nahestehenden Studiengang.** Der Studiengang muss mindestens folgende Anteile enthalten:

  36 LP aus den Grundlagen der Informatik, davon
  - 12 LP aus dem Bereich der Theoretischen Informatik,
  - 12 LP aus dem Bereich der Technischen Informatik oder Informationstechnik,
  - 12 LP aus dem Bereich der Methodisch-Praktischen Informatik,

  18 LP aus dem Bereich der Mathematik, sowie mindestens weitere 30 LP in der Informatik. Die Abschlussarbeit kann nicht auf die 30 LP angerechnet werden.

- **englische Sprachkenntnisse auf der Niveaustufe B2 gemäß dem Gemeinsamen Europäischen Referenzrahmen für Sprachen (GER).**

Falls Sie also Ihren Bachelor Informatik nicht an der TU Berlin abgeschlossen haben, wird die fachlich-inhaltliche Nähe Ihres vorangegangenen Studiengangs vom Prüfungsausschuss geprüft. Füllen Sie hierfür das **Formular zur Feststellung der fachlichen Eignung für den Masterstudiengangs Computer Science (Informatik**) auf den folgenden Seiten aus. Sollten Punkte nicht auf Sie zutreffen, kann das entsprechende Feld frei bleiben. Bitte laden Sie das ausgefüllte Formular zusammen mit den anderen vorzulegenden Unterlagen bei uni-assist hoch. Es erfolgt keine Vorprüfung der Unterlagen!

Weitere Informationen finden Sie auf der Webseite des Masterstudiengangs Computer Science (Informatik) unter http://www.tu-berlin.de/?191577.

HINTS TO THE ADMISSION REQUIREMENTS FOR THE INTERNATIONAL MASTER'S DEGREE PROGRAM COMPUTER SCIENCE (INFORMATIK)

Applicants for the international master's degree program are required to provide proof of the following:

- **a first university degree that qualifies for a profession and that has been aquired in a course of study in the subject area of Computer Science or in a similar, related course of study.**
  The course of study must include at least the following parts:

  36 CP in foundations of computer sciences, including
  - 12 CP in the field of Theoretical Computer Science,
  - 12 CP in the field of Computer Engineering or Information Technology,
  - 12 CP in the field of Methodological-Practical Computer Science,

  18 CP in the field of Mathematics and, additionally, at least 30 CP in the field of computer sciences, not including your thesis.

- **English language proficiency corresponding to level B2 according to the Common European Framework of Reference for Languages (CEFR).**

If your Bachelor in Computer Science is not from TU Berlin, the eligibility of your previous degree program will be reviewed by the examination board. Please complete the **suitability assessment form for entering the Master's degree program Computer Science (Informatik)** on the following pages. If questions do not apply to you, please do not fill in the corresponding field. Please upload the completed form with all other required documents to the uni-assist online portal. There is no preliminary checking procedure!

Further information can be found on the website of the Master's program Computer Science (Informatik): http://www.tu-berlin.de/?191577&L=1.

FAKULTÄT IV
ELEKTROTECHNIK UND INFORMATIK

Technische Universität Berlin

Suitability assessment for entering the Master's degree program Computer Science (Informatik)

If you have not completed your Bachelor's degree in Computer Science at TU Berlin, please complete this evaluation form with regard to the study fields laid out in § 3 of the current and valid version of the Entry Regulations for the international Master's degree program Computer Science (Informatik) at Faculty IV Electrical Engineering and Computer Science of Technische Universität Berlin.
Official Version of the Entry Regulations, published in TU-AMBl. No. 26, October 31, 2018 (German)

To be completed by the assessment committee
Requirements fulfilled YES ☐ NO ☐

To be completed by the applicant:

Last name:		**First name:**	
Application number:		**Date of birth:**	31 December
E-Mail:		**Proposed start date at TU Berlin:**	

Country and university where the Bachelor's degree was awarded, e.g. Austria - University of Technology Vienna	
Title of the Bachelor's degree program, e.g. BSc Computer Science	
Stipulated number of **credit points per semester** in a full-time study program at the university attended, e.g. 20 CP	
Total number of credit points in the Bachelor's degree program, e.g. 160 CP	
Stipulated length of the Bachelor's degree program (in semesters), e.g. 8 semesters	
Type of **proof of language** proficiency and result, e.g. TOEFL iBT 97 *	

* If no proof of language proficiency is provided by a test such as TOEFL or IELTS, please copy the page on which the language qualification is certified, mark or highlight the information and entitle the sheet with "Instead of a language test certificate".

Further information can be found on the website of the international Master's program Computer Science (Informatik): http://www.tu-berlin.de/?191577&L=1.

By submitting this form, I confirm that all information provided is true and correct.

Application number

Please note that a module can only count towards one study field!

Appropriate evidence to the information provided must be attached.
I have successfully attended the following basic courses / modules with non-identical content in the field of **Theoretical Computer Science**:

To be completed by the applicant:			***To be completed by the assessment committee:***	
Title of the course / module *and brief description of the content, 5-10 keywords, separated by a semicolon*	**Credit points at the university attended**	**Course ID number on the transcript**	**Credit point equivalent at TU Berlin**	**accepted**

If you require additional space, please attach a separate sheet.

Application number

I have successfully attended the following basic courses / modules with non-identical content in the field of **Computer Engineering or Information Technology**:

To be completed by the applicant:			***To be completed by the assessment committee:***	
Title of the course / module *and brief description of the content,* *5-10 keywords, separated by a semicolon*	**Credit points at the university attended**	**Course ID number on the transcript**	**Credit point equivalent at TU Berlin**	**accepted**

If you require additional space, please attach a separate sheet.

Application number

I have successfully attended the following basic courses / modules with non-identical content in the field of **Methodological-Practical Computer Science:**

To be completed by the applicant:			***To be completed by the assessment committee:***	
Title of the course / module *and brief description of the content, 5-10 keywords, separated by a semicolon*	**Credit points at the university attended**	**Course ID number on the transcript**	**Credit point equivalent at TU Berlin**	**accepted**

If you require additional space, please attach a separate sheet.

Application number

I have successfully attended the following courses / modules with non-identical content in the field of **Mathematics:**

To be completed by the applicant:			***To be completed by the assessment committee:***	
Title of the course / module *and brief description of the content, 5-10 keywords, separated by a semicolon*	**Credit points at the university attended**	**Course ID number on the transcript**	**Credit point equivalent at TU Berlin**	**accepted**

If you require additional space, please attach a separate sheet.

Application number

I have successfully attended the following advanced courses / modules with non-identical content in the field of **Computer Science:**

To be completed by the applicant:			***To be completed by the assessment committee:***	
Title of the course / module *and brief description of the content,* *5-10 keywords, separated by a semicolon*	**Credit points at the university attended**	**Course ID number on the transcript**	**Credit point equivalent at TU Berlin**	**accepted**

If you require additional space, please use a separate sheet.

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