Dresden Technical University
Department of Computer Science
Faculty of Mathematics
Center for Molecular and Cellular Bioengineering

Regulations for determining the suitability for the Master's programme Computational Modeling and Simulation

(Aptitude Test Regulations)

of 21 February, 2018

based on § 13 para. 4 and § 17 para. 10 of the Law on the Freedom of Universities in the Free State of Saxony (Sächsisches Hochschulfreiheitsgesetz - SächsHSFG) in the version of the announcement of 15 January, 2013 (SächsGVBl. p. 3), last changed by Article 11 of the Law of 29 April, 2015 (SächsGVBL. p 349, 354) the Technical University Dresden shall issue the following suitability assessment regulations as statutes:

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§ 1
Scope of application

These regulations regulate the determination of the special admission requirements (aptitude assessment) for the Master's programme Computational Modeling and Simulation at the Technical University of Dresden on the basis of the regulations of the applicable Saxon University Freedom Law.

§ 2
Admission Requirements

(1) According to § 3 of the study regulations for the Master's programme Computational Modeling and Simulation, every applicant who has the required qualification for the Master's programme Computational Modeling and Simulation is admitted.

(2) Qualified and therefore entitled to access within the meaning of para. 1 is who:
1. one recognized in Germanyfirst university degree qualifying for a profession in computer science, mathematics, natural sciences, economics or engineering,
2. demonstrates a good command of English (level B2 of the European Framework of Reference for Languages), provided that English is not the applicant's native language and
3. provides proof of special aptitude to study in the Master's programme in Computational Modeling and Simulation in accordance with § 5.

§ 3
Access Committee

The Dean of the Faculty of Computer Science appointsan Access Committee for the respective application period on the proposal of the Study Commission. As a rule, it consists of three university teachers from the TU Dresden. The Access Committee shall decide on the existence of the admission requirements in accordance with § 2, invite to an aptitude interview if necessary and decide on appeals against decisions within the framework of this procedure. In addition, the Access Committee is responsible for the development and publication of the application form in accordance with § 4 Para. 2 No. 1.

§ 4
Application and deadlines

(1) The form for determining the special suitability according to these regulations in Modeling and Simulation Master's program is part of the formal application documents for matriculation and must be submitted in due time and in accordance with the form.

1. Applicants with a university degree obtained in Germany (Master's degree) must apply for the following position:
   Dresden Technical University
   Department of Computer Science
   Chairperson of the Access Committee
   Chairperson of the Access Committee of the Master's Program in Computational Modeling and Simulation
   01062 Dresden

Germany
Applicants with a university degree obtained abroad (master's degree) must apply to uni-assist e.V.

2. Applicants from non-EU countries who have completed their university degree (Master's degree) at a foreign university must apply for the winter semester by 31 May. All other German and foreign applicants must apply for the winter semester until the 15th July.

(2) The application must be accompanied by the following documents:
1. Formal application form,
2. Curriculum vitae with a list of previous education;
3. informal letter of motivation,
4. officially certified copy of the first professional qualifying university degree certificate,
5. officially certified copies of additional certificates and evidence proving the particular suitability according to § 2 para. 2 no. 3.
6. Proof of sufficient knowledge of English at level B2 of the European Framework of Reference for Languages in accordance with § 2(2). No. 2. Proof is deemed to have been provided if:
    a)   the applicant's native language is English or
    b)   the previous course of study is/was completely in English or
    c) have successfully completed at least 12 LP modules in English as part of the Bachelor's programme, or
    d) passed the Test of English as a Foreign Language (TOEFL) with at least 550/213/80 (written/computer-based/internet-based) points, or
    e)   passed the IELTS test with at least level 6.0, or
    f)   the UNIcert test has been passed with at least level II or
    g) sufficient English education can be demonstrated within the framework of the university entrance qualification acquired, or
    h) a self-authored student research project or scientific paper can be submitted in English, or
    i) a language test to be determined by the examination board, e.g. as part of the aptitude interview pursuant to § 6, was passed with the corresponding minimum result.

(3) Applications which are not received in full, in due form or on time shall be excluded from further proceedings.

(4) If, at the time of application, proof of the first university degree qualifying for a profession (diploma) pursuant to para. 2 no. 4 is not yet available, the applicant shall also be included in the aptitude assessment procedure under these regulations if 80% of the credit points required for the university degree have already been earned. As proof of this, the applicant must submit an original or officially certified copy of a corresponding certificate from his or her university. This does not affect the necessity of presenting all other proofs mentioned in para. 2 with the application and para.3 .

§ 5
Proof and determination of special suitability

(1) The special suitability for the Master's Programme in Computational Modeling and Simulation according to § 2 paragraph 2 number 3 exists if proof of independently applicable knowledge in the fields of computer programming as well as mathematical and scientific foundations has been provided. In particular, proof is required that sequential computer programs

can be independently implemented, tested and applied in a high-level language. In addition, knowledge at the level of a German Abitur course is required in: analysis of functions of one or more variables, basics of vector and matrix calculation, basics of probability calculation, basics of classical physics, basic knowledge of biology and chemistry.

(2) The Access Committee shall first examine whether proof of particular suitability has been furnished on the basis of the documents attached to the application, in particular the documents pursuant to § 4 (2), but only if the admission requirements pursuant to § 2 (2) Nos. 1 and 2 have been fulfilled. If the particular suitability does not already result from the applicant's documents, an aptitude interview will be held in accordance with § 6 before the Access Committee.

§ 6
Suitability interview

(1) The aim of the aptitude interview is to determine whether the knowledge, skills or abilities required in accordance with § 5 paragraph 1, which provide information about the applicant's particular suitability, are available.

(2) The aptitude interview shall take place in a uniformly structured form and shall not last longer than 30 minutes.

(3) The invitation to the interview shall be issued in good time in written form by the Access Committee in accordance with § 3, but at least two weeks before the date of the aptitude interview.

(4) A member of the Access Committee shall draw up minutes of the essential content of the aptitude interview, which shall also include the participants, the duration and the result of the interview. The identity of the applicant is verified in the interview by official photo identification.

(5) If the applicant does not appear for an aptitude interview on the fixed date, he or she has no right to be granted an alternative date. If the applicant has taken part in the aptitude interview but has not been able to provide proof of special aptitude in accordance with § 4 (2) No. 3, the aptitude interview can be repeated next year upon application by the applicant. The application must be submitted within the period specified in 4 para. 1. § 4 para. 2 does not apply in these cases.

(6) If the applicant can prove that he or she is not in a position to pass the aptitude interview in the intended form due to prolonged or permanent physical disability or chronic illness, the admission committee will offer him or her an alternative form for determining aptitude. A medical certificate, and, in cases of doubt, an official medical certificate may be required for this.

(7) If it is not possible for an applicant from abroad or for reasons for which he or she is not responsible to pass the aptitude interview in the intended form, the Admissions Committee shall offer him or her an alternative form for determining aptitude.

§ 7
Notification of suitability

(1) If the applicant proves the required aptitude in accordance with § 2, he or she shall receive a notification of aptitude from the Admissions Committee. The aptitude certificate serves to be submitted to the Admissions Office/international student office of the TU Dresden and represents the required form of proof of admission to the Master's programme. It is a prerequisite for enrollment in the Master's program Computational Modeling and Simulation.

(2) If the applicant cannot prove the required aptitude pursuant to § 2, the Access Committee shall also issue a written decision on this matter, which shall be accompanied by instructions on legal remedies.

§ 8
Entry into force and Publication

These aptitude assessment regulations shall enter into force one day after their publication in the Official Announcements of the Technische Universität Dresden.

Issued at the Technical University of Dresden on the basis of the decisions of the Faculty of Computer Science of 17 January, 2018 and the Faculty of Mathematics of 31 January, 2018, the decision of the Scientific Council of the Center for Molecular and Cellular Bioengineering (CMCB) of 14 February, 2018 and the approval of the Rectorate of #Date (format: d. Monat JJJJ)#.

Dresden, #DATE#

The Rector
of Dresden Technical University

Prof. Dr.- Ing. habil. DEng/Auckland Hans Müller-Steinhagen