

**Note: The English translation (translated by a professional translator and interpreter) is a service. If any doubts occur, the German proclamation is binding.**

New version of the regulations on access and admission to the Master's degree programme "Computational Science in Engineering" of the Carl Friedrich Gauß Faculty, the Faculty of Architecture, Civil Engineering and Environmental Sciences, the Faculty of Mechanical Engineering and the Faculty of Electrical Engineering, Information Technology and Physics of the Technische Universität Braunschweig

The new version of the regulations on access and admission to the Master's degree programme "Computational Science in Engineering", which was adopted by the Joint Commission responsible for the joint degree programme at its meeting on 3 December 2024 and 16 December 2024, approved by the Ministry of Science and Culture on 13 December 2024 and by the Presidential Board of the Technical University at its meeting on 18 December 2024, is hereby made public to the university.

The regulations come into force on 01 January 2025. It regulates the admission procedure for the winter semester 2025/26 for the first time. Applicants who apply for a higher semester for the summer semester 2025 or the winter semester 2025/26 will still be admitted according to the previous regulations (HÖB 1149 dated 16.01.2017; authorised with HÖB 1150 dated 24.01.2017) in deviation from sentence 2. The previous regulations on access and admission to the Master's degree programme in Computational Science in Engineering (CSE) (HÖB 1149 dated 16.01.2017; corrected with HÖB 1150 dated 24.01.2017) shall cease to apply at the end of the admission procedure in accordance with sentence 3.

### **Regulations governing entry and admission to the consecutive Master's degree programme in Computational Sciences in Engineering (CSE) at TU Braunschweig**

On 03 December 2024 as well as on 16 December 2024, the Joint Committee that has been assigned responsibility for departmental tasks related to the joint M.Sc. degree programme Computational Sciences in Engineering (CSE) by the Department of Architecture, Civil Engineering and Environmental Sciences, the Department of Mechanical Engineering, the Department of Electrical Engineering, Information Technology, Physics, and the Department Carl-Friedrich-Gauß-Fakultät, agreed the regulations below in accordance with Section 18, Subsection 8 of the Higher Education Act of Lower Saxony NHG and Section 7 of the Lower Saxony University Admissions Act NHZG.

#### **1 Scope**

(1) These regulations govern entry and admission to the consecutive Master's degree programme in Computational Sciences in Engineering (CSE), additional to the General Admission Regulations for Master's degree programmes at the Technische Universität Braunschweig (Allg.ZO-MA).

(2) The entry requirements are set out in Section 2.

(3) Where there are more applicants who meet the entry requirements than there are places available on a degree programme that is subject to specific admission criteria, places are awarded based on the university's selection process (Section 4). Where there are fewer applicants who satisfy the admission criteria than there are places available, the university's selection process is not used.

## 2 Entry requirements

(1) For entry to the consecutive Master's degree programme in Computational Sciences in Engineering (CSE), applicants must

- a) hold a Bachelor's degree or equivalent qualification in a comparable prior degree programme in Engineering Sciences, Natural Sciences, Mathematics, Computer Science or a closely related degree programme, awarded either by a German university or by a university in a Bologna signatory state;

or

hold an equivalent qualification in one of the subjects listed above or in a comparable prior degree programme in Engineering Sciences, Natural Sciences, Mathematics, Computer Science or a closely related degree programme, awarded by a university in another country. The equivalence of degrees is assessed based on the recommendations from the Central Office for Foreign Education (<http://anabin.kmk.org>), which forms part of the Secretariat of the Standing Conference of the Ministers of Education and Cultural Affairs.

and

- b) provide proof of subject-specific qualification as set out in Subsection 2

The responsible admissions committee (Section 5) shall decide whether a prior degree programme is relevant or closely related.

(2) Applicants shall prove their knowledge and expertise in the following areas:

- a. the ability to work in a scientifically basic or method-orientated manner,
- b. computational science, mathematics, mechanics and information technology, which can be demonstrated as part of a degree programme and/or through other documentation,
- c. previous experience with regard to the interdisciplinary study programme in engineering, mathematics and scientific computing

(3) Departing from Subsection 1 item a), the entry requirements shall be provisionally met by applicants whose Bachelor's degree or equivalent qualification is pending at the time of application; who have accumulated at least 150 credits (83.3 %) on a degree programme with a total of 180 credit points, or at least 180 credits (85.7 %) on a degree programme with a total of 210 credit points; and who are expected to complete their Bachelor's degree or equivalent qualification no later than 31 March of the relevant winter semester. The average mark is calculated from the marks relevant for admission and this shall be taken into account in the selection process under Section 4, Subsection 1, whether or not a different result is achieved in the Bachelor's degree or final examination.

(4) Applicants who do not hold a German higher education entrance certificate and who have not completed part of their education in German must have A2 knowledge of the German language to enable them to study for a degree. This shall be demonstrated for example with a certificate.

(5) Applicants who do not hold a higher education entrance certificate which shows that the language of instruction was English and who have not completed part of their education in English must, have sufficient knowledge of the English language.

Sufficient English language skills shall be demonstrated by the following minimum performance in the subsequent internationally recognised tests or equivalent:

Test of English as a Foreign Language (TOEFL), web based Test/IBT <a href="http://www.ets.org">www.ets.org</a>	88 points
International English Language Testing System (IELTS) <a href="http://www.ielts.org">www.ielts.org</a>	Band 6.5 or higher
English Language Proficiency Report of the Language Centre of TU Braunschweig	At least two skills at B2 level and two skills at C1 level in a Language Centre (English Language Proficiency Report)

(6) The proofs according to Subsection 4 and 5 must be submitted by the time of enrolment; if both proofs are required, one of the proofs must be submitted with the application for admission according to Section 2, Subsection 1.

### 3

#### Start of the programme and application deadline

(1) The Master's degree programme in Computational Sciences in Engineering (CSE) starts every winter semester. Applications for admission to the Master's degree programme Computational Science Engineering must be submitted in accordance with the provisions of Section 3 and 4 of the General Regulations for Admission to the CSE.

Complete application documents for the winter semester must reach the university no later than 15 March (deadline for applications from non-EU nationals requiring a visa) or 15 July (deadline for applications from EU nationals and other applicants not requiring a visa) for the winter semester.

Applications for admission made outside the ordinary application process and above set admission numbers, the provisions of Section 3, Subsection 5 of the General Regulations for Admissions and the deadlines of Section 4, Subsection 2 of the General Regulations for Admissions apply accordingly.

Applications under sentence 2 and 4 shall be valid for admission to the programme only on the starting date specified. The university has no official obligation to verify information provided by the applicants.

(2) Applications for admission under Subsection 1 Clause 2 and sentence 4 must include the supporting documents listed below. Where originals are not issued in English or German, certified German or English translations must be included:

- a) Bachelor's degree certificate or, where this has not been issued yet, a certificate stating the results, the credit points, the total number of credit points and the average mark
- b) Curriculum vitae
- c) Proof of particular specialised qualification as set out in Section 2, Subsection 2
- d) If necessary proof of German language proficiency as set out in Section 2, Subsection 4
- e) If necessary proof of English language proficiency as set out in Section 2, Subsection 5

The requirements set out in sentence 1 shall apply also to applications for a place above admission capacity, without, however, affecting the additional requirements applicable in that process. In particular, applicants must submit an affidavit stating that they have not received an unconditional or conditional offer of a place on the Master's programme in Computational

Sciences in Engineering (CSE) or parts of that programme, or a related degree programme at a university in Germany or another member state of the European Union. The affidavit must state the applicant's nationality.

(3) Incomplete applications, applications that do not have the proper form, and applications that reach the university after the deadline specified shall not be considered for admission. Please note that the university does not return any documents submitted.

#### 4

#### **Admissions process**

- (1) The admissions committee (Section 5) makes all admissions decision
- (2) Admissions decisions are made as set out below. Points are awarded for the final mark as set out in Section 2, Subsection 1 item a) or for the average mark as set out in Section 2, Subsection 3, and for other criteria to be taken into account (Section 2, Subsection 2). A list of applicants is drawn up ranked according to the total scores. Where there are several applicants with the same score, the score for particular specialised qualification determines the ranking (Section 2, Subsection 2); after that, lots are drawn.

(3) Points are awarded based on the following system:

Bachelor's degree result (up to 51 points)

Bachelor's degree result	Points
1.0	51
1.1	49
1.2	47
1.3	45
1.4	43
1.5	41
1.6	39
1.7	37
1.8	35
1.9	33
2.0	31
2.1	29
2.2	27
2.3	25
2.4	23
2.5	21

Bachelor's degree result	Points
2.6	19
2.7	17
2.8	15
2.9	13
3.0	11
3.1	10
3.2	09
3.3	08
3.4	07
3.5	06
3.6	05
3.7	04
3.8	03
3.9	02
4.0	01
>4.0	00

Particular specialised qualification (up to 49 points): The awarding of points by the admissions committee is based on written proof of special aptitude for the degree programme:

- a. the ability to work in a scientific or fundamental and method-based manner,
- b. previous experience in the fields of computational science, mathematics, mechanics and information technology, as demonstrated in the course of studies and through documentation,
- c. previous experience with regard to the interdisciplinary study programme in engineering, mathematics and scientific computing.

Experience gained outside a degree programme can, if proven, be given equal weight in the particular specialised qualification.

A maximum of 100 points can be achieved.

(4) Beyond these provisions, the general registration provisions as set out in the university's registration regulations are not affected. Applicants who do not present their degree certificate under Section 2, Subsection 1 by the end of the application period shall have their names removed from the register if they do not submit their Bachelor's degree certificate by 31 March of the winter semester, unless they can give proof that they are not responsible for this.

## 5

### **Admissions committee for the Master's degree programme in Computational Sciences in Engineering (CSE)**

(1) For the preparation of their decision, the CSE Joint Committee forms an admissions committee (Admissions Panel).

(2) This admissions committee comprises at least four voting members who must be university lecturers or other university staff, and one student member with an advisory vote. Each of the departments participating in the degree programme shall be represented by one voting

member. There must be at least one representative from among the university lecturers. Committee members are appointed by the CSE Joint Committee. The student member is appointed for a period of one year, all other members for a period of two years. Re-appointments are permitted. The admissions committee shall be quorate if at least two voting members are present, including at least one member of the university lecturers' group.

(3) The admissions committee has the following responsibilities:

- a) Reviewing incoming applications for admission for formal correctness
- b) Checking that entry requirements as set out in Section 2, are met including the determination of specialized qualification in accordance with Section 2, subsection 2.
- c) Assessment of specialized qualification in accordance with Section 4, Subsection 3 and formation of a corresponding ranking list by determining the overall result
- d) Notification of the ranking list compiled for the individual applicants to the Enrolment Office or the International Office, which issues the letter of admission or rejection to the applicant.

(4) When the admissions process is complete, the admissions committee shall report to the CSE Joint Committee on the experiences gained and may make recommendations for the development of the admissions process.

## 6

### **Notification of decisions, clearing, and process completion**

(1) Applicants who can be offered a place on the programme are notified by the university in writing of the offer. This notification specifies a deadline by which applicants must accept or decline the offer in writing or electronically. Where an applicant's reply is not received by the deadline specified or in the proper form, the offer of a place lapses. Applicants must be informed of this legal consequence in the written notification.

(2) Applicants who cannot be offered a place on the programme are notified by the university in writing that their application is rejected. These applicants will receive a rejection notice electronically or in writing with instructions on how to appeal. If a selection procedure in accordance with Section 4 has taken place beforehand, the applicant's position in the ranking and the position of the last applicant admitted shall be listed. Eligible applicants who could not be admitted in the previous selection procedure will take part in a succession procedure. Further notifications will only be issued in the event of admission.

(3) The clearing process is based on the ranking that results under Section 4, Subsection 1 sentence 2.

(4) Admissions shall end no later than the beginning of the semester. Applications may be made for any places on the programme available after that date, provided they meet the entry requirements under Section 2. The application period for this starts 6 weeks before the start of lectures and ends at the latest at the start of the semester.

## 7

### **Admissions for transfer students**

- (1) Applicants for degree programmes with specific admission criteria must provide proof that their level of proficiency is of a standard required for studying in that particular advanced semester (including 20 credit points in the 2nd semester), proof of the required German language skills in accordance with Section 2, Subsection 4 and proof of the required English language skills in accordance with Section 2, Subsection 5.

(2) Places available for transfer students are subject to specific admission criteria. They are awarded to applicants based on the ranking below:

- a) Applicants for whom a rejection would constitute particular hardship because of their personal circumstances.
- b) Applicants who have studied or are studying on the same or a similar degree programme
  - I.) at another German university, or a university in another member state of the European Union or another signatory state to the Agreement on the European Economic Area;
  - II.) who are either German nationals or hold a nationality that is treated as equivalent for admissions purposes and have studied or are studying at a university outside Germany.
- c) Applicants giving other valid reasons.

For the three case groups specified in sentence 1, admission decisions are made based on the social and particularly family-related and economic grounds crucial for a location choice. Where several applications have the same ranking, the average mark determines the decision. Where several similar cases remain, lots are drawn. The average mark is determined based on an applicant's work to date.

(3) If the Master's degree programme in Computational Science in Engineering has limited capacity, students who change the location may only be admitted to the next higher semester. The requirements of Subsection 1 must be fulfilled accordingly. However, if the standard period of study has already been exhausted, admission is not possible.

## **8 Entry into force**

These regulations shall become effective on 01.01.2025. They regulate for the first time the admission procedure for the winter semester 2025/26.

Applicants who apply for a higher semester in the summer semester 2025/26 will still be admitted according to the previous regulations (announcement dated 16 January 2017 [TU Gazette no. 1150]) in deviation from sentence 2.

The previous regulations on access and admission to the Master's degree programme in Computational Science in Engineering (CSE) - university-published announcement dated 24.01.2017 (TU Gazette no. 1150) - expire at the end of the admission procedure in accordance with sentence 3.