## Regulations Governing Entry Requirements and Admission to the Solar System Physics

#### Master's Degree Programme at Technische Universität Braunschweig

This translation of the German version date 28.09.2023 is provided for information purpose only.

If there is a discrepancy or inconsistency of meaning or interpretation between the English version and the original German version, the German version shall prevail.

The Faculty Council of TU Braunschweig's Faculty of Electrical Engineering, Information Technology, Physics has adopted the following regulations on 23.01.2023 according to Section 18, Paragraph 8, of the Lower Saxony Higher Education Act (Niedersächsisches Hochschulgesetz, NHG) and Section 7 of the Lower Saxony University Admissions Act (Niedersächsisches Hochschulzulassungsgesetz, NHZG):

### 1 Scope

- (1) These regulations govern entry and admission to the English taught consecutive Master's degree programme in Solar System Physics.
- (2) The entry requirements are set out in Section 2. In order to determine the entry requirements, the TU Braunschweig will be awarding all places based on the University's own selection process.
- (3) The places will be distributed based on the University's own selection process (Section 5).

#### 2 Entry requirements

- (1) To enter the consecutive Master's degree programme in Solar System Physics, applicants must:
- a) 1. Either hold a Bachelor's degree or an equivalent qualification in a previous degree programme in Physics or a closely related field, awarded either by a German university or by a university in a Bologna signatory state according to Paragraph 2 or
- 2. Hold an equivalent qualification from a previous degree programme in Physics or a closely related field, awarded by a foreign university, according to Paragraph 2. Degree equivalency will be assessed according to the recommendations of the Central Office for Foreign Education (http://anabin.kmk.org, in German only), which is part of the Secretariat of the Standing Conference of Ministers of Education and Cultural Affairs

and

b) Provide proof of qualifications as set out in Annex 1.

and

- c) Score at least six points in a selection interview (see Section 3). Applicants who, according to Section 3, did not score at least six points in the selection interview cannot be admitted.
- (2) The Admissions Committee will decide whether a previous degree programme is closely related and whether the qualifications are in accordance with Paragraph 1 b). In order to determine this, the qualifications listed in Annex 1 will be consulted. Admission may be granted with an ancillary clause stating that outstanding modules, exam results or credits (Annex 1) must be submitted within two semesters.
- (3) As an exception to Paragraph 1, Letter a), the University may provisionally admit applicants whose Bachelor's degree or equivalent qualification is pending at the time of application if they have accumulated at least 150 credits (83 %) in a degree programme with a total of 180 credits, or at least 180 credits (86 %) in a degree programme with a total of 210 credits, and if they are expected to complete their Bachelor's degree or equivalent qualification no later than 31 March for the winter semester or 30 September for the summer semester (Section 4, Paragraph 4). A grade point average (GPA) is calculated based on the marks relevant to admission. This GPA is taken into account during the selection process explained in Section 5, Paragraph 2 and 3, regardless of the student's final GPA in their Bachelor's degree.
- (4) Applicants who fail to complete outstanding modules as set out in Section 2, Paragraph 2, within their first two semesters and submit corresponding proof before the end of their second semester (30 September or 31 January, respectively) will be exmatriculated after this deadline, unless they can prove that they are not responsible for this. Applicants with an incomplete Bachelor's degree or equivalent qualification at the time of their application (Section 2, Paragraph 3) will be exmatriculated after the deadline if they fail to submit their Bachelor's or equivalent degree certificate before the end of their first semester (31 March or 30 September, respectively), unless they can prove that they are not responsible for this.
- (5) Applicants whose native language is not English must have a sufficient command of the language. Sufficient English proficiency must be demonstrated by achieving at least a minimum result in one of the following internationally recognised tests or an equivalent test:

Test of English	Minimum result
Test of English as a Foreign Language	95 credits
(TOEFL), internet-based test/IBT	
www.ets.org	
Cambridge English: Advanced (CAE)	Grade B or higher
www.cambridgeenglish.org	
Cambridge English: Proficiency (CPE)	Grade C or higher
www.cambridgeenglish.org	
International English Language Testing	Band 6,5 or higher
System (IELTS) www.ielts.org	
English Language Proficiency Report from	At least two skills at B2 level and two
TU Braunschweig's Language Centre	skills at C1 level in the Language

Centre's	English	Language		
Proficiency Report				

The successful completion of one of these tests must not date back more than three years from the date of application for admission to the Master's degree programme. Applicants who have successfully completed a study programme taught entirely in English are exempt from providing proof of a successful English test.

(5) Applicants do not have to prove any German language skills.

#### 3 Selection Interview

- (1) Before their acceptance, applicants must participate in a selection interview either conducted by the admission committee themselves or by people appointed by the admissions committee (Section 6). This selection interview is graded. Applicants who score less than six points cannot be admitted.
- (2) The admission committee or the people appointed by the admissions committee will conduct the interview in English. The selection interview should show whether or not an applicant is suited for the degree they are applying to. The selection interview will cover the applicant's motivation as well as the following suitability criteria:
  - 1. Specific aptitudes and interests that could reflect positive on their study,
  - 2. Particular motivation to study Solar System Physics,
  - 3. The ability to work scientifically, systematically and in a method-oriented way,
  - 4. Knowledge of the scientific principles or basic knowledge from the first degree,

Each parameter will be awarded with either 0 points, 1 point, or 2 points. These points correspond to the following evaluation:

0 = not given / not convincing

1 = partially given / partially convincing

2 = given / convincing

The suitability parameters 3 and 4 are weighted twice when awarding points.

#### 4

#### Start of the programme, admissions application, and application deadline

(1) The Master's degree programme in Solar System Physics starts every winter and summer semester. To apply for admission, an electronic application form must be completed and submitted via the University's web portal. Application forms must then be printed, signed and submitted along with the supporting documents listed in Paragraph 2. Applications must reach the University no later than 15 July for the winter semester and 15 January for the summer semester. Applications for admission outside the regular application process and above the defined admission numbers must reach the University no later than 10 April for the summer semester and no later than 10 October for the winter semester. Both types of applications (Clauses 2 and 4) will be valid for admission to the programme for the starting

date specified. The University is under no official obligation to verify the information provided by applicants.

- (2) Where originals are not issued in English or German, certified German or English translations must be included. Applications for admission under Paragraph 1, Sentence 2, must include the supporting documents listed below:
  - a) Degree certificate (Section 2, Paragraph 1, letter a) or, if this is pending, a certificate listing the student's achievements (with credits), number of credits, total number of credits earned, and GPA,
  - b) Curriculum vitae,
  - c) Proof of English language proficiency as set out in Section 2 Paragraph 5,
  - d) if applicable, according to paragraph 2 section 1 letter b), evidence of knowledge, skills, and credit points according to Annex 1 (e.g. excerpts from module manuals), if the attached documents according to letter a) cannot provide sufficient evidence,
  - e) if applicable, additional proof of subject-specific qualifications as set out in Section 2, Paragraph 1, letter b),

The requirements set out in Sentence 1, also apply to applications for a place above admission capacity, without however affecting the additional requirements applicable to that process. In addition, applicants must submit a sworn statement confirming that they have not received an offer or a conditional offer of a place in the Master's programme in Solar System Physics or parts of that programme, or a related degree programme at a university in Germany or in another European Union Member State. This statement must include the applicant's nationality.

(3) Applications that are incomplete, not in the proper form, or not submitted by the deadline will be excluded from further consideration. The submitted documents will remain with the university.

# 5 Selection and admission process

- (1) Admission is generally granted for the Solar System Physics master's degree.
- (2) Places are allocated according to the results of the university's own selection process.
- (3) Selection decisions are made as set out below:
  - a) Taking into account the final grade or GPA (Section 2, Paragraph 3), a ranking is created, with the first place on the list being awarded to the best grade. If there are several applicants with the same score, they will be ranked at random

b) In order of the ranking, selection interviews (Section 3) with the applicants will be conducted by the selection committee or persons appointed by it (Section 6). In order to limit the number of participants in the selection interviews, applications are preselected in a quantity up to twice the number of places available. The final grade (converted into points, A) is combined with the score (B) awarded in the selection interview according to Section 3 Paragraph 2 and weighted accordingly. The weighting of the final grade and the selection interview is 60% to 40%.

The final grade is converted according to the following table:

Grade	1.0-1.2	1.3-1.6	1.7-1.9	2.0-2.2	2.3-2,6	2.7-2.9	3.0-3.2	3.3-3.6	3.7-3.9	4.0
Points	12.5	12,0	11.5	11.0	10.5	10.0	9.5	9.0	8.5	8.0

The weighted grade is calculated according to the following formula:

 $[(6 \times A) + (4 \times B)] / 10$ . Based on this calculation, the selection committee or the people appointed by it create a new ranking, with the first place on the list being awarded to the applicant with the highest score achieved. If there is a tie, the average grade according to Section 2, Paragraph 3 determines the order. If there is still a tie between individual applicants, the ranking order on the list will be decided by drawing lots.

(4) Furthermore, the general provisions for enrollment according to the enrollment regulations of the university remain unaffected.

# Admissions Committee for the Master's degree programme in Solar System Physics

- (1) The Faculty of Electrical Engineering, Information Technology, Physics forms a selection committee for the preparation of the admission and the selection decisions.
- (2) This selection committee consists of three voting members who must belong to the group of university teachers or scientific staff, and one member of the student group with an advisory vote. At least one member must belong to the group of university teachers. The members and three substitutes are appointed by the Faculty Council of the Faculty of Electrical Engineering, Information Technology, Physics. The term of office for the members is two years, and for the student member, it is one year, with the possibility of reappointment. The selection committee is quorate if at least two voting members are present. The selection committee may appoint other professionally qualified persons belonging to the group of university teachers or scientific staff to conduct the selection interviews.
- 3) The Admissions Committee or the people appointed by it have the following responsibilities:
  - a) Checking that entry requirements as set out in Section 2 are met,

- b) Deciding on whether a degree programme is considered to be closely related in subject matter according to Section 2, Paragraph 2,
- c) Deciding on ancillary provisions according to Section 2, Paragraph 2, Sentence 2,
- d) Carrying out selection interviews as set out in Section 2 and Section 6, Paragraph 3, sentence 1, letter b),
- e) Ranking all applications according to their performance in the selection interviews as set out in Section 5
- f) Deciding on the success of individual applications and notifying the Admissions Office or International Office who in turn send out letters of admission or rejection to the applicants.

### 7 Selection interview process

- (1) The following principles apply to the selection interviews: Usually selection interviews for the winter semester will take place between the mid of July and the end of August. Selection interviews for the summer semester will take place between the mid of January and the end of February. Selection interviews will take place by videoconference. The University will notify applicants of the exact date and location of their interview within an appropriate period of time. The Admissions Committee or the people appointed by it (Section 6) will hold individual selection interviews of approximately 15 minutes with each applicant. A protocol regarding the essential questions and answers of the interview must be kept and signed by the selection committee or the people appointed by it. The protocol must include the date and location of the interview, the names of the members of the selection committee or the appointed people, the name of the applicant, and the evaluation.
- (2) Applicants who fail to attend their interview without good reason are excluded from the selection process. If there is valid reason, the Admissions Committee will set a new date for the selection interview at the applicant's request. Proof of the valid reason as well as the request for a new interview date must be submitted immediately, and no later than two days after the original interview date.

## 8 Notifications, wait list procedure and process completion

- (1) Applicants who are offered a place in the programme are notified by the University in writing. This notification specifies a deadline by which the applicant must accept or decline the offer in writing, either on paper or electronically. If an applicant's reply is not received within the specified deadline 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 in the programme are notified by the University in writing with information on legal remedies. If a selection procedure has been carried out

according to Section 5, the applicant's position in the ranking and the position of the last applicant admitted must be listed. They also include a request for the applicant to state, in writing (on paper or electronically) by a specified deadline, whether they wish to be wait-listed. Applicants who do not submit their reply by the deadline or in the proper form are excluded from the waitlist. Applicants must be notified of this legal consequence.

- (3) The waitlist procedure is based on the rankings as set out in Section 5, Paragraph 3 and 4.
- (4) The admissions process will end no later than the beginning of the semester. Informal applications may be submitted for any places on the programme available after that date. Places are allocated by random draw from the applications received, provided they meet the entry requirements as set out in Section 2. The application period for this starts six weeks before the beginning of the semester (1 October for winter semesters and 1 April for summer semesters) and ends with the completion of the admissions process.

# 9 Admission to a higher programme semester

- (1) The prerequisite for admission to a higher semester is a completed degree program according to Section 2, Paragraph 1, letter a), proof of knowledge and competencies according to Section 2, Paragraph 1, letter b), and the required minimum score in the selection interview according to Section 2, Paragraph 1, letter c), as well as the requirement according to Section 2, Paragraph 5. The selection committee or the people appointed by it (Section 6) may attach a condition to the finding that knowledge and competencies are missing according to Annex 1 Number 2, which requires the applicant to complete the missing qualifications for up to 15 credit points until the registration of the master's thesis.
- (2) Applicants who have not received their Bachelor's degree certificate by the end of the application period may be admitted if proof is given that they meet the entry requirements as set out in Section 2. Their Bachelor's degree certificate must then be presented on enrolment.

# 10 Entry into force

These regulations will come into effect on the day following their publication throughout the university.

1. The knowledge and competencies required according to Section 2, Paragraph 1, Letter b are generally considered to be present if knowledge and competencies have been acquired to at least the extent specified in the respective subject areas:

Subject area	Credits
Mathematical foundations (e.g.	10
Analysis, Linear Algebra, Function	
Theory, Statistics)	
Physical foundations (Mechanics,	15
Thermodynamics, Electrodynamics,	
Atomic Physics, Nuclear Physics)	

- 2. If knowledge and competencies of at least 5 credits in one or more of the following subject areas are not demonstrated, admission may be subject to the condition that these knowledge and competencies are acquired and demonstrated within two semesters:
  - Mechanics and Thermodynamics
  - Electrodynamics
  - Atomic and Nuclear Physics
- 3. For the comparison of the required knowledge and competencies, the module descriptions of the Bachelor's programme in Physics at TU Braunschweig will be used