

Special Part of the Examination Regulations for the Degree Programme „Battery and Hydrogen Technology“ Leading to the Graduation „Master of Science“ at Technische Universität Braunschweig

According to § 1 (2) of the General Examination Regulations for the Bachelor's, Master's, Diploma and Magister Degree Programmes at Technische Universität Braunschweig (APO), TU Gazette No. (TU-Verköndungsblatt Nr.) 1482 of March 24, 2023, last amended with TU Gazette No. 1689 of March 24, 2026, the Faculty Council of the Faculty of Mechanical Engineering agreed on the following Special Part of the Examination Regulations of the Degree Programme “Battery and Hydrogen Technology” Leading to the Graduation “Master of Science” on June 24, 2026.

§ 1 Standard Period of Study

The degree programme can be completed in 4 semesters (standard period of study).

§ 2 Structure and Scope of the Degree Programme

- (1) The programme is organized into modules and comprises a total of 120 credit points (LP/CP). The programme is divided into the following areas:
 - A Compulsory area
 - B Compulsory elective area
 - C Practical lab work
 - D Interdisciplinary specialization
 - E Study research project
 - F Final module
- (2) In the compulsory area, students have to complete modules as specified in Appendix 1 (Area A – Compulsory Area) and Appendix 2 (Compulsory Area) totaling 15 LP/CP.
- (3) In the compulsory elective area, students have to complete modules as specified in Appendix 1 (Area B – Compulsory Elective Area) and Appendix 2 (Compulsory Elective Area) totaling 35 LP/CP.
- (4) In practical lab work, students have to complete modules totaling 12 LP/CP, as specified in Appendix 1 (Section C – Practical Lab Work) and Appendix 2 (Practical Lab Work).
- (5) During the course of study, students have to complete 13 LP/CP in the area interdisciplinary specialization in accordance with Appendix 1 (Area D – Interdisciplinary Specialization) and Appendix 2 (Area Interdisciplinary Specialization). For further details see § 11.
- (6) A study research project worth 15 LP/CP has to be completed in accordance with Appendix 1 (Area E – Study Research Project) and Appendix 2 (Study Research Project). For further details see § 10.
- (7) The final module, as specified in Appendix 1 (Section F – Final Module) and Appendix 2 (Final Module), comprises 30 LP/CP. For further details see § 12.

§ 3 Examination and Study Achievements

- (1) The modules, qualification objectives, nature and scope of the associated coursework or examinations, and the number of credit points assigned are specified in Appendix 2. The examination content is derived from the qualification objectives of the modules.
- (2) A course, including its corresponding exam, that is assigned to multiple modules may be included only as part of one module.
- (3) Examinations have to be taken in the language of the course. In justified exceptional cases, the examiner may permit a different language for the examination.
- (4) Through a written examination or a written examination+ pursuant to § 9a or § 9j of the APO, and an oral examination or an oral examination+ pursuant to § 9b or § 9k of the APO, examinees are expected to demonstrate that they possess the fundamental knowledge required for the programme. It should also be determined that the examinee understands the interrelationships within the examination subject area and is able to contextualize and solve specific tasks and problems within this framework. The examinee may be given a selection of topics and examination tasks to choose from.
- (5) The time allotted for a written examination or a written examination+ is at least 45 minutes and no more than 240 minutes.
- (6) As part of an oral examination or an oral examination+, a reasonable number of tasks may be assigned for written completion, provided that this does not undermine the oral nature of the exam.
- (7) An oral examination or oral examination+ lasts at least 30 minutes and no more than 90 minutes. The results generally have to be announced to the examinee immediately following the examination.
- (8) Practical lab work consists of experimental work in accordance with § 9h APO. It may be completed through coursework or exams. Colloquia (oral) and/or reports (written) may be required as part of the practical lab work for academic credit or for examination purposes. Colloquia or reports cover the theoretical preparation and the development or planning, as well as the description of the steps involved and the conduct of the practical lab work, along with a critical evaluation thereof.

§ 4 Repeat Examinations

- (1) In addition to § 9b, sentence 5, of the APO, it is stipulated that, for final repeat examinations, both examiners have to be from different institutes.
- (2) An oral supplementary examination pursuant to § 13 (5) APO shall take place no earlier than five working days after the examinee has been granted access to the written examination. For the purposes of this provision, Saturdays are not considered working days.
- (3) Notwithstanding § 13 (5), sentence 8, of the APO, the date of the supplementary oral examination shall be set by the examiner so that it takes place no later than April 30 for the preceding winter semester and no later than October 31 for the preceding summer semester.

- (4) When appointing the second examiner for supplementary oral examinations pursuant to § 5 (4) APO, the primary examiner may only appoint members of the group of university professors or full-time associate lecturers from the academic subjects responsible for the respective degree programme. The second examiner is generally appointed at least three days before the date of the respective exam.

§ 5 Withdrawal and Absence

The reasons cited for the withdrawal or absence from the exam pursuant to § 11 (3) of the APO have to be submitted in writing and substantiated within three working days. For the purposes of this regulation, Saturdays are not considered working days. The Examination Board will decide on any exceptions regarding the deadline for reporting the reasons cited for withdrawal or failure to attend.

§ 6 Regulation on Free Attempts

- (1) If the free attempt pursuant to § 13 (4) APO was taken in a compulsory elective or laboratory course pursuant to § 2 (1), areas B and C, a change of the examination subject is permissible. This change has to be reported to the Examination Office in writing before the examination registration period begins. Upon request, the replaced examination subject may be classified as an additional subject. It is not permitted to reconsider the replaced examination subject in an area under § 2 (1) Areas B and C.
- (2) The extension of the period during which an exam may be taken as a free attempt, as provided for in § 13 (2), sentence 3, of the APO, is possible only if the exam for which the withdrawal is claimed was to be taken during the last semester of the standard period of study.

§ 7 Access to Examination Records

- (1) The right to access their graded written exams in accordance with § 21 (2) APO (Access to Written Examinations) is granted to examinees without the need for a request, and the examiner will announce the date at least five business days in advance. Access to the written exam has to be granted at a reasonable time and to a reasonable extent, but for at least 30 minutes.
- (2) A sufficient number of sample solutions has to be available during the examination access period and may be used to justify the grade in accordance with § 9 (4), sentence 8 of the APO. A grading rubric has to be made available no later than 14 days after the examination access period.

§ 8 Recognition of Examination Achievements

- (1) Identical exams taken as part of a concurrent programme in another degree programme will be credited automatically, without the need for an application, in accordance with § 6 (7) of the APO, regardless of the result, provided they are assigned to the compulsory coursework as defined in § 2 (1).
- (2) Upon request, the Examination Board may, in the category of compulsory elective modules pursuant to § 2 (1) recognize up to two modules that are not currently included in Appendixes 1 and/or 2, provided that these modules were completed during a study abroad programme and meaningfully complement the student's academic progress to date.

§ 9 Consultation

- (1) Deviating from § 8 (2) of the APO, the following applies: Students who have not earned at least 30 credit points by the end of the second semester should attend a counseling session. Attendance at the counseling session is not compulsory, and admission to further exams and coursework does not depend on it.

§ 10 Study Research Project

- (1) A study research project has to be completed in accordance with § 9I of the APO. The study research project is worth 15 LP/CP, has to be submitted in written form (13 LP/CP), and has to be presented orally (2 LP/CP) to the examiner in accordance with § 9o of the APO.
- (2) The topic may be assigned by university professors and full-time associate lecturers in the subjects responsible for the respective degree programme. The topic may also be assigned by retired professors in the relevant subjects.
- (3) The study research project is generally registered with the supervising institute. The registration and submission dates are also recorded there. Upon registration, the type of assignment and the assignment instructions are determined. The topic and assignment instructions have to be consistent with the purpose of the exam as specified in § 2 APO and the time allotted for completion as specified in § 9I, sentence 6, APO.
- (4) The paper has to be submitted in electronic form by the deadline to the chair of the Examination Board or to an office designated by the chair; the time of submission has to be recorded in the official record. In addition, the examiner may require that, as a rule, two bound copies be submitted to the supervising institute.
- (5) Upon submitting the paper, the examinee must certify in writing that he or she has written the paper—or, in the case of group work, the appropriately identified portion of the paper—independently and has not used any sources or aids other than those specified. In all other respects, § 9 (4) APO applies *mutatis mutandis*.
- (6) As a general rule, the study research project has to be graded by the examiner within four weeks of its submission in accordance with § 12, (2) through (4).

§ 11 Interdisciplinary Specialization

- (1) The “Interdisciplinary Specialization” module consists of a required English language course (4 LP/CP) at the C1 level (CEFR) and a required German course (4 LP/CP) at the B1 level (CEFR), as well as one or more courses totaling 5 LP/CP, which have to be selected in accordance with paragraph 2. Upon written request, the Examination Board may waive the requirement to take language courses if appropriate proof of the required language proficiency level—English C1 (CEFR), German B1 (CEFR)—has been submitted.
- (2) Courses pursuant to § 2 (1), Section D must be selected from the courses offered by Technische Universität Braunschweig or, during a study abroad programme, from the courses at the foreign university, and have to be completed with an examination in accordance with § 9 (1) of the APO.

- (3) Courses in the area of interdisciplinary specialization are generally counted as academic achievements.
- (4) Courses listed in the curriculum for the “Battery and Hydrogen Technology” Master’s degree programme (Appendices 1 and 2) cannot be counted toward the Interdisciplinary Specialization track.

§ 12 Final Module

- (1) The final module consists of a written assignment, including literature search, in the form of a master’s thesis in accordance with § 14 APO, worth 28 LP/CP, and a presentation of the results in accordance with § 9o APO, worth 2 LP/CP. Both parts have to be passed separately. If the written portion is not passed, the entire final module has to be retaken.
- (2) Admission to the final module is granted only to students who have passed the exams in all modules of the compulsory, compulsory-elective, and laboratory areas, have successfully completed the term paper, and have provided proof of passing all coursework requirements as well as fulfilling any conditions specified in the admission letter.
- (3) Deviating from paragraph 2, the Examination Board may, upon written request, admit students to the final module even if they have not yet passed all of the courses listed in paragraph 2. Admission under such conditions is contingent upon the expectation that the student can make up these examination or coursework requirements within one semester without affecting the final module.
- (4) The presentation may take place up to four weeks before the scheduled submission date of the master’s thesis.
- (5) The evaluation of the master’s thesis and the presentation generally have to be completed within six weeks of the submission of the Master’s thesis.

§ 13 Assessment of Examination Achievements and Calculation of the Overall Grade

- (1) In accordance with § 16 (2) of the APO, an overall grade is calculated for the Master’s examination. Course units from the “Interdisciplinary Specialization” area and from supplementary subjects are not taken into account when calculating the overall grade.

§ 14 Academic Degree and Certificates

- (1) Upon successful completion of the Master’s examination, the academic degree “Master of Science” (abbreviated “M.Sc.”) in the “Battery and Hydrogen Technology” programme is conferred, and degree certificates are issued in accordance with § 17 (1) of the APO. The Diploma Supplement lists the learning outcomes achieved within the programme, in accordance with Appendix 3.
- (2) The grade “passed with honors” is awarded if, when calculating the final grade in accordance with § 13 (2), a grade point average of 1.3 or lower is achieved.
- (3) The results of the additional exams and the number of LP/CP credits earned will be included on the transcript, up to a maximum of 10 exams.

- (4) Upon request, additional exams may be excluded from the transcript. A written request to this effect has to be submitted to the Examination Board no later than before the completion of the final coursework or exam.
- (5) If more than 10 additional exams are taken, or if, even following a request under paragraph 4, more than 10 additional exams would need to be included on the transcript, the additional exams will be listed on the transcript in chronological order by examination date until the maximum number of 10 additional exams listed is reached. Upon request, a certificate will be issued listing the achievements that were not included in the transcript.

§ 15 Entry Into Force

These regulations enter into force on October 1, 2026.