



**General Study and Examination Regulations
(ASPO) for Bachelor's and Master's Courses at
the Hamburg University of Technology (TUHH)**

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The Board of the Hamburg University of Technology (TUHH) approved the General Study and Examination Regulations for Bachelor’s and Master’s courses at the Hamburg University of Technology (TUHH) as per section 108, paragraph 1 of the Hamburg Higher Education Act (HmbHG) on 07 March 2018. The provisions were decided by the TUHH Academic Senate on 22 November 2017 and 28 February 2018 pursuant to section 85, paragraph 1.1 HmbHG of 18 July 2001 (HmbGVbl., p. 171) in the version dated 28 November 2017 (HmbGVbl., p. 365).

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Section 1: General

§ 1 Scope

- (1) The following General Study and Examination Regulations (ASPO) for Bachelor's and Master's courses at the Hamburg University of Technology (TUHH) shall apply to all courses at the Hamburg University of Technology (TUHH).
- (2) Subject-Specific Study and Examination Regulations (FSPO) for each course shall apply in addition to the ASPO. A provision in the FSPO is invalid if it contradicts a provision in the ASPO, unless the relevant provision in the FSPO has been adopted by the Academic Senate with an express statement accepting the deviation from the ASPO.
- (3) Module catalogues from Non-technical Complementary Courses and Business & Management are annexed to the ASPO.

§ 2 Purpose of studies

- (1) A Bachelor's course equips students with the basic subject-related and personal skills required for gaining initial professional experience or undertaking further academic study. Graduates have a broad basic knowledge and the basic skills required for academic work. Passing the Bachelor's examinations is the aim of the Bachelor's course and seen as acquiring a first professional qualification.
- (2) On a Master's course, students acquire in-depth subject-related and personal skills that enable them to enter the job market or complete a doctoral degree. A professional Master's degree additionally builds on practical work experience. Graduates have extensive professional knowledge and skills associated with academic work, as well as the ability to apply academic knowledge and to extend existing knowledge limits in theory

and practice using new methodological approaches. Passing the Master's examinations is the aim of the Master's course and seen as acquiring a second professional qualification.

§ 3 Academic degrees

- (1) The academic degree Bachelor of Science (B.Sc.) is awarded on the basis of passing the Bachelor's examinations.
- (2) The academic degree of "Master of Science" (M.Sc.), "Master of Arts" (MA), "Master of Business Administration" (MBA) or "Master of Education" (M.Ed.) is awarded on the basis of passing the Master's examinations. Further details can be found in the applicable FSPO.

Section 2: Study

§ 4 Access and admission, classification

- (1) Access and admission to study at the TUHH is regulated by the "Study Regulations for the Hamburg University of Technology (TUHH)".
- (2) Students are generally enrolled onto the first semester of a particular course. In variation from this, students who – as per section 13 – provide proof of allowable coursework will be classified in the n-th semester of the course if the sum of allowable credit points is not more than ten points lower than the number of credit points to be achieved at the end of the (n-1)-th semester as per the curriculum.

§ 5 Standard period of study

- (1) The standard period of study for a Bachelor's course is six semesters. An FSPO may provide for a standard period of study lasting seven semesters.
- (2) The standard period of study for a Master's course is four semesters. An FSPO may provide for a standard period of study lasting three semesters. In the case of professional Master's degrees, an FSPO may provide for different standard periods of study.

§ 6 Modules

- (1) Courses are divided into modules, which consist of one or more teaching and learning units that are coordinated in terms of content and time. Modules should generally be completed within one semester or in up to two consecutive semesters, in exceptional cases.
- (2) A closed module (GM) comprises one or more compulsory classes and may include coursework. The closed module is concluded with a module examination. An open module (OM) comprises several optional classes, each of which must be completed to a sufficient level and evidenced by way of examinations in order to acquire the number of credit points required by the open module. Examinations in an open module are either all graded or all ungraded.

- (3) In order to complete the degree, all compulsory modules (P) must be passed. Compulsory elective modules (WP) can be chosen from the selection provided in the curriculum for the relevant compulsory elective area. The number of credit points required as per the curriculum in a compulsory elective area is achieved by passing examinations in modules within the appropriate compulsory elective area to a sufficient extent.
- (4) In relation to compulsory elective modules, it is not possible to guarantee a complete class plan without overlap as per the curriculum due to the range on offer and possible combinations. However, the TUHH provides sample study plans for each curriculum, as part of which classes are planned without overlap so that the degree can be completed as per the sample curriculum within the standard period of study. Students are advised to select modules in such a way that they can complete their studies within the standard period of study.
- (5) In relation to open modules, it is not possible to guarantee a complete class plan without overlap as per the curriculum due to the range on offer and possible combinations. Students are advised to select classes in such a way that they can complete their studies within the standard period of study.

§ 7 Credit points

- (1) According to the European Credit Transfer and Accumulation System (ECTS), the credit points from a module or class provide information on the average total workload a student will need to complete in order to successfully complete the relevant unit. One credit point is equivalent to a workload of 30 hours.
- (2) The number of credit points assigned to a module indicates the total workload for that module. The total workload for a module is based on class attendance time and self-study time. The credit points for a module are defined in the applicable curriculum.
- (3) Credit points are earned after passing the examination and, if applicable, after completion of coursework.

§ 8 Curriculum and module handbook

- (1) The curriculum is an integral part of an FSPO. The curriculum determines which examinations must be passed in compulsory and elective modules and which coursework must be completed, as well as providing further details on the content of the studies and examinations. As a general rule, a curriculum is valid for a period of one and a half times the standard period of study of the respective course. The examination offer is maintained during this period. At the end of the above-mentioned validity period, students change to the curriculum that entered into force immediately following the lapse of the previous curriculum. This does not apply if a student has been assigned a subject for their dissertation before the end of the validity period for a curriculum; in this case, the older curriculum remains valid for that student.
- (2) A module handbook contains a detailed description of a course, as well as the modules and applicable classes.

§ 9 Classes

- (1) Classes are assigned to modules. Classes support students in achieving the qualification aims and impart the course content. Classes must be accompanied by self-study in order to achieve the learning objectives.

- (2) Classes may be of the following types:
- a. Lecture (VL):
A lecture consists of talks that are held regularly and are partly interactive, during which content is presented.
 - b. Lecture-hall exercise (HÜ)
A lecture-hall exercise repeats and reinforces the lecture content by means of examples and further tasks.
 - c. Group exercise / tutorial (GÜ):
During a group exercise or tutorial, students work on tasks related to the lecture content individually or as part of a group and are individually supported by a tutor.
 - d. Integrated lecture (IV):
An integrated lecture combines a lecture with a lecture-hall or group exercise, in which presentations alternate with stand-alone individual or group work.
 - e. Seminar (SE):
A seminar is a class in which students independently acquire knowledge and skills under professional guidance so that they are able to speak on the topic and defend the presented content as part of a discussion.
 - f. Project seminar (PS):
A project seminar is a seminar incorporating a practical element.
 - g. Internship (PR):
During an internship, technical equipment is used and/or experiments are undertaken to supplement and reinforce the content learned. Students learn how to handle and use devices, equipment and/or software systems, as well as how to evaluate their own work results.
 - h. Project-/problem-based class (PBL):
In a project-/problem-based class, students work independently to cover content based on questions or problem situations. As a rule, the class is divided into different phases, for which different tasks must be completed either individually or as part of a group. Content covered in a project-/problem-based class can reinforce particular topics relating to certain application cases or can lead to the development of a product, such as a sketch, programme, report or interpretive design. For projects that are independently prepared as term papers, proof of intermediate results (attestations) may be required in the form of accompanying face-to-face classes.
 - i. Process design class (PK):
During a process design class, students work in groups to design an entire plant. This includes conducting calculations for, and designing, individual plant components, as well as preparing full cost calculations.
- (3) Classes may be held in German or English. The class language is stipulated in the applicable curriculum. For classes held in English, it is recommended that students have reached level B2.
- (4) For compulsory elective modules and open modules, the number of participants for class types referred to in paragraph (2) letters e to i may be restricted if this is necessary for their proper implementation. The manner and criteria for selecting participants shall be stipulated and made public in an appropriate manner.
- (5) An FSPO may provide for obligatory attendance at a class type referred to in paragraph (2) letters e to i provided that the learning objective can only be achieved by personally attending the class. The nature and extent of the obligatory attendance shall be defined in the FSPO.

§ 10 Course guidance

- (1) General course guidance is offered by Academic and Student Services.
- (2) Course guidance is organised by the School of Study or the relevant department responsible for the respective course. In particular, such course guidance is offered to all students in the first two semesters of the course (section 51 paragraph (1) HmbHG).
- (3) Students who have not passed the foundation examinations from the first semester as per § 14 paragraph (3) shall seek course guidance as soon as possible following the end of the examination period for the first semester of the course.
- (4) Students who have exceeded the standard period of study must seek course guidance within two semesters following the end of the standard period of study if they have not registered for their dissertation by the end of this period (section 51 paragraph (2) clause 2 HmbHG). Students will be notified by the Central Examination Office in writing and electronically (e.g. by email) before this period lapses. If students fail to comply with the participation obligations set out in section 51 paragraph (2) clause 2 HmbHG, they shall be exmatriculated (section 42 paragraph (2) no. 7 HmbHG).

§ 11 Dual degree (dual@TUHH)

- (1) Selected TUHH courses can also be studied as part of a dual system in accordance with the following requirements. The dual degree (dual@TUHH) consists of an academic and a practical element. The academic element is completed by studying at the TUHH. The practical element is coordinated with the academic element in relation to content and timing, but takes place within a company.
- (2) The practical element of a dual degree is generally completed during the semester break. As a rule, it amounts to a minimum of 10 and a maximum of 13 weeks per semester.
- (3) As part of the practical element of the dual degree, students will acquire the necessary knowledge and skills to further support the learning objectives of the relevant curriculum modules. The practical element of the dual degree can only be completed at a company that has agreed with the TUHH to fulfil the objectives and content of the dual degree as defined in these regulations (partner company) and with which students have signed a student contract recognised by the TUHH.
- (4) The dissertation can be completed at the partner company in compliance with these study and examination regulations.
- (5) The “diploma supplement” (§ 32 paragraph (6)) contains the additional “Dual Degree” designation, as well as a comment on successful completion of the practical elements and their duration, provided that a certificate is made available upon completion of the practical element of the dual degree to the extent that is stipulated in paragraph (2).

Section 3: Examination

§ 12 Entitlement to sit examinations

- (1) A student’s right to sit examinations and undertake an examination procedure (entitlement to sit examinations) only exists for examinations provided for in the course for which they are enrolled in accordance with the curriculum. The entitlement to sit examinations expires

at the end of the semester's examination period in which students were last continuously enrolled.

- (2) Contrary to paragraph (1) clause 1, students enrolled for a Bachelor's course at the TUHH may additionally provide modules of up to 30 credit points from the range of courses offered on all Bachelor's courses at the TUHH. The same shall apply to students who are enrolled on a Master's course. Students may request to register for these examinations via the Central Examination Office.

§ 13 Recognising and crediting examinations, coursework, study periods and skills acquired outside a degree

- (1) Course and examination achievements, as well as periods of study and work experience completed at a university as part of a degree, shall be recognised provided that there are no significant differences between the knowledge and skills acquired elsewhere and those to be acquired at the TUHH. Bachelor's and Master's dissertations will not be recognised.
- (2) Failed examinations for modules taught at universities will be officially recognised for the number of examination attempts made in equivalent modules for the chosen course. Together with their enrolment documents, applicants are obliged to submit documents from their past university or universities that show the number of failed examination attempts for the individual modules. If the universities do not provide such documents, applicants must submit the number of unsuccessful attempts in writing on a self-disclosure form and confirm the accuracy of the information provided. Incorrect information on the self-disclosure form is provided at the applicant's expense.
- (3) Credits may be awarded for skills acquired in ways other than through studies. Those skills must be equivalent to those required to successfully complete a course at the TUHH. These may only constitute a maximum of 50% of the total credits to be completed at the TUHH through examinations and coursework.
- (4) Examinations and coursework that pupils have completed without university admission and enrolment will be recognised if they later start a course of higher education study.
- (5) Recognition and credits shall be decided on at the request of the responsible Board of Examiners, with the exception of the recognitions referred to in paragraph (2). Students who are enrolling at the TUHH for the first time or are re-enrolling must submit their application by the end of the first six weeks from the date of enrolment. For students who are already enrolled at the TUHH and decide to change course, the application period ends six weeks after the date of enrolment on the new course. Students who return to the TUHH from a study visit at a different university without breaking their enrolment must submit their application by the end of the first six weeks of the semester following their return. Applications not submitted by the deadline shall be rejected without being verified. If an applicant was prevented from meeting the deadline through no fault of their own, they shall, upon application, be reinstated to the previous status as per the provisions set out in section 32 of HmbVwVfG.
- (6) In order to verify the recognition of successful completion of examinations, coursework and study periods outside the TUHH, applicants must submit all available documents to verify equivalence. These documents include, for example, module and course descriptions, module handbooks, lecture notes or other documents with information on forms of teaching, content, workload, as well as knowledge and skills to be imparted. Documents that are not issued in German or English must be submitted together with a German translation, provided by a professional translator who is publicly appointed in Germany. The TUHH may set a reasonable deadline for submitting documents and,

- where relevant, their translations. If students have met their cooperation obligations as stipulated in this paragraph, the burden of proof that there are significant differences between the knowledge and skills acquired and those to be acquired on the relevant course at the TUHH lies with the TUHH.
- (7) Where examinations are to be recognised, the grade obtained shall be included in the calculation of the overall grade if the obtained grade originates from a grade system that is comparable with the grade system used in these examination regulations. If, in the case of a non-comparable grade system, it is possible to convert to the grade system used in these examination regulations, the grades are included following conversion. More details can be stipulated in separate regulations.
 - (8) In the case of non-comparable and non-convertible grade systems, the examination shall simply be considered as passed. In this case, the examination is not included when calculating the overall grade.
 - (9) Credit points for a particular examination or coursework achievement cannot be recognised for an additional examination or coursework achievement within the same course, as per section 13 paragraph (1).
 - (10) If, prior to a TUHH student undertaking a study-related period at a university abroad, a Learning Agreement¹ recognised by the TUHH has been concluded with the student and the relevant authorities, the achievements detailed in the Learning Agreement shall be recognised if they are passed. The same applies to periods of study as well as examination and coursework completed at universities outside the Federal Republic of Germany if recognition of these achievements and periods has been agreed between the TUHH and the participating universities.
 - (11) Students on a TUHH Bachelor's course who have already gained 156 credit points can complete examinations and coursework totalling up to 30 credit points from the currently valid curriculum of a TUHH Master's course under the conditions of the ASPO and applicable FSPO. § 14 paragraph (1) applies accordingly. The date on which the registration period for the selected examinations expires is the relevant date for determining whether 156 credit points have been earned. In the case of subsequent admission to a Master's degree, these achievements will be officially recognised for the Master's if they are deemed equivalent to coursework and examinations on said Master's. Acquiring credit points as per clause 1 does not entitle an individual to admission to a Master's. The student shall make a request to register for early Master's examinations via the Central Examination Office.

§ 14 Registration and admission to the examination, withdrawal

- (1) Students must register for an examination within the registration period before it; otherwise they have no right to sit the examination. The registration period will be announced by the TUHH Central Examination Office. If the examination takes place before the registration period, sitting the examination is deemed as timely registration.
- (2) The specialisation or focus should be evident from the examinations passed in line with the curriculum in force at the time. Should this not be the case, the student must state

¹ As per the rules of the relevant exchange programme, a Learning Agreement determines which modules are to be taken at the foreign university and how recognition at the TUHH is guaranteed.

their specialisation or focus when submitting the dissertation to the TUHH Central Examination Office.

- (3) An FSPO may provide for a maximum of two foundation examinations in the first semester of a Bachelor's course. Notwithstanding paragraph (1), registration for the foundation examinations and any subsequent repeat examinations shall be undertaken by the TUHH Central Examination Office. In contrast to § 24, no supplementary oral examinations are permitted in foundation examinations. An FSPO may state that it is necessary to pass foundation examinations as a prerequisite for admission to written examinations (§ 16 paragraph (2)a.) and oral examinations (§ 16 paragraph (2)d.), scheduled for the third or subsequent semesters of the course, that build on the content of the foundation examinations. In addition to the modules for foundation examinations, supplementary courses providing at least half the stipulated contact time for a regular course are usually offered in the summer semester.
- (4) An FSPO may stipulate that if a student is placed in a higher semester of the Bachelor's course as per the regulations in § 4 paragraph (2) clause 2, the foundation examinations that are still to be taken following the recognition procedure shall be taken in the examination period of the student's second semester following enrolment at the latest. Passing the foundation examinations can be made a prerequisite for admission to written examinations (§ 16 paragraph (2)a.) and oral examinations (§ 16 Paragraph (2)d.) that build on the content of the foundation examinations and take place after the student's second semester following enrolment.
- (5) A student may notify the Central Examination Office of their withdrawal from an examination on the second day prior to the examination date at the latest. Withdrawal from foundation examinations is excluded from this.
- (6) Examination registrations must be sent to the Central Examination Office. The Central Examination Office grants admission to the examination.

§ 15 Examination period and examination offer

- (1) The examination period for the winter semester begins on 16 November and ends on 15 May. The examination period for the summer semester begins on 16 May and ends on 15 November.
- (2) At least one examination date will be offered for written examinations (§ 16 paragraph (2)a.) and oral examinations (§ 16 Paragraph (2)d.) in each examination period. All other examination types as per § 16 section (2) will be offered at least once a year. In the case of professional Master's degrees and inter-university courses as per section 55 HmbHG, an FSPO may stipulate that written examinations (§ 16 paragraph (2)a.) and oral examinations (§ 16.) are also offered at least once a year.

§ 16 Examinations

- (1) The examination results to be achieved in order to be awarded a degree are stipulated in the curriculum for the relevant course.
- (2) The examination type is detailed in the curriculum. Examinations may be of the following types:
 - a. Written examination (KL):

A written examination consists of completing tasks independently, in writing, while supervised and within the time frame of at least one hour up to a maximum of three

hours. A written examination may take the form of a multiple-choice examination in whole or in part. § 19 provides further details.

- b. Written essay (SA):
A written essay consists of answering a question independently, in writing and without supervision. A written essay may also be submitted in sections throughout the semester. It may also be combined with an oral presentation on the work completed.
 - c. Practical examination (FFA):
A practical examination examines the student's practical application of theoretical principles. It may include developing a technical product, documenting a process or experiment, and/or an oral presentation. It may also be divided into a number of in-process and end-of-process sections tested throughout the semester.
 - d. Oral examination (MP):
An oral examination consists of a guided interview. The result and essential examination topics are recorded in note form. An oral examination may be held individually or as part of a group. For oral examinations held in groups, it must be possible to assign a performance to one person. Every student has the right to be examined for a minimum of 20 minutes and a maximum of 40 minutes.
 - e. Presentation (RE):
A presentation is prepared independently and given orally, usually with the help of presentation media. The presentation may be followed by a discussion or answering questions. A presentation may also include a written paper on the presentation.
 - f. Research paper (STA):
A research paper consists of a written, independently prepared piece of work on an academic topic that is not associated with a particular class. Each student is assigned an individual research paper topic. § 20 provides further details.
 - g. Dissertation:
A dissertation consists of a written, independently prepared piece of work on an academic topic that is not associated with a particular class. Each student is assigned an individual topic for their dissertation. § 21 provides further details.
- (3) Examinations are held in the language in which the module was taught. Deviating from this, the parties may agree on a different language. For examinations in bilingual modules, the examiner must announce the examination language at the beginning of the semester if the examination documents are not available in both languages.
 - (4) For examinations that require the student to be present, if requested, the student must prove their identity using an official identity card featuring a photograph.
 - (5) Examination achievements must be assigned to one person. Examinations may also be held in the form of group work if the contribution given by the individual student to be assessed is clearly identifiable and assessable, unless a joint assessment is to be made on the basis of students' soft skills.
 - (6) In the case of oral examinations, the student must be told the examination result immediately after the examination.
 - (7) Examinations for modules that are part of the compulsory element of a curriculum must be passed in order to successfully complete a course. For compulsory elective modules, students are required to gain credit points as stipulated in the curriculum by passing examinations in the relevant modules.
 - (8) For students who study according to the curriculum schedule, it must be ensured that no more than one compulsory-module examination is held each day, otherwise an alternative

date must be offered. This does not apply to examinations from Non-technical Complementary Courses and Business & Management.

§ 17 Coursework

- (1) Coursework may be an integral part of completing a module. Coursework supports students in achieving the learning objectives of a module. Furthermore, coursework serves to encourage students to study continuously and actively.
- (2) The coursework type is detailed in the curriculum. Coursework may be of the following types:
 - a. Midterm (MT):
A midterm consists of completing tasks independently, in writing and under supervision on site. It takes place during the semester.
 - b. Written essay (SA):
A written essay consists of answering a question independently, in writing and without supervision. A written essay may also be submitted in sections throughout the semester. It may also be combined with an oral presentation on the work completed.
 - c. Practical coursework (FFST):
Practical coursework examines the student's practical application of theoretical principles. It may include developing a technical product, documenting a process or experiment, and/or an oral presentation. It may also be divided into a number of in-process and end-of-process sections tested throughout the semester.
 - d. Presentation (RE):
A presentation is prepared independently and given orally, usually with the help of presentation media. The presentation may be followed by a discussion or answering questions. A presentation may also include a written paper on the presentation.
 - e. Group discussion (GD):
A group discussion consists of participating in independent teamwork as part of an on-site event that is supported by teaching staff or tutors.
 - f. Exercises (ÜA):
Exercises consist of tasks to be completed without supervision relating to the course content.
 - g. Participation in excursions (EX):
Participating in an excursion consists of a joint excursion with teaching staff for academic or educational purposes. It may also include documenting and/or reflecting on the excursion.
 - h. Attestations (TE):
Attestations provide proof of successfully passing certain milestones relating to independently prepared term papers and projects. Attestations include face-to-face appointments during which interim results are checked, discussed in groups and questions answered. Attestations are evaluated based on the written essays submitted.
- (3) When evaluating an examination, coursework may be taken into consideration for up to 20% of the mark if
 - a. The coursework was completed before the examination;
 - b. The examination was passed without crediting the coursework;

- c. A grade of 1.0 can be achieved in the examination without crediting the coursework and
- d. The creditable proportion of the coursework is given as a percentage in the curriculum.

§ 18 Computer-assisted examinations and coursework

Examinations as per section 16 paragraph 2 a. (including written multiple-choice examinations) and paragraph 2 c., as well as coursework as per section 17 paragraph 2 a., c. and f., may be carried out electronically in whole or in part. It must be ensured that:

- a. The electronic data can be clearly and permanently assigned to individual students;
- b. A student's paper is stored in an electronic document format as per section 2 paragraph 4 of the Order on electronic legal transactions in Hamburg dated 28 January 2008 in the version applicable at the time.

§ 19 Multiple-choice examinations

- (1) Written examinations as per § 16 paragraph (2) letter a may take the form of a multiple-choice examination in whole or in part. If the number of points to be achieved in the multiple-choice section of a written examination equate to less than one third of the total score, paragraphs 2 to 4 below shall not apply.
- (2) Two examiners are involved in preparing the examination and determining the pass mark. Students will be told the achievable score per task when given the task.
- (3) The pass mark is calculated as follows:
 - a. The top 5% of all participants will be determined, rounded up to the next whole number if necessary.
 - b. One point and 35% of the achievable score (rounded commercially) will be deducted from the lowest score achieved by these participants. This result represents the pass mark, which can also be corrected as necessary: If the calculation result falls below 40% of the total score, the pass mark is set at 40%; if it exceeds 60%, it is set at 60%.
 - c. If there are fewer than 100 participants, the pass mark will be set taking into account similar examinations, e.g. from previous examination periods. This shall be described in the examination documentation.

- (4) The minimum number of points to be attained for a grade level is the commercially rounded sum of the score for the pass mark determined as per paragraph 3 and the score that is also required to reach the grade level. This score equals the product of a fixed percentage per grade level and the difference between the maximum achievable total score and the score for the pass mark determined as per paragraph 3. Grade-level percentages are determined as follows:

| Grade | Percentage |
|-------|-------------------|
| 1.0 | 85% |
| 1.3 | 75% |
| 1.7 | 66% |
| 2.0 | 58% |
| 2.3 | 50% |
| 2.7 | 42% |
| 3.0 | 34% |
| 3.3 | 24% |
| 3.7 | 13% |
| 4.0 | 0% |
| 5.0 | (Below pass mark) |

§ 20 Research paper

- (1) A course FSPO may stipulate that a research paper is to be completed. A research paper introduces the student to practical problems and academic approaches. Students are provided with academic guidance.
- (2) The research paper must be written on a suitable technical subject for the course. The student must be given the opportunity to make suggestions as to the subject. The research paper may be carried out in an institution outside the university.
- (3) The dates for issuing and submitting the research paper are to be recorded. The research paper includes a presentation of between 15 and 30 minutes, which will be taken into account when grading. The research paper must be marked within six weeks of submission.

§ 21 Dissertation

- (1) The Bachelor's or Master's dissertation is the final thesis for the respective course. It is intended to demonstrate that the student is in a position to independently work on a subject-related problem according to academic methods within a set period of time. A student may only start work on their Bachelor's dissertation once they have earned at least 126 credit points for the respective Bachelor's course. A student may only start work on their Master's dissertation once they have earned at least 60 credit points for the respective Master's course. In the case of professional Master's degrees, an FSPO may provide for a different regulation for the start of the Master's dissertation.

- (2) The dissertation must be written on a subject that matches the course and must be assigned, supervised and evaluated by an expert university lecturer or a member of the TUHH with a 'habilitation' qualification. With approval from the Chair of the Board of Examiners, the dissertation may be written in an institution outside the university. It can be terminated once within the first four weeks of the writing period without giving reasons and without being considered an examination attempt.
- (3) The date of issue and the dissertation topic must be recorded at the TUHH Central Examination Office.
- (4) The Bachelor's dissertation is worth twelve credit points. This corresponds to nine weeks of full-time work. In the case of attending teaching and learning units in parallel, and also taking examinations solely from the Bachelor's course, the examiner must determine the writing period when registering the thesis. The writing period cannot exceed six months. The Master's dissertation is worth 30 credit points. This corresponds to six months of full-time work. The topic and supervision should reflect the required scope of a dissertation.
- (5) A one-time extension of the writing period of up to two months can be approved by the Chair of the Board of Examiners in the case of justified applications submitted before the end of the writing period for the dissertation. For the extension to be granted, the reasons for the extension must not be the student's fault and must be reported without delay. The reasons for the extension must be provided by the student in detail in writing. The application for an extension must contain the supervisor's explicit approval.
- (6) The dissertation has to be completed in writing. It must be submitted as two hard copies and on an electronic storage device. The digital text files must be in a common format. When submitting the dissertation, the student must confirm in writing and under oath that the work – in the case of group work, their correspondingly marked section of the work – was written independently and that no sources or aids other than those indicated were used. The dissertation may be subjected to an electronic plagiarism check.
- (7) The dissertation must be submitted to the TUHH Central Examination Office within the prescribed writing period. The submission date must be recorded. If the dissertation is not submitted by the deadline, it is considered a "fail".
- (8) After submitting the written work, the student must give a presentation of 20-30 minutes detailing the results of their work. The presentation is followed by a public university discussion. The presentation and discussion are an integral part of the dissertation.
- (9) The dissertation, including the presentation and discussion, must be evaluated within six weeks of the dissertation being submitted. It must be evaluated by two examiners. One examiner must be the issuing university lecturer. Provisions for repeating the dissertation are stipulated in § 24 paragraph (6).

§ 22 Evaluation of examinations

- (1) There are marked and unmarked examinations. The respective examiners evaluate the individual examination achievements.
- (2) The following grades are to be used for evaluating graded examination achievements:
 Grade 1.0 and 1.3 = very good = outstanding performance

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|------------------------|----------------|---|
| Grade 1.7; 2.0 and 2.3 | = good | = performance significantly above average requirements |
| Grade 2.7; 3.0 and 3.3 | = satisfactory | = performance equivalent to average requirements |
| Grade 3.7 and 4.0 | = sufficient | = performance still meets the requirements, despite its deficiencies |
| Grade 5.0 | = fail | = performance no longer meets the requirements due to significant deficiencies. |
- (3) When evaluating ungraded examination achievements, the evaluations of “pass” and “fail” are to be used.
 - (4) Each examination achievement, including any supplementary oral examination, must be evaluated by 15 May for the winter semester and 15 November for the summer semester.
 - (5) Examination results are sent electronically to the student using their TUHH email address. The student is obliged to check their TUHH email inbox regularly.

§ 23 Overall grade and overall assessment

- (1) The overall grade is calculated based on an average of the individually weighted examinations. For this, only the first decimal place after the full stop is taken into consideration; further decimal places are ignored. The credit points for the respective examinations are used to calculate the weighting factor.
- (2) The overall assessment is categorised as follows:

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| With an average of 1.0 to 1.3 inclusive: | Distinction |
| With an average of 1.4 to 1.5 inclusive: | Very good |
| With an average of 1.6 to 2.5 inclusive: | Good |
| With an average of 2.6 to 3.5 inclusive: | Satisfactory |
| With an average of 3.6 to 4.0 inclusive: | Sufficient |

§ 24 Resitting examinations, supplementary oral examinations

- (1) Examinations that receive a mark of “4.0” or higher, or are evaluated as “passed”, are deemed to have been passed and cannot be resat.
- (2) Examinations that receive a mark of “5.0”, or are evaluated as “failed”, are deemed as failed. If a student fails an examination, they may retake that examination no more than twice.
- (3) If a written examination (section 16 paragraph (2) letter a) is failed at the third attempt, the student may request that a supplementary oral examination is held on the subject of the failed written examination. A supplementary oral examination consists of a guided interview that deals with the topics covered in the failed examination or the corresponding

- module. The result and essential topics of the supplementary oral examination are recorded in note form.
- (4) If a written examination (§ 16 paragraph (2) letter a) is failed at the second attempt, the student may request a supplementary oral examination on the subject of the failed examination only if they have already passed all other examinations required to complete the degree, with the exception of the dissertation (§ 16 paragraph (2) letter g).
 - (5) Prior to a supplementary oral examination, the student must be given the opportunity to look at the examination paper. The application to sit a supplementary oral examination must be submitted in writing to the Central Examination Office no later than two weeks after the publication date of all examination results for the applicable examination period. If this deadline is missed, the right to a supplementary oral examination shall lapse. If the supplementary oral examination is passed, the examination shall be evaluated with a mark of “4.0” overall.
 - (6) If a dissertation is evaluated with a mark of 5.0, it may be repeated promptly once and, only in justified exceptional cases, a second time, taking a different topic. The Board of Examiners shall decide on the existence of a justified exceptional case. A justified exceptional case is conditional on the requirement that the reasons cannot be attributed to the student.
 - (7) A maximum of three supplementary oral examinations are permitted on Bachelor’s courses, and a maximum of two supplementary oral examinations are permitted on Master’s courses. There is no right to a supplementary oral examination if the previous examination has been completed as per § 25.
 - (8) Students are considered to have conclusively failed an examination if the examination has not been passed after all permissible resits and supplementary oral examinations have been exhausted. If an examination is deemed as having been ultimately failed, the Bachelor’s or Master’s examination is also ultimately failed. In this case, the TUHH Central Examination Office will issue the student with written notification, accompanied by instructions on how to appeal.

§ 25 Absence, deception and breach of regulation

- (1) An examination is deemed to have been “failed” if the student does not attend an examination date without a valid reason (absence) or if they abort the examination after it has been started without a valid reason (termination). The same applies if a written examination achievement is not completed within the specified writing period. If the valid reason is accepted, the student is entitled to a further examination attempt. A valid reason can no longer be provided after an uninterrupted examination has been completed.
- (2) The valid reasons given for absence must be reported in writing to the TUHH Central Examination Office within three days and substantiated. The valid reasons given for termination must be reported immediately and substantiated within three days. Illness shall be regarded as a valid reason only if it constitutes incapacity to sit an examination and is proven by a medical certificate.
- (3) If the student attempts to influence the result of the examination or coursework by deception, in particular by using unauthorised aids, the relevant examination or coursework will be assessed as “failed”. The student will not be prevented from continuing the examination. The supervisor shall, where appropriate, collect the inadmissible aids and make a note of the incident, which shall be submitted to the Board of Examiners immediately after the examination has been completed. The Board of Examiners will make

a decision on whether there has been an attempt to use deception; the student must first be given the opportunity to comment.

- (4) If an attempt to use deception as per paragraph (3) is only discovered after the final documents have been handed over, the examination must be subsequently declared as failed by the responsible Board of Examiners. If the examination has been failed, the incorrect final documents must be declared invalid and withdrawn. The student must be given four weeks in which to make a written statement before a decision is reached.
- (5) Examination candidates who interfere with proper examination conduct may be prevented from continuing the examination by the supervisor; in this case, the examination achievement in question is deemed to have been “failed” (5.0).

§ 26 Special arrangements

- (1) If a student can demonstrate that, owing to a disability, they are unable to sit examinations in accordance with the stipulated conditions or to sit them within the timeframe stipulated in these regulations, the Board of Examiners may take appropriate measures to compensate for the prejudice suffered, at the written request of the student. Alterations to examination conditions, the extension of deadlines for sitting examinations and examination via a different examination type can be considered. The same applies to coursework.
- (2) In accordance with section 88, paragraph (3) of the HmbHG, the disability ombudsman shall be involved in any decisions made as per paragraph (1).
- (3) The disability and the resulting restrictions relating to the completion of an examination must be explained and substantiated by the student. Suitable evidence, e.g. a specialist medical certificate, may be required to establish credibility.

§ 27 Protection provisions under the Maternity Protection Act

Expectant or breastfeeding mothers have the right to withdraw from foundation examinations (section 14 paragraph (3)) that take place within the specified period from six weeks prior to the expected date of delivery and up to eight weeks after delivery (or twelve weeks in the case of premature or multiple births), provided that an application for withdrawal has been submitted to the Central Examination Office before the start of the examination and the expected date of delivery or actual day of delivery has been proven by a medical certificate or a certificate issued by a midwife.

§ 28 Inspecting examination papers

- (1) Following written examinations, students can inspect their assessed examination papers on a date specified and announced by the examiner on the day of the examination. To inspect the examination papers at a later date, students can apply to the Board of Examiners in writing. As part of the inspection, the assessment and examination assessment standards must be explained to the student if requested.
- (2) Upon completion of the Bachelor’s or Master’s examination, the student shall be granted access to their examination papers on request. The application must be submitted to the TUHH Central Examination Office within one year of completing the final successful examination. The TUHH Central Examination Office will determine the inspection date and location.

§ 29 Board of Examiners

- (1) The Board of Examiners for the respective courses is responsible for organising examinations and ensuring that the provisions of the examination regulations are complied with. They carry out tasks assigned to them by the ASPO and the relevant FSPO in force at the time, and upon request, make decisions on individual cases, as well as in cases of doubt and hardship.
- (2) A Board of Examiners is made up as follows:
 - a. Three members from the university teaching staff;
 - b. One member from the academic staff and
 - c. One student.
- (3) The members of a Board of Examiners and their deputies are elected for two years by the respective School of Study committees from among those involved in the respective course; the student member and deputy is elected for one year.
- (4) The Chair and their deputy, who must both be from the TUHH university teaching staff, are elected by the respective School of Study committees.
- (5) The members of the Board of Examiners have the right to attend when examinations are being held.
- (6) The Board of Examiners does not meet publicly. However, in the case of inter-university courses, one representative from each of the universities involved may participate as a non-voting guest. The members of the Board of Examiners and guests are bound to secrecy with regard to all procedures and consultations associated with the assessment of individual students or examiners. Members of the Board of Examiners who are directly affected by a decision of the Board of Examiners must be represented by a deputy. The Board of Examiners meets as necessary, usually at the beginning and end of each examination period where there are requests or appeals to consider.
- (7) The Board of Examiners has a quorum if at least four members, including the Chair or their deputy, are present and have been invited to the meeting at least one week prior to the date of the meeting. Voting by circulars without holding a meeting shall be admissible. The Board of Examiners shall reach decisions based on a majority vote. In the event of a tie, the Chair – or in case of absence, their deputy – shall have the casting vote.
- (8) Appeals to examination matters must first be submitted to the Board of Examiners for a decision on a possible solution. If the appeal is not resolved or not fully resolved, the case together with all examination papers shall be referred to the Appeals Committee.
- (9) In urgent cases, the Chair of the Board of Examiners may reach a decision alone and will then subsequently inform the Board of Examiners of their decision. At the request of other members, the decision must be substantiated at the following meeting.

§ 30 Examiners

- (1) Examiners are appointed by the respective Board of Examiners. The Board may delegate the appointment to the Chair.
- (2) A person can be appointed as an examiner if they teach the subject full-time at the TUHH and have the qualification to be determined by the examination or an equivalent qualification as a minimum. University teaching staff and members of the TUHH with a 'habilitation' qualification may be appointed as examiners for all examinations in their subject area. Research assistants and lecturers may only be appointed as examiners for

the examination material presented in classes in which they are involved and for the examination material of modules belonging to their classes, provided they are involved in teaching duties.

- (3) Persons who are not members of the TUHH may also be appointed as examiners; paragraph (2) clauses 2 to 5 shall apply accordingly.
- (4) Examiners determine the content of examinations. They remain impartial when evaluating examinations and reach their own decisions in relation to examinations. With the exception of oral examinations, examinations must be assessed by at least two examiners if they are to be deemed failed. Oral examinations shall be conducted by several examiners, or by one examiner in the presence of a competent person.

Section 4: Final documents

§ 31 Diploma and awarding the academic degree

- (1) Upon completion of their studies, the graduate will be issued with a diploma, based on which the responsible School of Study awards the academic degree as per § 3 .
- (2) The completed course is specified on the diploma. It is written in two languages – German and English.
- (3) The diploma is signed by the Head of the School of Study and the Head of Department, and bears the TUHH seal.
- (4) In the case of a Joint Master's programme, the graduate receives a diploma in accordance with the provisions in the applicable FSPO.

§ 32 Certificate, diploma supplement, transcript of records

- (1) In addition to the diploma, the graduate will receive a certificate detailing the successful completion of the Bachelor's or Master's examinations, as well as a diploma supplement. They bear the date of the day on which the last successful examination was taken.
- (2) As a rule, the certificate must be issued within three months of passing the Bachelor's or Master's examinations.
- (3) The certificate shall state the completed course and, where applicable, the chosen specialisations and focuses. It shall also detail the examinations required to complete the course as well as any modules completed outside of the main discipline, the corresponding credit points and results, and the overall grade and overall assessment. The topics of the dissertation and, if applicable, the research paper and process design class, are also included on the certificate. It is written in two languages – German and English.
- (4) In addition, the certificate includes a grading scale which shows the relative classification of an individual's overall grade compared with the performance of other graduates on the same course. The reference group used to determine the grading scale is the cohort of the previous three academic years, which should include a minimum of 25 graduates. If the minimum number is not reached, the reference group is always extended by a whole previous cohort of graduates. No grading scale is shown if the minimum size for a reference group is not reached or if there are fewer than three graduate cohorts available.

- (5) If the number of examinations taken in compulsory elective modules exceeds the number required by the current curriculum, the examinations with the highest number of credit points are included in the overall grade. Remaining examinations shall be listed in the same way as on the certificate as an annex to the certificate. Additional examinations are not included when calculating the overall grade.
- (6) In addition to the certificate, an English diploma supplement that provides information about the underlying studies is handed out at the same time as the certificate.
- (7) The certificate, its annexes and the diploma supplement are signed by the Head of the School of Study and the Head of Department, and bear the TUHH seal.
- (8) Immediately after passing all the examinations required to obtain the relevant degree, the graduate will be issued with a completion certificate and a transcript of records.
- (9) In the case of a Joint Master's programme, the graduate receives a certificate in accordance with the provisions in the FSPO.
- (10) If the student has ultimately failed the examination, the TUHH Central Examination Office will send them a performance overview by post, detailing the passed and failed examination and coursework.
- (11) If the examination is declared invalid as per § 25 (4), the Chair of the responsible Board of Examiners shall withdraw the applicant's academic degree. The diploma, certificate, diploma supplement and transcript of records shall also be withdrawn.

Section 5: Final provisions

§ 33 Effective date and transitional arrangement

- (1) These General Study and Examination Regulations (ASPO) for Bachelor's and Master's courses at the Hamburg University of Technology (TUHH) came into effect on 01 October 2018 and supersede the General Study and Examination Regulations (ASPO) for Bachelor's and Master's courses at the Hamburg University of Technology (TUHH) dated 29 April 2009 as amended on 27 September 2017.
- (2) For students who started their studies at the TUHH prior to winter semester 2018/19, a transitional arrangement shall apply and is detailed and published in a separate administrative provision.

22 November 2017 and 28 February 2018

Hamburg University of Technology (TUHH)