

This document is a translation and is provided for information purposes only. In the event of any inconsistency between the German version and the English version, only the German version shall apply.

A corrected version of the amended examination regulations for the Master's Degree Programme Computer Science, last published in the official bulletin of Gottfried Wilhelm Leibniz Universität Hannover 16/2022 of 08.09.2022, is published on the basis of the decision taken on 02.11.2022 by the Dean of the Faculty of Electrical Engineering and Computer Science as a matter of urgency and the approval issued on 09.11.2022 by the President as a matter of urgency. It shall enter into force upon publication in the official bulletin.

**Amendments to the Examination Regulations for the Master's Degree Programme
Computer Science
at Gottfried Wilhelm Leibniz Universität Hannover of 23.03.2017,
as amended on 18.09.2018, 13.08.2019, 01.09.2020, 30.07.2021 and 09.09.2022**

The Faculty of Electrical Engineering and Computer Science of Gottfried Wilhelm Leibniz Universität Hannover has issued the following amended examination regulations as per section 7 paragraph 3 and section 44 paragraph 1 of the Lower Saxony Higher Education Act (NHG):

Overview

Part One: General information

Section 1	Examination Purpose and Academic Degree
Section 2	Duration and Structure of the Degree Programme
Section 3	Responsibility (Dean of Studies, Examination Board)

Part Two: Master's Examination

Section 4	Structure and Content of the Examination
Section 5	Examiners and Observers
Section 6	Coursework and Assessments
Section 7	Master's Thesis
Section 8	Passing and Failing
Section 9	Additional Modules and Examinations
Section 10	Recognition of Previous Coursework and Assessments
Section 10a	Placement Examinations for Refugees
Section 11	Distance Learning

Part Three: Examination Procedure

Section 12	Admission to Assessments
Section 13	Registration
Section 14	Resit
Section 15	Late Submission, Withdrawal, Deadline Extension
Section 16	Assessment Procedure in Cases of Hardship
Section 17	Evaluation of Assessments
Section 18	Deceit, Breach of Regulations
Section 19	Credit Points for Modules
Section 20	Calculation of the Overall Mark
Section 21	Certificates of Results and Other Documents
Section 22	Access to Examination Records

Section 23 Procedural Provisions

Part Four: Final Provisions

Section 24 Entry into Force and Interim Provisions

Part One: General information

Section 1 Examination Purpose and Academic Degree

- (1) ¹The master's degree constitutes further academic qualification in a professional field. ²The master's examination aims to establish whether the examination candidate is capable of working independently at an advanced level according to scientific or scientific-artistic principles and is capable of applying academic knowledge. Furthermore, it serves to determine whether the examination candidate has gained a subject-related overview of the academic field and has acquired the knowledge and competence necessary for the transition to professional practice.
- (2) Upon successful completion of the master's examination, Gottfried Wilhelm Leibniz Universität Hannover shall confer the academic degree "Master of Science (M. Sc.)".

Section 2 Duration and Structure of the Degree Programme

¹The standard period of study is two years. ²The time required for class attendance and independent study is 120 ECTS (credit points) at 30 hours each. ³The degree programme is organised into four semesters.

Section 3 Responsibility (Dean of Studies, Examination Board)

- (1) The examination board authorised to perform such duties by the faculty council in agreement with the dean of studies is responsible for implementation of the obligations set out in these examination regulations.
- (2) ¹The examination board comprises five members, three of whom are from the group of professors and junior professors, one is from the group of academic staff and one from the group of students. ²The members of the examination board and their deputies are appointed by the respective group representatives. ³The chairperson and deputy chairperson are appointed by the examination board and must be members of the group of professors and junior professors or members who have completed their habilitation. ⁴The student member may only adopt an advisory role with regard to grading or decisions concerning recognition of assessments. ⁵If not appointed as a member of the examination board, the dean of studies may participate in meetings of the examination board in an advisory role.
- (3) ¹The members of the examination board and their deputies are subject to official secrecy. ²If they are not employed in public service, they must be sworn to secrecy by the chairperson.
- (4) ¹The examination board has a quorum provided that the majority of the members eligible to vote are present. ²Resolutions shall be passed by a majority of the valid votes cast; abstention from voting shall not be considered as a vote cast.
- (5) ¹The meetings of the examination board are not open to the public. ²Minutes shall be taken of the meetings of the examination board. ³The minutes shall document significant matters discussed and the decisions made.
- (6) Members of the examination board are entitled to observe examinations.
- (7) ¹The examination board may delegate authority to the chairperson and deputy chairperson, subject to revocation. ²The examination board may appoint a body to perform its duties. ³The chairperson shall prepare and implement the resolutions of the examination board and report to the examination board on a regular basis regarding these activities. ⁴Delegation of authority to the chairperson or deputy chairperson shall not be permissible for the cases specified in section 18 paragraph 1.
- (8) The examination board may establish its own procedural rules.

Part Two: Master's Examination

Section 4 Structure and Content of the Examination

- (1) ¹The master's examination is conducted during the course of the degree programme. ²It comprises assessments and, as appropriate, coursework in compulsory modules; and, as appropriate, compulsory elective modules, elective modules and the compulsory module "master's thesis" in accordance with appendix 1. ³The modules as per sentence 2 are organised into areas of expertise.
- (2) The courses corresponding to the modules can be found in the module handbook or the course catalogue.
- (3) not applicable
- (4) ¹As a rule, courses and examinations are conducted in German. ²Courses and examinations may also be conducted in English, provided that this is indicated accordingly in the module handbook. ³Examinations may be conducted in English if agreed with or determined by the examiner.

Section 5 Examiners and Observers

¹The responsible body specified in section 3 shall appoint members of the group of professors and junior professors from the Faculty of Electrical Engineering and Computer Science of Gottfried Wilhelm Leibniz Universität Hannover as authorised examiners for the modules of the degree programme Computer Science as well as the observers. ²The responsible body specified in section 3 may appoint further examiners, provided that they hold at least the qualification that is to be ascertained through the said examination or an equivalent qualification. ³Provided that they meet the requirements set out in sentence 2, examiners may also be appointed who are not members or affiliates of Gottfried Wilhelm Leibniz Universität Hannover. ⁴Observers must hold at least the qualification that is to be ascertained through the said examination or an equivalent qualification in order to be appointed. ⁵The responsible body as specified in section 3 may also delegate the appointment of observers to the examiners.

Section 6 Coursework and Assessments

- (1) ¹Coursework comprises ungraded pieces of work that may be required in a module/a course in order to practice skills. ²The required coursework is explained in more detail in appendix 1 and/or the respective module handbook; coursework is determined by the teaching staff at the latest by the beginning of the course. ³As a rule, coursework is to be completed within the scope of the relevant course.
- (2) Assessments include the master's thesis (MA), term papers (HA), written examinations (K), multiple-choice examinations (KA), oral examinations (MP), placement reports (PB), project-related examinations (PJ), practical sports presentations (SP), independent assignments (ST) and course-accompanying examinations (VbP). ²Further details on assessment types are specified in appendix 2.1.
- (3) ¹If alternative assessment types are specified for a module in appendix 1 or if one assessment type can be replaced by another, notification of the assessment type must occur before 15.10. for the winter semester and before 15.04. for the summer semester. ²The same applies to the weighting of individual components if a course-accompanying examination (VbP) is specified in appendix 1.
- (4) Coursework and assessments may be conducted as group work, provided that individual contributions can be clearly defined and evaluated separately according to objective criteria.
- (5) When submitting written term papers (coursework and assessments), students must declare in writing that
 - a) the work was completed independently,
 - b) no sources or resources other than those indicated were used,
 - c) all passages of the work that make reference to other sources, whether through direct quotation or paraphrasing, have been indicated accordingly and
 - d) the paper has not previously been submitted to an examining authority in the same or a similar form.
- (6) not applicable
- (7) ¹Practical evaluations ("Testate") may count additionally towards an assessment. ²They monitor learning progress and are only assigned to one individual assessment. ³Individual criteria such as homework assignments or short assessments (oral or written) may count towards them. ⁴Practical evaluations are not explicitly indicated in the certificate of results; subject to the examiner's stipulations, they count towards the assessment with a maximum weighting of 25 per cent. ⁵It must also be possible to pass the assessment without a practical evaluation. ⁶Subject to the examiner's stipulations, the result of a practical

evaluation may remain unaffected regardless of whether the assessment is passed. ⁷The examiner must announce (via notice board) the conditions under which practical evaluations will be conducted and how they count towards assessment marks by the start of the course at the latest.

Section 7 Master's Thesis

- (1) ¹The master's thesis module comprises the master's thesis and, if applicable, an oral assessment and/or a piece of coursework as defined in appendix 1. ²The master's thesis aims to illustrate that the examination candidate is able to independently apply academic methods to address an issue in the field within a predetermined deadline. ³30 credit points shall be awarded for the successfully completed master's thesis module.
- (2) ¹The topic of the master's thesis must be appropriate in view of the purpose of the examination (section 1 paragraph 1 sentence 2) and the period of time provided for its completion as set out in paragraph 4. ²The topic of the thesis may not be assigned until successful admission of the student to the master's thesis as per section 12 paragraph 3.
- (3) ¹The student may return the topic once within the first third of the completion period. ²Renewed registration for the master's thesis module must occur within six months of returning the topic. ³If registration does not occur within this period, a topic determined by the first examiner shall be assigned, with a deadline specified in accordance with paragraph 4 sentence 1. ⁴Section 15 paragraphs 4 and 5 shall apply accordingly.
- (4) ¹The master's thesis must be submitted both in printed and electronic form within six months from the date of assignment. ²The master's thesis should be marked by both examiners within six weeks – within ten weeks at the latest.
- (5) When submitting the master's thesis, students must declare in writing that
 - a) the work was completed independently,
 - b) no sources or resources other than those indicated were used,
 - c) all passages of the work that make reference to other sources, whether through direct quotation or paraphrasing, have been indicated accordingly and
 - d) the paper has not previously been submitted to an examining authority in the same or a similar form.
- (6) ¹The assessment process for the master's thesis module can be found in the module description in the module handbook. ²If the master's thesis module comprises more than one assessment, the mark shall be composed in accordance with appendix 1.
- (7) ¹The master's thesis must be written in German; in accordance with appendix 1 and in agreement with the examiners it may be written in English. ²In justified individual cases, students may also be permitted to write the thesis in a different language. ³The responsible body specified in section 3 shall decide upon applications as per sentence 2, at the latest when deciding on admission (section 12).
- (8) ¹The first examiner of the master's thesis (MA) must be a member of the Faculty of Electrical Engineering and Computer Science.

Section 8 Passing and Failing the Master's Examination

- (1) The master's examination has been passed if the modules specified in section 4 in conjunction with appendix 1 have been passed and a minimum of 120 ECTS credit points have been attained.
- (2) ¹Failure of the master's examination shall be considered final if repetition of a failed assessment that is required in accordance with section 4 is no longer possible in accordance with section 14. ²Written notification shall be issued in the case of final failure of the master's examination.

Section 9 Additional Modules and Examinations

- (1) ¹Students may take further examinations in addition to those specified in appendix 1 as necessary for attaining the minimum required credit points for this degree programme (additional examinations). ²The same applies regarding completion of additional modules of this degree programme (additional modules). ³Upon application to the responsible body specified in section 3, examinations and modules outside of the degree programme may also be taken provided that this is approved by the examiner.
- (2) Upon application to the responsible body specified in section 3, results from additional examinations and modules shall be recorded in the final degree documents and any further documents as set out in section 21; however, results from additional examinations and modules shall not contribute to the overall mark.

Section 10 Recognition of Previous Coursework and Assessments

- (1) ¹Previous coursework and assessments can be recognised under the conditions below. ²Applications for recognition should be submitted at the beginning of the degree programme. ³Applications are to be submitted to the responsible body specified in section 3. ⁴As a rule, a decision shall be taken on the application within six weeks. ⁵The deadline for the decision shall apply from the date on which all documents required for the decision have been received. ⁶Coursework and assessments previously completed within the scope of a degree programme at Gottfried Wilhelm Leibniz Universität shall be recognised automatically.
- ²Coursework and assessments that were completed at a university in Germany or abroad shall be recognised in accordance with the Convention on the Recognition of Qualifications concerning Higher Education in the European Region dated 11 April 1997 (Lisbon Recognition Convention), provided that there are no substantial differences to the coursework and assessments required under these examination regulations. ²In case of doubt, statements must be obtained from the examiner – a member of Gottfried Wilhelm Leibniz Universität Hannover authorised (in accordance with section 5) to examine the module for which recognition has been requested – or from the Central Office for Foreign Education (*Zentralstelle für ausländisches Bildungswesen – ZAB*). ³In the event of lack of equivalence or substantial differences, the burden of proof lies with Gottfried Wilhelm Leibniz Universität Hannover. ⁴The process shall be governed by the Orientation framework of Gottfried Wilhelm Leibniz Universität Hannover for the recognition of previously completed coursework and assessments (*Orientierungsrahmen zur Anerkennung von Studien- und Prüfungsleistungen der Gottfried Wilhelm Leibniz Universität*).
- (3) ¹Professional qualifications acquired outside of the degree programme shall be recognised to an extent of up to 50 percent of the required credit points as per section 2, provided that they are equivalent. ²In the event of lack of equivalence or substantial differences, the burden of proof lies with Gottfried Wilhelm Leibniz Universität Hannover. ³The process is governed by the orientation framework of Gottfried Wilhelm Leibniz Universität Hannover for the recognition of acquired professional competence (*Orientierungsrahmen für die Anerkennung beruflich erworbener Kompetenzen der Gottfried Wilhelm Leibniz Universität*).
- (4) ¹When previously completed assessments are recognised, the marks are recognised as well or – if the marking scale differs – converted; the corresponding periods of study are recognised and credit points are awarded as per appendix 1. ²If no comparable marking system exists, the assessment shall remain ungraded; in particular, this shall apply to the case specified in paragraph 3 sentence 1. ³Recognised performance shall be indicated in the final degree documents.
- (5) The applicant shall be informed in writing regarding the decision whether recognition is granted or not; section 23 paragraph 1 must be observed.

Section 10a Placement Examinations for Refugees

Persons who have substantiated that, due to being refugees, they cannot provide evidence of previously completed academic study and assessments can take a special placement examination to prove that they have the knowledge and skills necessary to complete the degree programme in accordance with the examination regulations; their knowledge and skills shall be credited towards modules.

Section 11 Distance Learning

Selected modules may also be offered as distance learning modules by resolution of the responsible body specified in section 3.

Part Three: Examination Procedure

Section 12 Admission to Assessments

- (1) ¹Those enrolled in a master's degree programme at Gottfried Wilhelm Leibniz Universität Hannover are eligible to take examinations in the relevant degree programme – taking into account paragraph 2. ²Further requirements for admission to individual assessments can be found in appendix 1.

- (2) Admission to examinations in master's degree programmes will be denied if the student is no longer entitled to take an examination in a comparable degree programme, in particular a degree programme in computer science.
- (3) ¹Students must apply for admission to the master's thesis. ²Admission to the master's thesis requires that the student has fulfilled the requirements specified in appendix 1. ³Should there be valid reason, the responsible body specified in section 3 shall decide upon exceptions.
- (4) ¹Admission in accordance with paragraph 3 shall be denied if the admission requirements have not been met. ²The examination candidate shall be notified if admission is denied.

Section 13 Registration

¹Registration is necessary for each individual assessment and resit, within the period set out in appendix 3.1. ²In exceptional circumstances, registration may be permitted outside of the stipulated period; such applications must be made to the responsible body specified in section 3. ³Registration/admission to the master's thesis implies registration for all assessments required in this module in accordance with appendix 1. ⁴The responsible body specified in section 3 may determine that registration is also necessary for individual pieces of coursework.

Section 14 Resit

- (1) ¹Students cannot resit assessments they have passed. ²Students may resit a failed assessment twice. ³The master's thesis as well as independent assignments (ST) may however only be repeated once. ⁴Students must resit assessments from compulsory modules and compulsory elective modules that have already been started until they pass or until it is no longer possible to resit them, in accordance with sentence 2 or sentence 3; section 19 paragraph 2 sentence 3 and section 19 paragraph 3 sentence 3 shall remain unaffected. ⁵The first time an examination is taken or the time of assignment of the topic shall be deemed to be the beginning of the assessment. ⁶Students are not required to resit failed assessments of elective modules; they may replace them with other elective modules. ⁷In the case of failed course-accompanying examinations (VbP), all assessment components must be repeated.
- (2) ¹Assessments may be repeated as a different assessment type – selected from those specified in section 6 paragraph 2 – at the discretion of the examiner. ²The assessment type must be announced by the start of the registration period (section 13 sentence 1).
- (3) ¹For the final attempt to repeat an assessment, the mark “insufficient” (*nicht ausreichend*) – for an written examination actually taken – or “failed” (*nicht bestanden*) – in the case of ungraded written examinations – may only be awarded after a supplementary assessment has been taken. ²As a rule, the supplementary assessment, which must be based on the content of the previous written examination, shall be conducted within six weeks after results have been announced. ³If the supplementary assessment is conducted as an oral examination, an observer must be present at the examination in addition to the examiner. ⁴As a rule, an oral supplementary assessment should not exceed a maximum duration of 20 minutes. ⁵The supplementary assessment may be taken as another assessment type, selected from those specified in section 6 paragraph 2, but not as a written examination. ⁶If the student has passed the assessment following the supplementary assessment, only the mark “sufficient” (*ausreichend* – 4.0) – or “passed” (*bestanden*) in the case of ungraded assessments – may be awarded. ⁷A supplementary assessment shall not be permissible if section 18 applies with regard to evaluation of the written assessment. ⁸Once results for the final resit have been announced, the Examination Office shall invite students at least three weeks in advance to take the supplementary assessment. ⁹Section 15 paragraphs 4 and 5 shall apply accordingly.

Section 15 Late Submission, Withdrawal, Deadline Extension

- (1) ¹Students can deregister from a written examination (whether or not it is a multiple-choice examination, graded or ungraded) up until seven calendar days before the start of the examination. ²Students can deregister from an oral examination or practical sports presentation up until one calendar day before the start of the examination. ³Students can deregister from all other assessment types specified in appendix 2 up until the start of the assessment. ⁴This does not apply to returning a topic if this occurs within the deadline specified in section 7 paragraph 3 – or appendix 2 in the case of an independent assignment (ST).
- (2) ¹For assessments with a submission deadline, assignment of the topic shall be determined as the start of the examination. ²For course-accompanying examinations (VbP), starting the first assessment component shall be deemed as the start of the examination, as per section 14 paragraph 1 sentence 5.

³Should the student deregister from the first assessment component of a VbP, this deregistration shall apply for the entire VbP. ⁴Students may deregister in accordance with paragraph 1 sentences 1 to 3 without giving a reason.

- (3) ¹Deregistration from written examinations in accordance with paragraph 1 sentence 1 must occur online via the examination system. ²For oral examinations and practical sports presentations, deregistration in accordance with paragraph 1 sentence 2 must occur in writing, via email or in a form determined by the examiner. ³The method used to deregister in accordance with sentence 2 shall also apply for assessments specified in appendix 2 that involve assignment of a topic.
- (4) ¹If an examination candidate fails to meet a fixed submission deadline, does not withdraw until after the start of the assessment, does not attend a scheduled written examination, oral examination or practical sports presentation, or does not withdraw until after the deadline defined in paragraph 1 sentences 1 and 2, the assessment concerned shall be deemed “failed” (*nicht bestanden*).
- (5) ¹However, in deviation to paragraph 4, if valid reason for failure to meet a submission deadline, absence from an examination or withdrawal is promptly provided and substantiated in writing to the responsible body specified in section 3, the assessment shall be deemed as not taken. ³In the event of illness, the student must provide a doctor’s certificate and – at the request of the responsible body specified in section 3 – a medical certificate issued by a public medical officer (*Amtsarzt*). ³The medical certificate must include a description of the health impairment and must state the resulting hindrance to the examination concerned. ⁴The form in appendix 4 should be used for this purpose. ⁵The responsible body specified in section 3 shall decide upon recognition of valid reason within two weeks after the medical certificate has been submitted. ⁶Sentences 2 and 5 shall also apply with respect to illness and the resulting necessary care for a close relative. ⁷Close relatives are your children, parents, grandparents, as well as your spouse or partner and their children.
- (6) ¹If valid reason for failure to meet a submission deadline is credibly proven, the responsible body specified in section 3 may extend the deadline by a maximum of a third of the original completion period. ²Further extension of the deadline is only permitted in justified individual cases. ³If a further extension of the deadline is disproportionate, the responsible body specified in section 3 can decide that a new topic be issued. ⁴In this case, the assessment shall be deemed as not taken.

Section 16 Assessment Procedure in Cases of Hardship

¹The responsible body specified in section 3 shall enable students who provide evidence – in the form of a doctor’s certificate or medical certificate issued by a medical specialist or public medical officer (*Amtsarzt*) – of a serious long-term health issue, to take assessments in an equivalent alternative form, on another date, or within other deadlines. ²Should other valid reasons be substantiated – particularly maternity leave and parental leave – these shall be dealt with accordingly.

Section 17 Evaluation of Assessments

- (1) ¹As a rule, assessments shall be evaluated by the examiners within one month; further details are specified in appendix 3.2. ²As a rule, assessments are graded. ³Coursework and ungraded assessments are evaluated as “passed” (*bestanden*) or “failed” (*nicht bestanden*).

⁴The following classifications are to be used for evaluating assessments:

1.0; 1.3	= “very good” (<i>sehr gut</i>)	= a particularly outstanding performance,
1.7; 2.0; 2.3	= “good” (<i>gut</i>)	= a performance well above average,
2.7; 3.0; 3.3	= “satisfactory” (<i>befriedigend</i>)	= an average performance in every respect,
3.7; 4.0	= “sufficient” (<i>ausreichend</i>)	= a performance that fulfils the basic requirements despite shortcomings,
5.0	= “insufficient” (<i>nicht ausreichend</i>)	= a performance that does not fulfil the requirements due to serious shortcomings.

⁵An assessment evaluated as “insufficient” (*nicht ausreichend*) has been failed.

- (2) ¹If an assessment is evaluated by two examiners, it is only deemed as passed if both examiners evaluate it as “passed” (*bestanden*), “sufficient” (*ausreichend*) or better. ²In this case, the mark is calculated as the average of the individual marks awarded by the examiners. ³Section 20 paragraph 3 sentence 4 shall apply accordingly.
- (3) ¹For a course-accompanying examination (VbP) as per section 6 paragraph 3 sentence 2, the individual assessment components shall be evaluated in accordance with the classifications set out in section 17

paragraph 1. ²Using the weighting predetermined for the individual marks, the overall mark for the course-accompanying examination (VbP) shall be calculated as set out in section 20 paragraph 3 sentences 1, 2 and 4. ³A course-accompanying examination (VbP) is deemed passed if the overall grade is 4.0 or better. It is irrelevant here whether individual assessment components have not been passed.

- (4) ¹An examination conducted in choice format (e.g. single choice or multiple choice) is deemed passed if the exam candidate has attained at least 50 per cent of the maximum points available (absolute pass mark). ²In cases however where the average of all examinations minus 18 per cent is worse than the absolute pass mark, the resulting value shall be deemed the relative pass mark. ³To calculate each examinee's results, the difference between the relative and absolute pass mark shall be added to their points. ⁴In the case of repeated assessments, the average performance of the examinees from the first possible examination date shall apply.
- (5) ¹If the examinee has achieved the minimum points required for passing an examination conducted in choice format as specified in paragraph 4, the following marks shall be awarded:
- 1.0 = "very good" ("sehr gut"), if at least 95 per cent,
 - 1.3 = "very good" ("sehr gut"), if at least 90 per cent,
 - 1.7 = "good" ("gut"), if at least 85 per cent,
 - 2.0 = "good" ("gut"), if at least 80 per cent,
 - 2.3 = "good" ("gut"), if at least 75 per cent,
 - 2.7 = "satisfactory" ("befriedigend"), if at least 70 per cent,
 - 3.0 = "satisfactory" ("befriedigend"), if at least 65 per cent,
 - 3.3 = "satisfactory" ("befriedigend"), if at least 60 per cent,
 - 3.7 = "sufficient" ("ausreichend"), if at least 55 per cent and
 - 4.0 = "sufficient" ("ausreichend"), if the minimum
- available points have been attained. ²Should the examinee fail to achieve the minimum points required for passing, the examination shall be deemed "failed" ("nicht bestanden").

Section 18 Deceit, Breach of Regulations

- (1) ¹Attempts to influence the outcome of an assessment or coursework through deceit shall result in evaluation of the assessment concerned as "failed" (*nicht bestanden*). ²Carrying unauthorised resources after the assessment has started shall always be considered attempted deceit. ³Electronic communication devices are also considered unauthorised resources. ⁴In particularly serious cases – particularly repeated breach of regulations as per sentence 2 or plagiarism – the responsible body specified in section 3 may exclude the examination candidate from completing further assessments and coursework, or deem irrevocable failure of the entire examination. ⁵Sentence 4 shall also apply in the event of breach of regulations in other degree programmes at Gottfried Wilhelm Leibniz Universität Hannover.
- (2) ¹Those who breach regulations may be excluded from continuing the assessment concerned; in this case, the assessment concerned shall be evaluated as "failed" (*nicht bestanden*). ²Section 14 shall remain unaffected, except in the cases specified in section 18 paragraph 1 sentence 4.

Section 19 Credit Points for Modules

- (1) ¹The credit points listed in appendix 1 are awarded for a module if the corresponding coursework has been completed and the required assessments have been passed or evaluated as "sufficient" (*ausreichend*) or better. ²For modules assessed in the form of examinations covering multiple modules (module group) as per appendix 1, credit points are not awarded until the examination covering multiple modules has been passed.
- (2) ¹A module has been passed once all of the credit points stipulated in appendix 1 have been attained. ²A module group is considered passed if all modules relating to the examination and the examination covering multiple modules have been passed.
- (3) ¹In areas other than the compulsory modules specified in appendix 1, more modules can be selected and completed than is necessary to achieve the required credit points. ²Calculation of the overall mark is regulated by section 20 paragraphs 1 to 3. ³Students who have attained the credit points required for the overall progress review and have passed the prescribed number of compulsory elective modules or elective modules may apply to discontinue the examination process for the remaining compulsory elective modules or elective modules that they have started but not yet passed.

- (4) An area of expertise has been passed if all the respective modules as per appendix 1 have been passed.

Section 20 Calculation of the Overall Mark

- (1) ¹The best marks from passed compulsory modules, compulsory elective modules and elective modules shall be used to calculate the overall mark as set out in paragraph 3, unless otherwise requested by the student. ²The other passed compulsory elective modules and elective modules shall be treated as additional modules as defined in section 9.
- (2) ¹To calculate the overall mark as per paragraph 3, only the marks from modules necessary to achieve the credit points specified in section 4 may be taken into account. ²If selection of the final module necessary to achieve the credit points specified in section 4 results in slightly exceeding this number of credit points, the modules shall be taken into account to calculate the overall mark as per paragraph 3.
- (3) ¹The overall mark for the master's examination is the arithmetic mean of the marks of all graded modules as per section 17 paragraphs 1 and 2. ²The credit points listed there shall be used for weighting unless particular weightings are specified in appendix 1. ³The overall mark shall be:
- for an average of up to 1.5: "very good" (*sehr gut*),
 - for an average of more than 1.5 up to 2.5: "good" (*gut*),
 - for an average of more than 2.5 up to 3.5: "satisfactory" (*befriedigend*),
 - for an average of more than 3.5 up to 4.0: "sufficient" (*ausreichend*),
 - for an average of more than 4.0: "failed" (*nicht bestanden*).
- ⁴To calculate the overall mark as per sentence 3, only the first decimal place shall be taken into account; all further decimal places shall be omitted without rounding up or down.
- (4) If the overall mark of the master's examination is 1.3 or better and the master's thesis achieves a mark of 1.0, the classification "with distinction" shall be awarded and indicated on the degree documents as per section 21.
- (5) ¹Unless stipulated otherwise in appendix 1, the arithmetic mean of all graded assessments assigned to the module shall form the mark for the module. ²The particular weightings or proportionate credit points specified in the appendices shall be used for weighting. ³If no particular weighting is specified for modules with multiple graded assessments or if credit points are not allocated proportionately to assessments, the assessments shall hold equal weighting to form the module mark. ⁴In accordance with paragraph 3 sentence 4, only the first decimal place will be taken into account to form the mark for the module. ⁵All further decimal places will be omitted without rounding up or down.
- (6) ¹The marks from passed graded assessments or modules within the scope of the module or module group shall form the mark for the module or module group as specified in paragraph 3. ²The same applies for calculating the overall mark of an area of expertise.

Section 21 Certificates of Results and Other Documents

- (1) ¹A degree certificate (*Urkunde*) featuring the awarded academic degree and final degree documents shall be issued for the successfully completed master's degree. ²The final degree documents comprise a certificate of results (*Zeugnis*) and a record of passed modules (*Verzeichnis der bestanden Module*). ³Furthermore, students will receive a diploma supplement and a grading table confirming the relative ECTS grade distribution (*Einstufungstabelle*); upon request, confirmation of the overall degree mark in the form of a grade point average (GPA) is also available from the examination office.
- (2) ¹Provided that no additional subsections are specified in appendix 1 in conjunction with section 20 paragraph 6, the certificate of results (*Zeugnis*) shows the modules and their marks, the title of the master's thesis and its mark, the attained credit points as well as the overall mark awarded for the academic degree and – if applicable – the rating "with distinction" (*mit Auszeichnung*; section 20 paragraph 4). ²The record of passed modules (*Verzeichnis der bestanden Module*) – including the master's thesis module – indicates the respective courses and credit points as well as marks or evaluations of assessments. ³All marks shall be shown as decimal numbers. ⁴The date on which the final module relevant for calculation of the overall mark as per section 20 paragraph 1 is passed shall be the date of completion of the master's degree indicated on all documents. ⁵The issue date of all final degree documents shall be the date of printing.
- (3) ¹The diploma supplement includes a description of the qualifications achieved through the degree programme as well as the overall mark attained as per section 20 paragraph 3. ²Paragraph 2 sentences 3 to 5 shall apply accordingly.

- (4) ¹Confirmation of the relative ECTS grade distribution is issued in the form of a grading table. ²The calculation is based on the ECTS Users' Guide of the European Commission, as amended. ³The responsible body specified in section 3 shall determine the parameters for cohort formation within the framework specifications of the Presidential Board and shall make them available to the examination office.
- (5) ¹The document confirming the overall mark for the degree as a grade point average (GPA) additionally shows the assessments indicated in the certificate of results (*Zeugnis*) as per paragraph 2 as the following GPA equivalent grades:

Mark	Equivalent Grade
1.0	= 4.0
1.3	= 3.7
1.7	= 3.3
2.0	= 3.0
2.3	= 2.7
2.7	= 2.3
3.0	= 2.0
3.3	= 1.7
3.7	= 1.3
4.0	= 1.0

²The equivalent grades of these assessments are used – as specified in section 20 paragraph 6 – to calculate the equivalent grades for the module marks. ³In deviation to section 20 paragraph 3, the marks shall be rounded up to the first decimal place. ⁴Using the equivalent grades of these modules, the GPA shall be calculated as the average of the equivalent grades in accordance with section 20 paragraphs 1 and 2. ⁵When calculating the overall mark as per sentence 4, it shall be rounded up to the first decimal place.

- (6) ¹In the case of section 8 paragraph 2 and when a student otherwise discontinues the degree programme concerned at Gottfried Wilhelm Leibniz Universität Hannover, written confirmation shall be issued upon request specifying passed assessments and modules, their marks and the credit points awarded. ²All marks shall be shown as decimal numbers. ³If applicable, written confirmation shall also indicate irrevocable failure of the degree programme.
- (7) ¹All documents stated in paragraph 1 shall be issued in German. ²Additionally, English versions of the documents shall be provided by the examination office.

Section 22 Access to Examination Records

¹After completing a module examination, upon request students are granted access by the Examination Office to the complete examination records. ²The application must be submitted at the latest within one year of announcement of results or issuance of the certificate of results (*Zeugnis*).

Section 23 Procedural Provisions

- (1) Reasons for non-beneficial administrative acts must be given in writing; such acts must be accompanied by information on legal remedies and delivered to the person concerned.
- (2) ¹The person concerned may submit a written objection to a decision based on the evaluation of an assessment; this must be submitted to the responsible body specified in section 3 within one month of receipt of the notification. ²The responsible body specified in section 3 shall make a decision regarding the objection.
- (3) ¹Should the examination candidate raise concrete and substantiated objections against an evaluation by one of the examiners, the responsible body specified in section 3 shall forward the objection to the examiner concerned or – in the case of a first and second examiner – both examiners so that they may respond. ²If the evaluation is changed by the examiner(s) in accordance with the request, the examination board shall remedy the objection. ³Otherwise, the examination board shall review the evaluation on the basis of the response(s), paying particular attention to whether
1. the examination process was duly carried out,
 2. the evaluation was based on incorrect facts,
 3. generally applicable evaluation principles were not observed,

- 4. a reasonable and logically justified solution was evaluated as incorrect, or whether
 - 5. the examiner was guided by irrelevant considerations.
- (4) A decision regarding the objection must be made within three months.
- (5) The proceedings shall not result in a worse examination mark for the examination candidate.

Part Four: Final Provisions

Section 24 Entry into Force and Interim Provisions

- (1) These amended examination regulations shall enter into force as of 1 October 2022 after approval by the Presidential Board and publication in the official bulletin of Gottfried Wilhelm Leibniz Universität Hannover.
- (2) ¹Students who have enrolled in the master's degree programme in Computer Science at Gottfried Wilhelm Leibniz Universität shall be subject to these examination regulations from their entry into force. ²The responsible body specified in section 3 shall decide upon exceptions referring to appendix 1 upon substantiated request, which must be submitted within three months of entry into force of these examination regulations. ³Any general transition rules that may be necessary shall be resolved by the responsible body specified in section 3 in supplement to these examination regulations.

List of Appendices**Appendix 1: Modules of the Master's Degree Programme Computer Science**

- Appendix 1.1: Area of Expertise Automatic Image Interpretation
 - Appendix 1.1.a) Compulsory modules – not applicable
 - Appendix 1.1.b) Compulsory elective modules
 - Appendix 1.1.c) Elective modules – not applicable
- Appendix 1.2: Area of expertise Computational Health Informatics
 - Appendix 1.2.a) Compulsory modules – not applicable
 - Appendix 1.2.b) Compulsory elective modules
 - Appendix 1.2.c) Elective modules – not applicable
- Appendix 1.3: Area of expertise Data Science and Digital Libraries
 - Appendix 1.3.a) Compulsory modules – not applicable
 - Appendix 1.3.b) Compulsory elective modules
 - Appendix 1.3.c) Elective modules – not applicable
- Appendix 1.4: Area of expertise Data Base and Information Systems
 - Appendix 1.4.a) Compulsory modules – not applicable
 - Appendix 1.4.b) Compulsory elective modules
 - Appendix 1.4.c) Elective modules – not applicable
- Appendix 1.5: Area of Expertise Real Time Systems
 - Appendix 1.5.a) Compulsory modules – not applicable
 - Appendix 1.5.b) Compulsory elective modules
 - Appendix 1.5.c) Elective modules – not applicable
- Appendix 1.6: Area of Expertise Hardware Platforms of Computer Science
 - Appendix 1.6.a) Compulsory modules – not applicable
 - Appendix 1.6.b) Compulsory elective modules
 - Appendix 1.6.c) Elective modules – not applicable
- Appendix 1.7: Area of Expertise IT-Security
 - Appendix 1.7.a) Compulsory modules – not applicable
 - Appendix 1.7.b) Compulsory elective modules
 - Appendix 1.7.c) Elective modules – not applicable
- Appendix 1.8: Area of Expertise Communication Networks
 - Appendix 1.8.a) Compulsory modules
 - Appendix 1.8.b) Compulsory elective modules
 - Appendix 1.8.c) Elective modules – not applicable
- Appendix 1.9: Area of expertise Natural Language Processing
 - Appendix 1.9.a) Compulsory modules – not applicable
 - Appendix 1.9.b) Compulsory elective modules
 - Appendix 1.9.c) Elective modules – not applicable
- Appendix 1.10: Area of expertise Machine Learning
 - Appendix 1.10.a) Compulsory modules – not applicable
 - Appendix 1.10.b) Compulsory elective modules
 - Appendix 1.10.c) Elective modules – not applicable
- Appendix 1.11: Area of expertise Man-Machine Communications
 - Appendix 1.11.a) Compulsory modules – not applicable
 - Appendix 1.11.b) Compulsory elective modules
 - Appendix 1.11.c) Elective modules – not applicable
- Appendix 1.12: Area of expertise Mixed-Signal Circuits

Appendix 1.12a)	Compulsory modules – not applicable
Appendix 1.12.b)	Compulsory elective modules
Appendix 1.12.c)	Elective modules – not applicable
Appendix 1.13: Area of expertise Multimedia Signal Processing	
Appendix 1.13.a)	Compulsory modules – not applicable
Appendix 1.13.b)	Compulsory elective modules
Appendix 1.13.c)	Elective modules – not applicable
Appendix 1.14: Area of expertise Scientific Data Management	
Appendix 1.14.a)	Compulsory modules – not applicable
Appendix 1.14.b)	Compulsory elective modules
Appendix 1.14.c)	Elective modules – not applicable
Appendix 1.15: Area of expertise Software Engineering	
Appendix 1.15.a)	Compulsory modules – not applicable
Appendix 1.15.b)	Compulsory elective modules
Appendix 1.15.c)	Elective modules – not applicable
Appendix 1.16: Area of expertise Systems and Computer Architecture	
Appendix 1.16.a)	Compulsory modules – not applicable
Appendix 1.16.b)	Compulsory elective modules
Appendix 1.16.c)	Elective modules – not applicable
Appendix 1.17: Area of expertise Theoretical Computer Science	
Appendix 1.17.a)	Compulsory modules – not applicable
Appendix 1.17.b)	Compulsory elective modules
Appendix 1.17.c)	Elective modules – not applicable
Appendix 1.18: Area of expertise Dependable and Scalable Software Systems	
Appendix 1.18.a)	Compulsory modules – not applicable
Appendix 1.18.b)	Compulsory elective modules
Appendix 1.18.c)	Elective modules – not applicable
Appendix 1.19: Area of expertise Visual Analytics	
Appendix 1.19.a)	Compulsory modules – not applicable
Appendix 1.19.b)	Compulsory elective modules
Appendix 1.19.c)	Elective modules – not applicable
Appendix 1.20: Area of expertise Knowledge-Based Systems	
Appendix 1.20.a)	Compulsory modules – not applicable
Appendix 1.20.b)	Compulsory elective modules
Appendix 1.20.c)	Elective modules – not applicable
Appendix 1.21: Area of expertise Studium Generale	
Appendix 1.21.a)	Compulsory modules – not applicable
Appendix 1.21.b)	Compulsory elective modules
Appendix 1.21.c)	Elective modules – not applicable
Appendix 1.22: Area of expertise Industrial Placement	
Appendix 1.22.a)	Compulsory modules – not applicable
Appendix 1.22.b)	Compulsory elective modules – not applicable
Appendix 1.22.c)	Elective modules
Appendix 1.23: Area of expertise Fundamentals of Computer Science	
Appendix 1.23.a)	Compulsory modules – not applicable
Appendix 1.23.b)	Compulsory elective modules – not applicable
Appendix 1.23.c)	Elective modules
Appendix 1.24: Area of expertise Minor Subject Business Administration and Economics	

- Appendix 1.24.a) Compulsory modules – not applicable
- Appendix 1.24.b) Compulsory elective modules – not applicable
- Appendix 1.24.c) Elective modules
- Appendix 1.25: Area of expertise Minor Subject Power Engineering
 - Appendix 1.25.a) Compulsory modules – not applicable
 - Appendix 1.25.b) Compulsory elective modules – not applicable
 - Appendix 1.25.c) Elective modules
- Appendix 1.26: Area of expertise Minor Subject Information Technology
 - Appendix 1.26.a) Compulsory modules – not applicable
 - Appendix 1.26.b) Compulsory elective modules – not applicable
 - Appendix 1.26.c) Elective modules
- Appendix 1.27: Area of expertise Minor Cartography and Remote Sensing
 - Appendix 1.27.a) Compulsory modules – not applicable
 - Appendix 1.27.b) Compulsory elective modules – not applicable
 - Appendix 1.27.c) Elective modules
- Appendix 1.28: Area of Expertise Minor Subject Life Science
 - Appendix 1.28.a) Compulsory modules – not applicable
 - Appendix 1.28.b) Compulsory elective modules – not applicable
 - Appendix 1.28.c) Elective modules
- Appendix 1.29: Area of Expertise Minor Subject Mechanical Engineering and Mechatronics
 - Appendix 1.29.a) Compulsory modules – not applicable
 - Appendix 1.29.b) Compulsory elective modules – not applicable
 - Appendix 1.29.c) Elective modules
- Appendix 1.30: Area of Expertise Minor Mathematics
 - Appendix 1.30.a) Compulsory modules – not applicable
 - Appendix 1.30.b) Compulsory elective modules – not applicable
 - Appendix 1.30.c) Elective modules
- Appendix 1.31: Area of Expertise Minor Subject Philosophy
 - Appendix 1.31.a) Compulsory modules – not applicable
 - Appendix 1.31.b) Compulsory elective modules – not applicable
 - Appendix 1.31.c) Elective modules
- Appendix 1.32: Area of Expertise Minor Subject Physics
 - Appendix 1.32.a) Compulsory modules – not applicable
 - Appendix 1.32.b) Compulsory elective modules – not applicable
 - Appendix 1.32.c) Elective modules
- Area of Expertise Minor Subject Water and Environmental Engineering
 - Appendix 1.33.a) Compulsory modules – not applicable
 - Appendix 1.33.b) Compulsory elective modules – not applicable
 - Appendix 1.33.c) Elective modules
- Appendix 1.34: Master's Thesis Module

Appendix 2: Assessment Types

Appendix 2.1: Definitions

Appendix 2.2: Glossary

Appendix 3: Supplementary Provisions

Appendix 3.1: Registration and Examination Periods

Appendix 3.2: Deadlines for Evaluation of Assessments

Appendix 3.3: Deviating Stipulations Concerning Variant 2 Assessment Types

Appendix 4: Proof of Incapacity to Take an Examination Due to Illness

Appendix 1: Modules of the Master's Degree Programme Computer Science

Students obtain the 120 credit points required to pass the master's examination in compulsory elective modules, elective modules and the master's thesis (MA). The compulsory elective modules comprise the studium generale as well as academic core areas of computer science in which students complete 37-87 credit points. The modules of the individual areas of expertise may include lectures and tutorials (5 CP), projects (6 CP), seminars (3 CP) and labs (6 CP). In addition, lecture modules taught by external lecturing staff, seminar modules and, in exceptional cases, project modules may be offered, with 3 to 4 CP. Up to six modules in Computer Science taken abroad and comprising 5 to 10 credit points each may be counted.

Students may select an industrial placement and/or a minor subject as elective modules. A student's first registration for an examination in a minor subject constitutes their selection. Students who select a minor subject must obtain credit points as indicated in the last line of the relevant list detailing the requirements for the minor subject. Students may apply once to the responsible body specified in section 3 to change their minor subject. Up to two modules "study abroad" may be credited in the minor subject. The modules "study abroad" shall be allocated to the minor subject selected.

Attachment	Area of expertise	Credit points Requirements
1.1-1.20	Computer Science	37-87
1.21	Studium Generale	3-6
1.22	Industrial placement	0 or 15
1.23	Fundamentals of Computer Science	0-15
1.24-1.33	Minor subject	0 or 12-17
1.34	Master's thesis	30
	Total requirements	120

Generic modules which may encompass various topics cover module structures for new modules and/or modules offered on an irregular basis as compulsory elective modules. They merely indicate examples of the structure of the work to be completed for new modules and/or modules offered on an irregular basis in the area of expertise in question. As a rule, these modules are called "Current Topics". If these modules are not included in the module handbook at the beginning of the semester, then such new modules and/or modules offered on an irregular basis are not offered during that semester.

The duration of a written examination is usually 15 to 25 minutes per credit point for the module. The duration of an oral examination is 5 to 10 minutes per credit point. "K" indicates that a written examination (K) shall take place, "MP" an oral examination (MP). The examiner shall announce the relevant assessment type at the beginning of each semester.

All written examinations (K), oral examinations (MP), seminars, and the master's thesis (MA) as per the appendix are graded unless indicated otherwise in the column "assessment". Labs, projects and the industrial placement are ungraded. A maximum of 35 credit points shall be credited from labs and projects listed in appendices 1.1 to 1.20 and 1.23 and the industrial placement.

In the column "courses", the number following the type of course indicates the number of semester hours.

Areas of expertise in Computer Science

The following applies to students who began the degree programme before the winter semester 2020/2021:

The modules "Imaging Systems for Medical Engineering", "Algorithms and Architectures of Digital Hearing Aid Systems", "Design of Integrated Digital Circuits", "Industrial Microelectronics" and/or "Memory Systems" shall remain in the area of expertise Architectures and Systems if they were complete before 01.10.2020. Students cannot apply for the modules to be credited to the minor subject Information Technology.

Appendix 1.1: Area of Expertise Automatic Image Interpretation**Appendix 1.1.a) Compulsory modules – not applicable****Appendix 1.1.b) Compulsory elective modules**

Module	Course	Semester	Coursework	Assessment	Credit points
Graph-based Machine Learning	Lecture 2 Tutorial 2	1 to 3	-	K	5
Computer Vision	Lecture 2 Tutorial 1 Lab 1	1 to 3	1 piece of coursework	K	5
Lab: 3D Computer Graphics in Medicine	Lab 4	1 to 3	1 piece of coursework	-	6
Lab: Machine Learning for Games Als	Lab 4	1 to 3	1 piece of coursework	-	6
Lab: Matlab for Medical and Industrial Image Processing	Lab 4	1 to 3	1 piece of coursework	-	6
Lab: Self-Localisation and Mapping (SLAM)	Lab 4	1 to 3	1 piece of coursework	-	6
Machine Learning	Lecture 2 Tutorial 1 Lab 1	1 to 3	1 piece of coursework	K	5
Computer-Aided Scene Analysis	Lecture 2 Tutorial 1 Lab 1	1 to 3	1 piece of coursework	K	5
Seminar: Computer Vision, Scene Analysis and Coding	Seminar 2	1 to 3	-	VbP (SE)	3
Current Topics in Automatic Image Interpretation - VÜ	Lecture 2 Tutorial 2	1 to 3	-	K/MP	5
Current Topics in Automatic Image Interpretation - VÜL	Lecture 2 Tutorial 1 Lab 1	1 to 3	1 piece of coursework	K/MP	5
Current Topics in Automatic Image Interpretation - VÜS	Lecture 2 Tutorial 1 Seminar 2	1 to 3	-	K / MP / VbP (SE)	7
Current Topics in Automatic Image Interpretation - V	Lecture 2	1 to 3	-	K/MP	3
Current Topics in Automatic Image Interpretation - L	Lab 4	1 to 3	1 piece of coursework	-	6
Current Topics in Automatic Image Interpretation - S	Seminar 2	1 to 3	-	VbP (SE)	3
Current Topics in Automatic Image Interpretation - P	Project 4	1 to 3	1 piece of coursework	-	6
Current Topics in Automatic Image Interpretation - VS	Lecture 2 Seminar 2	1 to 3		K / MP / VbP (SE)	5

Total	0- 87
--------------	--------------

Appendix 1.1.c) Elective modules – not applicable**Appendix 1.2: Area of Expertise Computational Health Informatics****Appendix 1.2.a) Compulsory modules – not applicable****Appendix 1.2.b) Compulsory elective modules**

Module	Course	Semester	Coursework	Assessment	Credit points
Computational Health Informatics	Lecture 2 Tutorial 2	1 to 3	-	MP	5
Healthcare IT Infrastructure	Lecture 2 Tutorial 2	1 to 3	-	MP	5
Lab: Advanced Computational Health Informatics	Lab 4	1 to 3	1 piece of coursework	-	6
Magnetic Resonance Imaging Lab	Lab 4	1 to 3	1 piece of coursework	-	6
Lab: Medical Applications on Edge Devices	Lab 4	1 to 3	1 piece of coursework	-	6
Lab: Neuroevolution	Lab 4	1 to 3	1 piece of coursework	-	6
Lab: Use of Container Virtualization in Medicine	Lab 4	1 to 3	1 piece of coursework	-	6
Quantum Computing	Lecture 2 Tutorial 2	1 to 3	-	K	5
Project: Deep Neural Networks for Medical Applications	Project 4	1 to 3	1 piece of coursework		6
Seminar: Digital Health	Seminar 2	1 to 3	-	VbP (SE)	3
Seminar: Information Security in Medicine	Seminar 2	1 to 3	-	VbP (SE)	3
Current Topics in Computational Health Informatics - VÜ	Lecture 2 Tutorial 2	1 to 3		K/MP	5
Current Topics in Computational Health Informatics - VÜL	Lecture 2 Tutorial 1 Lab 1	1 to 3	1 piece of coursework	K/MP	5
Current Topics in Computational Health Informatics - VÜS	Lecture 2 Tutorial 1 Seminar 2	1 to 3	-	K / MP / VbP (SE)	7
Current Topics in Computational Health Informatics - V	Lecture 2	1 to 3	-	K/MP	3
Current Topics in Computational Health Informatics - L	Lab 4	1 to 3	1 piece of coursework	-	6
Current Topics in Computational Health	Seminar 2	1 to 3	-	VbP (SE)	3

Informatics - S					
Current Topics in Computational Health Informatics - P	Project 4	1 to 3	1 piece of coursework	-	6
Current Topics in Computational Health Informatics - VS	Lecture 2 Seminar 2	1 to 3		K / MP / VbP (SE)	5
Total					0- 87

Appendix 1.2.c) Elective modules – not applicable**Appendix 1.3: Area of Expertise Data Science and Digital Libraries****Appendix 1.3.a) Compulsory modules – not applicable****Appendix 1.3.b) Compulsory elective modules**

Module	Course	Semester	Coursework	Assessment	Credit points
Data Streams: Algorithms and Management Systems	Lecture 2 Tutorial 2	1 to 3	-	K/MP	5
Introduction to Neurosymbolic Hybrid Systems: Theory, Technologies and Applications	Lecture 2	1 to 3	-	VbP / HA	3
Knowledge Engineering and Semantic Web	Lecture 2 Tutorial 2	1 to 3	-	K	5
Seminar: Data Science & Digital Libraries	Seminar 2	1 to 3	-	VbP (SE)	3
Seminar: Personalization in Technology Enhanced Learning (TEL) Environments	Seminar 2	1 to 3	-	VbP (SE)	3
Current Topics in Data Science and Digital Libraries - VÜ	Lecture 2 Tutorial 2	1 to 3		K/MP	5
Current Topics in Data Science and Digital Libraries - VÜL	Lecture 2 Tutorial 1 Lab 1	1 to 3	1 piece of coursework	K/MP	5
Current Topics in Data Science and Digital Libraries - VÜS	Lecture 2 Tutorial 1 Seminar 2	1 to 3	-	K / MP / VbP (SE)	7
Current Topics in Data Science and Digital Libraries - V	Lecture 2	1 to 3	-	K/MP	3
Current Topics in Data Science and Digital Libraries - L	Lab 4	1 to 3	1 piece of coursework	-	6
Current Topics in Data Science and Digital Libraries - S	Seminar 2	1 to 3		VbP (SE)	3
Current Topics in Data Science and Digital Libraries - P	Project 4	1 to 3	1 piece of coursework	-	6

Current Topics in Data Science and Digital Libraries - VS	Lecture 2 Seminar 2	1 to 3		K / MP / VbP (SE)	5
Total					0- 87

Appendix 1.3.c) Elective modules – not applicable**Appendix 1.4: Area of Expertise Data Base and Information Systems****Appendix 1.4.a) Compulsory modules – not applicable****Appendix 1.4.b) Compulsory elective modules**

Module	Course	Semester	Coursework	Assessment	Credit points
Project: Big Data Technologies	Project 4	1 to 3	1 piece of coursework	-	6
Seminar: Advanced Topics in Database Systems	Seminar 2	1 to 3	-	VbP (SE)	3
Seminar: Database Systems	Seminar 2	1 to 3	-	VbP (SE)	3
The 800-pound Gorilla in the corner: Data Integration	Lecture 3 Tutorial 1	1 to 3	-	MP	5
Current Topics in Data Base and Information Systems - VÜ	Lecture 2 Tutorial 2	1 to 3		K/MP	5
Current Topics in Data Base and Information Systems - VÜL	Lecture 2 Tutorial 1 Lab 1	1 to 3	1 piece of coursework	K/MP	5
Current Topics in Data Base and Information Systems - VÜS	Lecture 2 Tutorial 1 Seminar 2	1 to 3	-	K / MP / VbP (SE)	7
Current Topics in Data Base and Information Systems - V	Lecture 2	1 to 3	-	K/MP	3
Current Topics in Data Base and Information Systems - L	Lab 4	1 to 3	1 piece of coursework	-	6
Current Topics in Data Base and Information Systems - S	Seminar 2	1 to 3	-	VbP (SE)	3
Current Topics in Data Base and Information Systems - P	Project 4	1 to 3	1 piece of coursework	-	6
Current Topics in Data Base and Information Systems - VS	Lecture 2 Seminar 2	1 to 3	-	K / MP / VbP (SE)	5
Total					0- 87

Appendix 1.4.c) Elective modules – not applicable

Appendix 1.5: Area of Expertise Real Time Systems**Appendix 1.5.a) Compulsory modules – not applicable****Appendix 1.5.b) Compulsory elective modules**

Module	Course	Semester	Coursework	Assessment	Credit points
Design of Discrete Control Systems	Lecture 2 Tutorial 2	1 to 3	-	K	5
Mobile Robotics	Lecture 2	1 to 3	-	K	3
Project: External IT Project	Project 2	1 to 3	1 piece of coursework	-	3
Current Topics in Real Time Systems - VÜ	Lecture 2 Tutorial 2	1 to 3	-	K/MP	5
Current Topics in Real Time Systems - VÜL	Lecture 2 Tutorial 1 Lab 1	1 to 3	1 piece of coursework	K/MP	5
Current Topics in Real Time Systems - VÜS	Lecture 2 Tutorial 1 Seminar 2	1 to 3	-	K / MP / VbP (SE)	7
Current Topics in Real Time Systems - V	Lecture 2	1 to 3	-	K/MP	3
Current Topics in Real Time Systems - L	Lab 4	1 to 3	1 piece of coursework	-	6
Current Topics in Real Time Systems - S	Seminar 2	1 to 3	-	VbP (SE)	3
Current Topics in Real Time Systems - P	Project 4	1 to 3	1 piece of coursework	-	6
Current Topics in Real Time Systems - VS	Lecture 2 Seminar 2	1 to 3	-	K / MP / VbP (SE)	5
Total					0- 87

Appendix 1.5.c) Elective modules – not applicable**Appendix 1.6: Area of Expertise Hardware Platforms of Computer Science****Appendix 1.6.a) Compulsory modules – not applicable****Appendix 1.6.b) Compulsory elective modules**

Module	Course	Semester	Coursework	Assessment	Credit points
Application-Specific Instruction-Set Processors	Lecture 2 Tutorial 2	1 to 3	-	MP	5
Architectures for Digital Signal Processing	Lecture 2 Tutorial 2	1 to 3	-	MP	5
FPGA Design	Lecture 2 Tutorial 2	1 to 3	-	MP	5
Lab: FPGA Design	Lab 4	1 to 3	1 piece of coursework	-	6
Project: ASIPLab: Design of Application-Specific Instruction-Set	Project 4	1 to 3	1 piece of coursework	-	6

Processors					
Project: Microelectronics - Chip Design	Project 4	1 to 3	1 piece of coursework	-	6
Current Topics in Hardware Platforms of Computer Science - VÜ	Lecture 2 Tutorial 2	1 to 3		K/MP	5
Current Topics in Hardware Platforms of Computer Science - VÜL	Lecture 2 Tutorial 1 Lab 1	1 to 3	1 piece of coursework	K/MP	5
Current Topics in Hardware Platforms of Computer Science - VÜS	Lecture 2 Tutorial 1 Seminar 2	1 to 3	-	K / MP / VbP (SE)	7
Current Topics in Hardware Platforms of Computer Science - V	Lecture 2	1 to 3	-	K/MP	3
Current Topics in Hardware Platforms of Computer Science - L	Lab 4	1 to 3	1 piece of coursework	-	6
Current Topics in Hardware Platforms of Computer Science - S	Seminar 2	1 to 3	-	VbP (SE)	3
Current Topics in Hardware Platforms of Computer Science - P	Project 4	1 to 3	1 piece of coursework	-	6
Current Topics in Hardware Platforms of Computer Science - VS	Lecture 2 Seminar 2	1 to 3	-	K / MP / VbP (SE)	5
Total					0- 87

Appendix 1.6.c) Elective modules – not applicable

Appendix 1.7: Area of Expertise IT-Security

Appendix 1.7.a) Compulsory modules – not applicable

Appendix 1.7.b) Compulsory elective modules

Module	Course	Semester	Coursework	Assessment	Credit points
Introduction Usable Security and Privacy	Lecture 2 Tutorial 2	1 to 3	-	K	5
Lab: Usable Security Lab	Lab 4	1 to 3	1 piece of coursework	-	6
Human Centered Security	Lecture 2	1 to 3	-	K	3
Seminar: Digital Sovereignty	Seminar 2	1 to 3	-	VbP (SE)	3
Seminar: Human Factors in Cybersecurity	Seminar 2	1 to 3	-	VbP (SE)	3
Current Topics in IT Security - VÜ	Lecture 2 Tutorial 2	1 to 3	-	K/MP	5
Current Topics in IT Security - VÜL	Lecture 2 Tutorial 1 Lab 1	1 to 3	1 piece of coursework	K/MP	5

Current Topics in IT Security - VÜS	Lecture 2 Tutorial 1 Seminar 2	1 to 3	-	K / MP / VbP (SE)	7
Current Topics in IT Security - V	Lecture 2	1 to 3	-	K/MP	3
Current Topics in IT Security - L	Lab 4	1 to 3	1 piece of coursework	-	6
Current Topics in IT Security - S	Seminar 2	1 to 3	-	VbP (SE)	3
Current Topics in IT Security - P	Project 4	1 to 3	1 piece of coursework	-	6
Current Topics in IT Security - VS	Lecture 2 Seminar 2	1 to 3	-	K / MP / VbP (SE)	5
Total					0- 87

Appendix 1.7.c) Elective modules – not applicable**Appendix 1.8: Area of Expertise Communication Networks****Appendix 1.8.a) Compulsory modules – not applicable****Appendix 1.8.b) Compulsory elective modules**

Module	Course	Semester	Coursework	Assessment	Credit points
Future Internet Communications Technologies	Lecture 2 Tutorial 1 Lab 1	1 to 3	1 piece of coursework	K/MP	5
Lab: Computer Networks	Lab 4	1 to 3	1 piece of coursework	-	6
Current Topics in Communication Networks - VÜ	Lecture 2 Tutorial 2	1 to 3	-	K/MP	5
Current Topics in Communication Networks - VÜL	Lecture 2 Tutorial 1 Lab 1	1 to 3	1 piece of coursework	K/MP	5
Current Topics in Communication Networks - VÜS	Lecture 2 Tutorial 1 Seminar 2	1 to 3	-	K / MP / VbP (SE)	7
Current Topics in Communication Networks - V	Lecture 2	1 to 3	-	K/MP	3
Current Topics in Communication Networks - L	Lab 4	1 to 3	1 piece of coursework	-	6
Current Topics in Communication Networks - S	Seminar 2	1 to 3	-	VbP (SE)	3
Current Topics in Communication Networks - P	Project 4	1 to 3	1 piece of coursework	-	6
Current Topics in Communication Networks - VS	Lecture 2 Seminar 2	1 to 3	-	K / MP / VbP (SE)	5
Total					0- 87

Appendix 1.8.c) Elective modules – not applicable**Appendix 1.9: Area of Expertise Natural Language Processing****Appendix 1.9.a) Compulsory modules – not applicable****Appendix 1.9.b) Compulsory elective modules**

Module	Course	Semester	Coursework	Assessment	Credit points
Computational Argumentation	Lecture 2 Tutorial 2	1 to 3	-	K/MP	5
Lab: Argumentation Technology	Lab 4	1 to 3	1 piece of coursework	-	6
Lab: Ethical Artificial Intelligence	Lab 4	1 to 3	1 piece of coursework	-	6
Seminar: Natural Language Generation	Seminar 2	1 to 3	-	VbP (SE)	3
Statistical Natural Language Processing	Lecture 2 Tutorial 2	1 to 3	-	K/MP	5
Current Topics in Natural Language Processing - VÜ	Lecture 2 Tutorial 2	1 to 3	-	K/MP	5
Current Topics in Natural Language Processing - VÜL	Lecture 2 Tutorial 1 Lab 1	1 to 3	1 piece of coursework	K/MP	5
Current Topics in Natural Language Processing - VÜS	Lecture 2 Tutorial 1 Seminar 2	1 to 3	-	K / MP / VbP (SE)	7
Current Topics in Natural Language Processing - V	Lecture 2	1 to 3	-	K/MP	3
Current Topics in Natural Language Processing - L	Lab 4	1 to 3	1 piece of coursework	-	6
Current Topics in Natural Language Processing - S	Seminar 2	1 to 3	-	VbP (SE)	3
Current Topics in Natural Language Processing - P	Project 4	1 to 3	1 piece of coursework	-	6
Current Topics in Natural Language Processing - VS	Lecture 2 Seminar 2	1 to 3	-	K /MP/ VbP	5
Total					0- 87

Appendix 1.10: Area of Expertise Machine Learning**Appendix 1.10.a) Compulsory modules – not applicable****Appendix 1.10.b) Compulsory elective modules**

Module	Course	Semester	Coursework	Assessment	Credit points
AutoML Lab	Lab 4	1 to 3	1 piece of coursework	-	6
Automated Machine Learning	Lecture 2 Tutorial 2	1 to 3	-	K/MP	5
Interpretable Machine Learning	Lecture 2 Tutorial 2	1 to 3	-	MP	5
Reinforcement Learning	Lecture 2 Tutorial 2	1 to 3	-	PJ / MP	5
Project: Reproducibility Challenge in Machine Learning	Project 4	1 to 3	1 piece of coursework	-	6
Seminar: Automated Machine Learning	Seminar 2	1 to 3	-	VbP (SE)	3
Seminar: Reinforcement Learning	Seminar 2	1 to 3	-	VbP (SE)	3
Social Responsibility in Machine Learning	Lecture 2 Tutorial 1 Project 1	1 to 3	-	MP /VbP	5
Current Topics in Machine Learning - VÜ	Lecture 2 Tutorial 2	1 to 3	-	K/MP	5
Current Topics in Machine Learning - VÜL	Lecture 2 Tutorial 1 Lab 1	1 to 3	1 piece of coursework	K/MP	5
Current Topics in Machine Learning - VÜS	Lecture 2 Tutorial 1 Seminar 2	1 to 3	-	K / MP / VbP (SE)	7
Current Topics in Machine Learning - V	Lecture 2	1 to 3	-	K/MP	3
Current Topics in Machine Learning - L	Lab 4	1 to 3	1 piece of coursework	-	6
Current Topics in Machine Learning - S	Seminar 2	1 to 3	-	VbP (SE)	3
Current Topics in Machine Learning - P	Project 4	1 to 3	1 piece of coursework	-	6
Current Topics in Machine Learning - VS	Lecture 2 Seminar 2	1 to 3	-	K / MP / VbP (SE)	5
Total					0- 57

Appendix 1.10.c) Elective modules – not applicable

Appendix 1.11: Area of Expertise Man-Machine Communications**Appendix 1.11.a) Compulsory modules – not applicable****Appendix 1.11.b) Compulsory elective modules**

Module	Course	Semester	Coursework	Assessment	Credit points
Interactive Systems	Lecture 2 Tutorial 2	1 to 3	-	K	5
Mobile Interaction Design Lab	Lecture 1 Lab 3	1 to 3	1 piece of coursework	-	6
Mobile Interaction	Lecture 2 Tutorial 2	1 to 3	-	K	5
Physical Computing Lab	Lecture 1 Lab 3	1 to 3	1 piece of coursework	-	6
Research Project Human-Computer Interaction	Project 4	1 to 3	1 piece of coursework	-	6
Seminar: Human-Computer Interaction	Seminar 2	1 to 3	-	VbP (SE)	3
Current Topics in Man-Machine Communications - VÜ	Lecture 2 Tutorial 2	1 to 3	-	K/MP	5
Current Topics in Man-Machine Communications - VÜL	Lecture 2 Tutorial 1 Lab 1	1 to 3	1 piece of coursework	K/MP	5
Current Topics in Man-Machine Communications - VÜS	Lecture 2 Tutorial 1 Seminar 2	1 to 3	-	K / MP / VbP (SE)	7
Current Topics in Man-Machine Communications - V	Lecture 2	1 to 3	-	K/MP	3
Current Topics in Man-Machine Communications - L	Lab 4	1 to 3	1 piece of coursework	-	6
Current Topics in Man-Machine Communication - S	Seminar 2	1 to 3	-	VbP (SE)	3
Current Topics in Man-Machine Communications - P	Project 4	1 to 3	1 piece of coursework	-	6
Current Topics in Man-Machine Communications - VS	Lecture 2 Seminar 2	1 to 3	-	K / MP / VbP (SE)	5
Total					0- 87

Appendix 1.11.c) Elective modules – not applicable

Appendix 1.12: Area of expertise Mixed-Signal Circuits**Appendix 1.12.a) Compulsory modules – not applicable****Appendix 1.12.b) Compulsory elective modules**

Module	Course	Semester	Coursework	Assessment	Credit points
Mixed-Signal Circuits	Lecture 2 Tutorial 1 Lab 1	1 to 3	1 piece of coursework	K/MP	5
Programming Project: Electronic Design Automation	Lab 4	1 to 3	1 piece of coursework	-	6
Current Topics in Mixed-Signal Circuits - VÜS	lecture and seminar	1 to 3	1 piece of coursework	K/MP	7
Current Topics in Mixed-Signal Circuits - V	Lecture 2	1 to 3	-	K/MP	3
Current Topics in Mixed-Signal Circuits - L	Lab	1 to 3	1 piece of coursework	-	6
Current Topics in Mixed-Signal Circuits - S	Seminar	1 to 3	-	VbP (SE)	3
Current Topics in Mixed-Signal Circuits - P	Project 4	1 to 3	1 piece of coursework	-	6
Current Topics in Mixed-Signal Circuits - VS	Lecture 2 Seminar 2	1 to 3	-	K / MP / VbP (SE)	5
Total					0- 87

Appendix 1.13.c) Elective modules – not applicable**Appendix 1.13: Area of expertise Multimedia Signal Processing****Appendix 1.13.a) Compulsory modules – not applicable****Appendix 1.13.b) Compulsory elective modules**

Module	Course	Semester	Coursework	Assessment	Credit points
Digital Image Processing	Lecture 2 Tutorial 1 Lab 1	1 to 3	1 piece of coursework	K/MP	5
Scientific Computing I	Lecture 2 Tutorial 1 Lab 1	1 to 3	1 piece of coursework	K/MP	5
Current Topics in Multimedia Signal Processing - VÜ	Lecture 2 Tutorial 2	1 to 3	-	K/MP	5
Current Topics in Multimedia Signal Processing - VÜL	Lecture 2 Tutorial 1 Lab 1	1 to 3	1 piece of coursework	K/MP	5
Current Topics in Multimedia Signal Processing - VÜL	Lecture 2 Tutorial 1 Seminar 2	1 to 3	-	K / MP / VbP (SE)	7
Current Topics in Multimedia Signal Processing - VÜ	Lecture 2	1 to 3	-	K/MP	3
Current Topics in	Lab 4	1 to 3	1 piece of	-	6

Multimedia Signal Processing - VÜL			coursework		
Current Topics in Multimedia Signal Processing - S	Seminar 2	1 to 3	-	VbP (SE)	3
Current Topics in Multimedia Signal Processing - P	Project 4	1 to 3	1 piece of coursework	-	6
Current Topics in Multimedia Signal Processing - VSL	Lecture 2 Seminar 2	1 to 3	-	K / MP / VbP (SE)	5
Total					0- 87

Appendix 1.13.c) Elective modules – not applicable**Appendix 1.14: Area of expertise Scientific Data Management****Appendix 1.14.a) Compulsory modules – not applicable****Appendix 1.14.b) Compulsory elective modules**

Module	Course	Semester	Coursework	Assessment	Credit points
Seminar on Scientific Data Management	Seminar 2	1 to 3	-	VbP (SE)	3
Current Topics in Scientific Data Management - VÜ	Lecture 2 Tutorial 2	1 to 3	-	K/MP	5
Current Topics in Scientific Data Management - VÜL	Lecture 2 Tutorial 1 Lab 1	1 to 3	1 piece of coursework	K/MP	5
Current Topics in Scientific Data Management - VÜS	Lecture 2 Tutorial 1 Seminar 2	1 to 3	-	K / MP / VbP (SE)	7
Current Topics in Scientific Data Management - V	Lecture 2	1 to 3	-	K/MP	3
Current Topics in Scientific Data Management - L	Lab 4	1 to 3	1 piece of coursework	-	6
Current Topics in Scientific Data Management - S	Seminar 2	1 to 3	-	VbP (SE)	3
Current Topics in Scientific Data Management - P	Project 4	1 to 3	1 piece of coursework	-	6
Current Topics in Scientific Data Management - VS	Lecture 2 Seminar 2	1 to 3	-	K / MP / VbP (SE)	5
Total					0- 87

Appendix 1.15: Area of expertise Software Engineering**Appendix 1.15.a) Compulsory modules – not applicable****Appendix 1.15.b) Compulsory elective modules**

Module	Course	Semester	Coursework	Assessment	Credit points
Architectures for Software and Systems	Lecture 2	1 to 3	-	K	3
Agile Software Development Lab	Lab 4	1 to 3	1 piece of coursework	-	6
Usability Engineering Lab	Lab 4	1 to 3	1 piece of coursework	-	6
Advanced Software Development Approaches	Lecture 2 Tutorial 2	1 to 3	-	K	5
Requirements Engineering	Lecture 2 Tutorial 2	1 to 3	-	MP	5
Requirements Engineering Lab	Lab 4	1 to 3	1 piece of coursework	-	6
Software Engineering in Projects	Lecture 2	1 to 3	-	K	3
Software Process Engineering	Lecture 2 Tutorial 2	1 to 3	-	K	5
Socio-Technical Aspects of Software Engineering	Lecture 2 Tutorial 2	1 to 3	-	HA	5
Current Topics in Software Engineering - VÜ	Lecture 2 Tutorial 2	1 to 3	-	K/MP	5
Current Topics in Software Engineering - VÜL	Lecture 2 Tutorial 1 Lab 1	1 to 3	1 piece of coursework	K/MP	5
Current Topics in Software Engineering - VÜS	Lecture 2 Tutorial 1 Seminar 2	1 to 3	-	K / MP / VbP (SE)	7
Current Topics in Software Engineering - V	Lecture 2	1 to 3	-	K/MP	3
Current Topics in Software Engineering - L	Lab 4	1 to 3	1 piece of coursework	-	6
Current Topics in Software Engineering - S	Seminar 2	1 to 3	-	VbP (SE)	3
Current Topics in Software Engineering - P	Project 4	1 to 3	1 piece of coursework	-	6
Current Topics in Software Engineering - VS	Lecture 2 Seminar 2	1 to 3	-	K / MP / VbP (SE)	5
Total					0- 87

Appendix 1.15.c) Elective modules – not applicable**Appendix 1.16: Area of expertise Systems and Computer Architecture**

Appendix 1.16.a) Compulsory modules – not applicable**Appendix 1.16.b) Compulsory elective modules**

Module	Course	Semester	Coursework	Assessment	Credit points
Operating System Construction for Multicore Platforms	Lecture 2 Tutorial 4	1 to 3	-	MP	8
Lab: Operating System Technology Lab	Lecture 1 Lab 3	1 to 3	1 piece of coursework	-	6
Project Course: System and Computer Architecture	Project 4	1 to 3	1 piece of coursework	-	6
Seminar: Hot Topics in Systems	Seminar 2	1 to 3	-	VbP (SE)	3
Current Topics in Systems and Computer Architecture - VÜ	Lecture 2 Tutorial 2	1 to 3	-	K/MP	5
Current Topics in Systems and Computer Architecture - VÜL	Lecture 2 Tutorial 1 Lab 1	1 to 3	1 piece of coursework	K/MP	5
Current Topics in Systems and Computer Architecture - VÜS	Lecture 2 Tutorial 1 Seminar 2	1 to 3	-	K / MP / VbP (SE)	7
Current Topics in Systems and Computer Architecture - V	Lecture 2	1 to 3	-	K/MP	3
Current Topics in Systems and Computer Architecture - L	Lab 4	1 to 3	1 piece of coursework	-	6
Current Topics in Systems and Computer Architecture - S	Seminar 2	1 to 3	-	VbP (SE)	3
Current Topics in Systems and Computer Architecture - P	Project 4	1 to 3	1 piece of coursework	-	6
Current Topics in Systems and Computer Architecture - VS	Lecture 2 Seminar 2	1 to 3	-	K / MP / VbP (SE)	5
Total					0- 87

Appendix 1.16.c) Elective modules – not applicable

Appendix 1.17.: Area of expertise Theoretical Computer Science**Appendix 1.17.a) Compulsory modules – not applicable****Appendix 1.17.b) Compulsory elective modules**

Module	Course	Semester	Coursework	Assessment	Credit points
Agent-Based Control in Energy Systems	Lecture 2 Tutorial 2	1 to 3	-	K	5
Computability and Logic	Lecture 2 Tutorial 1 Seminar 2	1 to 3	-	MP	7
Introduction to Energy Informatics	Lecture 2 Seminar 2	1 to 3	-	K	5
Efficient Algorithms	Lecture 2 Tutorial 1 Seminar 2	1 to 3	-	MP	7
Formal Languages	Lecture 2 Tutorial 1 Seminar 2	1 to 3	-	MP	7
Computational Complexity	Lecture 2 Tutorial 1 Seminar 2	1 to 3	-	MP	7
Cryptography	Lecture 2 Tutorial 1 Seminar 2	1 to 3	-	MP	7
Advanced Logics	Lecture 2 Tutorial 1 Seminar 2	1 to 3	-	MP	7
SAT Algorithms	Lecture 2 Tutorial 1 Lab 2	1 to 3	-	K/MP	7
Seminar: Computational Complexity	Seminar 2	1 to 3	-	VbP (SE)	3
Text Algorithms	Lecture 2 Tutorial 2	1 to 3	-	MP	5
Circuit Complexity	Lecture 2 Tutorial 1 Seminar 2	1 to 3	-	MP	7
Parameterized Complexity Theory	Lecture 2 Tutorial 1 Seminar 2	1 to 3	-	MP	7
Current Topics in Theoretical Computer Science - VÜ	Lecture 2 Tutorial 2	1 to 3	-	K/MP	5
Current Topics in Theoretical Computer Science - VÜL	Lecture 2 Tutorial 1 Lab 1	1 to 3	1 piece of coursework	K/MP	5
Current Topics in Theoretical Computer Science - VÜS	Lecture 2 Tutorial 1 Seminar 2	1 to 3	-	K / MP / VbP (SE)	7

Current Topics in Theoretical Computer Science - V	Lecture 2	1 to 3	-	K/MP	3
Current Topics in Theoretical Computer Science - L	Lab 4	1 to 3	1 piece of coursework	-	6
Current Topics in Theoretical Computer Science - S	Seminar 2	1 to 3	-	VbP (SE)	3
Current Topics in Theoretical Computer Science - P	Project 4	1 to 3	1 piece of coursework	-	6
Current Topics in Theoretical Computer Science - VS	Lecture 2 Seminar 2	1 to 3	-	K / MP / VbP (SE)	5
Total					0- 87

Appendix 1.17.c) Elective modules – not applicable**Appendix 1.18: Area of expertise Dependable and Scalable Software Systems****Appendix 1.18.a) Compulsory modules – not applicable****Appendix 1.18.b) Compulsory elective modules**

Module	Course	Semester	Coursework	Assessment	Credit points
Seminar: Dependable and Scalable Systems	Seminar 2	1 to 3	-	VbP (SE)	3
Current Topics in Dependable and Scalable Software Systems - VÜ	Lecture 2 Tutorial 2	1 to 3	-	K/MP	5
Current Topics in Dependable and Scalable Software Systems - VÜL	Lecture 2 Tutorial 1 Lab 1	1 to 3	1 piece of coursework	K/MP	5
Current Topics in Dependable and Scalable Software Systems - VÜS	Lecture 2 Tutorial 1 Seminar 2	1 to 3	-	K / MP / VbP (SE)	7
Current Topics in Dependable and Scalable Software Systems - V	Lecture 2	1 to 3	-	K/MP	3
Current Topics in Dependable and Scalable Software Systems - L	Lab 4	1 to 3	1 piece of coursework	-	6
Current Topics in Dependable and Scalable Software Systems - S	Seminar 2	1 to 3	-	VbP (SE)	3
Current Topics in Dependable and Scalable Software Systems - P	Project 4	1 to 3	1 piece of coursework	-	6
Current Topics in	Lecture 2	1 to 3	-	K / MP / VbP	5

Dependable and Scalable Software Systems - VS	Seminar 2			(SE)	
Total					0- 87

Appendix 1.18.c) Elective modules – not applicable**Appendix 1.19: Area of expertise Visual Analytics****Appendix 1.19.a) Compulsory modules – not applicable****Appendix 1.19.b) Compulsory elective modules**

Module	Course	Semester	Coursework	Assessment	Credit points
Lab: Visual Analytics / Multimedia Retrieval	Lab 4	1 to 3	1 piece of coursework	-	6
Multimedia Retrieval	Lecture 2 Tutorial 2	1 to 3	-	MP	5
Seminar Visual Analytics	Seminar 2	1 to 3	-	VbP (SE)	3
Visual Analytics	Lecture 2 Tutorial 2	1 to 3	-	K/MP	5
Current Topics in Visual Analytics - VÜ	Lecture 2 Tutorial 2	1 to 3	-	K/MP	5
Current Topics in Visual Analytics - VÜL	Lecture 2 Tutorial 1 Lab 1	1 to 3	1 piece of coursework	K/MP	5
Current Topics in Visual Analytics - VÜS	Lecture 2 Tutorial 1 Seminar 2	1 to 3	-	K / MP / VbP (SE)	7
Current Topics in Visual Analytics - V	Lecture 2	1 to 3	-	K/MP	3
Current Topics in Visual Analytics - L	Lab 4	1 to 3	1 piece of coursework	-	6
Current Topics in Visual Analytics - S	Seminar 2	1 to 3	-	VbP (SE)	3
Current Topics in Visual Analytics - P	Project 4	1 to 3	1 piece of coursework	-	6
Current Topics in Visual Analytics - VS	Lecture 2 Seminar 2	1 to 3	-	K / MP / VbP (SE)	5
Total					0- 87

Appendix 1.19.c) Elective modules – not applicable**Appendix 1.20: Area of expertise Knowledge-Based Systems****Appendix 1.20.a) Compulsory modules – not applicable****Appendix 1.20.b) Compulsory elective modules**

Module	Course	Semester	Coursework	Assessment	Credit points
Advanced Topics on Knowledge Graphs	Lecture 2 Tutorial 2	1 to 3	-	K/MP	5

Data Mining II	Lecture 2 Tutorial 2	1 to 3	-	K	5
Deep Learning	Lecture 2 Tutorial 2	1 to 3	-	K	5
Digital Transformation in the Automotive Industry	Lecture 2	1 to 3	-	MP	3
Foundations of Human Computation and Crowdsourcing	Lecture 2 Tutorial 2	1 to 3	-	K	5
Foundations of Information Ethics	Lecture 2 Seminar 2	1 to 3	-	K / VbP (SE)	5
Hybrid Artificial Intelligence	Seminar 2	1 to 3	-	VbP (SE)	3
Introduction to Data Science	Lecture 2 Tutorial 2	1 to 3	-	K	5
Artificial Intelligence for Healthcare	Lecture 2 Tutorial 2	1 to 3	-	K	5
Artificial Intelligence II	Lecture 2 Tutorial 2	1 to 3	-	K	5
Artificial Intelligence for the Automotive Industry	Lecture 2	1 to 3	-	K	3
Lab: Artificial Intelligence	Lab 4	1 to 3	1 piece of coursework	-	6
Machine Learning for Graphs	Lecture 2 Tutorial 2	1 to 3	-	MP	5
Multi-Agent Interactions and Games	Lecture 2	1 to 3	-	K	3
Multi-Agent Reinforcement Learning	Lecture 2 Tutorial 2	1 to 3	-	K/MP	5
Natural Language Processing	Lecture 2 Tutorial 2	1 to 3	-	K	5
Probabilistic Machine Learning	Lecture 2 Tutorial 2	1 to 3	-	K	5
Seminar: Artificial Intelligence	Seminar 2	1 to 3	-	VbP (SE)	3
Current Topics in Knowledge-Based Systems - VÜ	Lecture 2 Tutorial 2	1 to 3	-	K/MP	5
Current Topics in Knowledge-Based Systems - VÜL	Lecture 2 Tutorial 1 Lab 1	1 to 3	1 piece of coursework	K/MP	5
Current Topics in Knowledge-Based Systems - VÜS	Lecture 2 Tutorial 1 Seminar 2	1 to 3	-	K / MP / VbP (SE)	7
Current Topics in Knowledge-Based Systems - V	Lecture 2	1 to 3	-	K/MP	3
Current Topics in Knowledge-Based Systems - L	Lab 4	1 to 3	1 piece of coursework	-	6

Current Topics in Knowledge-Based Systems - S	Seminar 2	1 to 3	-	VbP (SE)	3
Current Topics in Knowledge-Based Systems - P	Project 4	1 to 3	1 piece of coursework	-	6
Current Topics in Knowledge-Based Systems - VS	Lecture 2 Seminar 2	1 to 3	-	K / MP / VbP (SE)	5
Total					0- 87

Appendix 1.20.c) Elective modules – not applicable**Appendix 1.21: Area of expertise Studium Generale****Appendix 1.21.a) Compulsory modules – not applicable****Appendix 1.21.b) Compulsory elective modules**

For the studium generale, students may select courses offered by the faculties of LUH, the Leibniz Language Centre and the Centre for Quality Enhancement in Teaching and Learning (ZQS). They may select only those courses offered by the Faculty of Electrical Engineering and Computer Science that are explicitly assigned to the area of expertise Studium Generale in the Computer Science module handbook. Students must complete the courses with an assessment/a piece of coursework in order to obtain credit points. Courses for which only attendance is confirmed cannot be credited.

Module	Courses	Semester	Coursework	Assessment	Credit points
Studium Generale	Courses offered by Leibniz University Hannover	1 to 3	at least 1 piece of coursework		3 to 6
Total					3 to 6

Appendix 1.21.c) Elective modules – not applicable**Appendix 1.22: Area of expertise Industrial Placement****Appendix 1.22.a) Compulsory modules – not applicable****Appendix 1.22.b) Compulsory elective modules – not applicable****Appendix 1.22.c) Elective modules**

The duration of the industrial placement is at least 12 weeks. The rules for the industrial placement are laid down in the "Richtlinien für die berufspraktische Tätigkeit" (Guidelines for career-oriented placements) of the Faculty of Electrical Engineering and Computer Science.

Module	Course	Semester	Coursework	Assessment	Credit points
Industrial placement	Industrial placement	1 to 3	1 piece of coursework		15
Total					15

Appendix 1.23: Area of expertise Fundamentals of Computer Science**Appendix 1.23.a) Compulsory modules – not applicable****Appendix 1.23.b) Compulsory elective modules – not applicable****Appendix 1.23.c) Elective modules**

Modules that were completed and credited as part of the bachelor's degree programme cannot be credited again in the master's degree programme.

Module	Courses	Semester	Coursework	Assessment	Credit points
Operating System Construction	Lecture 2 Tutorial 2	1 to 3		K/MP	5
Data Science Foundations	Lecture 2 Tutorial 2	1 to 3		K/MP	5
Database Systems II	Lecture 2 Tutorial 2	1 to 3		K/MP	5
Digital Electronic Circuits	Lecture 2 Tutorial 2	1 to 3		K/MP	5
Introduction to Game Development	Lecture 2 Tutorial 1 Project 1	1 to 3		K/MP	5
Introduction to Empirical Methods of Human-Centered Computing	Lecture 2 Tutorial 2	1 to 3	-	K/MP	5
Electronic Design Automation	Lecture 2 Tutorial 1 Lab 1	1 to 3	1 piece of coursework	K/MP	5
Supplementary Foundations of Electrical Engineering for Computer Science and Information Technology	Lecture 2 Tutorial 1 Lab 1	1 to 3	1 piece of coursework	K/MP	5
Ethical Hacking Lab	Lab 4	1 to 3	1 piece of coursework		5
Foundations of Information Retrieval	Lecture 2 Tutorial 2	1 to 3		K/MP	5
Fundamentals of Medical Informatics	Lecture 2 Tutorial 2	1 to 3		K/MP	5
Foundations of Modelling	Lecture 2 Tutorial 2	1 to 3		K/MP	5
Basics of Quantum Mechanics for Engineers	Lecture 2 Tutorial 1 Lab 1	1 to 3	1 piece of coursework	K/MP	5
Industrial Control Systems and Real Time Systems	Lecture 2 Tutorial 2	1 to 3		K/MP	5
Introduction to Natural Language Processing	Lecture 2 Tutorial 2	1 to 3		K/MP	5
Artificial Intelligence I	Lecture 2 Tutorial 2	1 to 3		K/MP	5
Lab: Control Systems	Lab 4	1 to 3	1 piece of coursework		5
Logic Design of Digital Systems	Lecture 2 Tutorial 2	1 to 3		K/MP	5
Medical IT Applications	Lecture 2 Tutorial 2	1 to 3		K/MP	5
Programming Lab Technical Computer Science	Project /Lab 4 InformatiCup OR Programming Lab Technical Computer Science OR Systematic	1 to 3	1 piece of coursework		5

	Programming				
Computer Architecture	Lecture 2 Tutorial 2	1 to 3		K/MP	5
Scientific Data Management	Lecture 2 Tutorial 2	1 to 3		K/MP	5
Software Quality	Lecture 2 Tutorial 2	1 to 3		K/MP	5
Dependable and Scalable Software Systems	Lecture 2 Tutorial 2	1 to 3		K/MP	5
Distributed Systems	Lecture 2 Tutorial 2	1 to 3		K/MP	5
Advanced Topics in Operating Systems	Lecture 2 Tutorial 2	1 to 3		K / MP / VbP (LÜ)	5
Current Topics in Fundamentals of Computer Science - VÜ	Lecture 2 Tutorial 2	1 to 3		K/MP	5
Current Topics in Fundamentals of Computer Science - L	Lab 4	1 to 3	1 piece of coursework	-	5
Current Topics in Fundamentals of Computer Science - P	Project 4	1 to 3	1 piece of coursework	-	5
Total					0- 15

Appendix 1.24: Area of expertise Minor Subject Business Administration and Economics

Appendix 1.24.a) Compulsory modules – not applicable

Appendix 1.24.b) Compulsory elective modules – not applicable

Appendix 1.24.c) Elective modules

The specialisation in the master's phase of the minor subject links up with the Areas from the master's degree programme in Economics. Further qualification in Business (B) or Economics (A) is possible in the following areas:

- Accounting, Taxation and Public Finance (A and B)
- Economic Policy and Theory (A)
- Empirical Economics and Econometrics (A)
- Finance, Banking & Insurance (A and B)
- Health Economics (A and B)
- Information and Operations Management (B)
- International Environment and Development Studies (A)
- Strategic Management (B).

Students who select this specialisation are urgently recommended to have completed at least 6 semester hours/at least 12 credit points in courses in business administration or economics during their bachelor's degree programme.

Students select their module courses from the elective modules (excluding seminars) of the areas corresponding to the module handbook of the Faculty of Economics and Management ((comprising at least 3 courses (6 semester hours); at least 15 credit points). Students select from a major area (comprising at least 2 and up to 3 courses) and a minor area (comprising 1 course). They may freely select their major and minor areas; the master's module shall have the same name as the major area. They may not select closely related modules (in the area Information and Operations Management).

Students shall determine their individual curriculum for the master's degree programme, which shall be recorded in a study plan, on the basis of an academic advice session with the representative of the Faculty of Economics and Management for minor subjects. This study plan shall be obtained from the relevant degree programme advisor prior to registration for an examination.

Appendix 1.25: Area of expertise Minor Subject Power Engineering**Appendix 1.25.a) Compulsory modules – not applicable****Appendix 1.25.b) Compulsory elective modules – not applicable****Appendix 1.25.c) Elective modules**

Module	Courses	Semester	Coursework	Assessment	Credit points
Electric Power Systems I	Lecture Tutorial Lab	1 to 3	1 piece of coursework	K/MP	5
Electromagnetic Compatibility	Lecture Tutorial Lab	1 to 3	1 piece of coursework	K/MP	5
Principles of Electric Power Industry	Lecture	1 to 3	-	K/MP	3
Principles and Calculation Methods of the Electric Power Industry	Lecture Tutorial Lab	1 to 3	1 piece of coursework	K/MP	5
Power Electronics I	Lecture Tutorial Lab	1 to 3	1 piece of coursework	K/MP	5
Optimisation of Technical Systems	Lecture Practical assessment project	1 to 3	1 piece of coursework	K/MP	5
Total					13-15

Appendix 1.26: Area of expertise Minor Subject Information Technology**Appendix 1.26.a) Compulsory modules – not applicable****Appendix 1.26.b) Compulsory elective modules – not applicable****Appendix 1.26.c) Elective modules**

The following applies to students who began the degree programme before the winter semester 2020/2021:
The modules Imaging Systems for Medical Engineering, Algorithms and Architectures of Digital Hearing Aid Systems, Design of Integrated Digital Circuits, Industrial Microelectronics and/or Memory Systems remain in the area of expertise Computer Science if they were completed before 01.10.2020. Students cannot apply for the modules to be credited to the minor subject Information Technology.

Module	Courses	Semester	Coursework	Assessment	Credit points
3D-Audio - Fundamentals of Spatial Audio Reproduction Systems	Lecture Tutorial Lab	1 to 3	1 piece of coursework	K/MP	5
Algorithms and Architectures of Digital Hearing Aid Systems	Lecture Tutorial	1 to 3	-	K/MP	5
Applications of Digital Audio Signal Processing	Lecture Tutorial Lab	1 to 3	1 piece of coursework	K/MP	5
Audio and Speech Signal Processing	Lecture Tutorial Lab	1 to 3	1 piece of coursework	K/MP	5

Imaging Systems for Medical Engineering	Lecture Tutorial	1 to 3	-	K/MP	5
Digital Information Transmission	Lecture Tutorial Lab	1 to 3	1 piece of coursework	K/MP	5
Elektroacoustics	Lecture Tutorial Lab	1 to 3	1 piece of coursework	K/MP	5
Electrical Performance of Electronic Packaging	Lecture Tutorial Lab	1 to 3	1 piece of coursework	K/MP	5
Design of Integrated Digital Circuits	Lecture Tutorial	1 to 3	-	K/MP	5
Electromagnetics and Wireless Communications for Biomedical Applications	Lecture Tutorial Lab	1 to 3	1 piece of coursework	K/MP	5
Fundamentals of Acoustics	Lecture Tutorial Lab	1 to 3	1 piece of coursework	K/MP	5
Industrial Microelectronics	Lecture	1 to 3	-	MP	3
Lab: Audio Communication and Acoustics	Lab	1 to 3	1 piece of coursework	-	4
Lab: IoT Communication Technologies	Lab	1 to 3	1 piece of coursework	-	4
Memory Systems	Lecture Tutorial	1 to 3	1 piece of coursework	MP	5
Mobile Communications	Lecture Tutorial Lab	1 to 3	1 piece of coursework	K/MP	5
Teletraffic Theory	Lecture Tutorial Lab	1 to 3	1 piece of coursework	K/MP	5
Design of Integrated Power Management and Smart Power Circuits	Lecture Tutorial Lab	1 to 3	1 piece of coursework	K/MP	5
Source Coding	Lecture Tutorial Lab	1 to 3	1 piece of coursework	K/MP	5
Relativistic Electrodynamics - Fundamentals and Limits	Lecture Tutorial Lab	1 to 3	1 piece of coursework	K/MP	5
Reliability of Electronic Components	Lecture Tutorial Lab	1 to 3	1 piece of coursework	K/MP	5
Total					13-16

Appendix 1.27: Area of expertise Minor Cartography and Remote Sensing**Appendix 1.27.a) Compulsory modules – not applicable****Appendix 1.27.b) Compulsory elective modules – not applicable****Appendix 1.27.c) Elective modules**

Module	Courses	Semester	Coursework	Assessment	Credit points
Big Geospatial Data	Lecture Tutorial	1 to 3	-	K/MP	5
Image Analysis I	Lecture Tutorial	1 to 3	1 piece of coursework	K/MP	5
Image Analysis II	Lecture Tutorial	1 to 3	1 piece of coursework	K/MP	5
GIS for Navigation Applications	Lecture 2 tutorials	1 to 3	2 piece of coursework	K/MP	5
Laser Scanning - Modelling and Interpretation	Lecture Tutorial	1 to 3	1 piece of coursework	K/MP	5
Geosensor Networks	Lecture Tutorial Seminar	1 to 3	1 piece of coursework	K/MP	5
SLAM and Path Planning	Lecture Practical assessment	1 to 3	1 piece of coursework	K/MP	5
Optical 3D-Measurement	Lecture Tutorial	1 to 3	1 piece of coursework	K/MP	5
Spatial Data Science	Lecture Practical assessment	1 to 3	-	K/MP	5
Image Sequence Analysis	Lecture Practical assessment	1 to 3	1 piece of coursework	K/MP	5
Total					15

Appendix 1.28.: Area of Expertise Minor Subject Life Science**Appendix 1.28.a) Compulsory modules – not applicable****Appendix 1.28.b) Compulsory elective modules – not applicable****Appendix 1.28.c) Elective modules**

Students must select two of these three modules in the area of expertise minor subject Life Science. One module must be completed with an assessment. Students may opt to select the modules Modeling of Bioprocesses or Programming of Algorithms for Life Science with an assessment.

Module	Courses	Semester	Coursework	Assessment	Credit points
Basic Module for Bioinformatics	Lecture Seminar Tutorial	1 to 3	1 piece of coursework	-	6
Modeling of Bioprocesses	Lecture Tutorial	1 to 3	1 piece of coursework	MP	6
Programming of Algorithms for Life Science	lecture seminar	1 to 3	1 piece of coursework	MP	6
Total					12

Appendix 1.29: Area of Expertise Minor Subject Mechanical Engineering and Mechatronics**Appendix 1.29.a) Compulsory modules – not applicable****Appendix 1.29.b) Compulsory elective modules – not applicable****Appendix 1.29.c) Elective modules**

Module	Courses	Semester	Coursework	Assessment	Credit points
Computer and Robot Assisted Surgery	Lecture Tutorial	1 to 3		K/MP	5
Dynamic Measurement Technology and Error Calculation	Lecture Tutorial	1 to 3	1 piece of coursework	K/MP	5
Small Electrical Motors and Servo Drives	Lecture Tutorial Lab	1 to 3	1 piece of coursework	K/MP	5
Small Electronically Controlled Motors	Lecture Tutorial Lab	1 to 3	1 piece of coursework	K/MP	5
Factory Planning	Lecture Tutorial	1 to 3		K/MP	5
Mechatronic Systems	Lecture Tutorial	1 to 3		K	5
Micro and Nanotechnology	Lecture Tutorial	1 to 3		K/MP	5
Production of Optoelectronic Systems	Lecture Tutorial	1 to 3		K/MP	5
Production Management and Logistics	Lecture Tutorial	1 to 3		K/MP	5
Control Engineering II	Lecture Tutorial	1 to 3	1 piece of coursework	K	5
Robotics I	Lecture Tutorial	1 to 3	1 piece of coursework	K	5
Robotics II	Lecture Tutorial	1 to 3		K	5
Fluid Dynamics I	Lecture Tutorial Lab	1 to 3	1 piece of coursework	K	5
Combustion Technology	Lecture Tutorial Lab	1 to 3	1 piece of coursework	K/MP	5
Total					15

Appendix 1.30.: Area of Expertise Minor Mathematics**Appendix 1.30.a) Compulsory modules – not applicable****Appendix 1.30.b) Compulsory elective modules – not applicable****Appendix 1.30.c) Elective modules**

Module	Courses	Semester	Coursework	Assessment	Credit points
Advanced Algebraic Methods	Lecture and tutorials Algebra I	1 to 3	1 piece of coursework	K/MP	12
Theory of Functions	Lecture and tutorial Theory of Functions	1 to 3	1 piece of coursework	K/MP	12

Numerical Mathematics II	Lecture and tutorial Numerical Mathematics II	1 to 3	1 piece of coursework	K/MP	12
Numerics of Partial Differential Equations	Lecture and tutorial Numerics of Partial Differential Equations	1 to 3	1 piece of coursework	K/MP	12
Practical Methods of Mathematics	Lecture and tutorial Algorithmic Programming	1 to 3		K/MP	14
	Lecture and tutorial Numerical Mathematics I	1 to 3	1 piece of coursework	K/MP	
Total					12 to 14

Appendix 1.31: Area of Expertise Minor Subject Philosophy**Appendix 1.31.a) Compulsory modules – not applicable****Appendix 1.31.b) Compulsory elective modules – not applicable****Appendix 1.31.c) Elective modules**

Students may take modules in philosophy comprising at least 14 and at most 17 CP, i.e., they take either two basic modules or one basic and one advanced specialisation module. They may select an advanced specialisation module only in combination with or following a basic module.

Module	Courses	Semester	Coursework	Assessment	Credit points
Basic module Metaphysics, Epistemology, Mind, and Language	Lecture	1 to 3	1 piece of coursework	K 90	7
	Tutorial				
Basic module Value Theory	Lecture	1 to 3	1 piece of coursework	K 90	7
	Tutorial				
Basic module History of Philosophy I	Lecture	1 to 3	1 piece of coursework	K 90	7
	Tutorial				
Basic module History of Philosophy II	Lecture	1 to 3	1 piece of coursework	K 90	7
	Tutorial				
Advanced specialisation module Metaphysics, Epistemology, Mind, and Language	Seminar	1 to 3	1 piece of coursework	HA 10-12 or MP 20	10
	Seminar		1 piece of coursework		
Advanced specialisation module Practical Philosophy	Seminar	1 to 3	1 piece of coursework	HA 10-12 or MP 20	10
	Seminar		1 piece of coursework		
Advanced specialisation module Philosophy of Science	Seminar	1 to 3	1 piece of coursework	HA 10-12 or MP 20	10
	Seminar		1 piece of coursework		
Total					14-17

Appendix 1.32: Area of Expertise Minor Subject Physics**Appendix 1.32.a) Compulsory modules – not applicable****Appendix 1.32.b) Compulsory elective modules – not applicable****Appendix 1.32.c) Elective modules**

Module	Courses	Semester	Coursework	Assessment	Credit points
Electricity and Relativity	Lecture and tutorial Electricity and Relativity	1 to 3	1 piece of coursework	K/MP	9
Undergraduate Physics Laboratory A	Basic Lab: Basics of Measurement Data Analysis	1 to 3	1 piece of coursework	-	5
Total					14

Appendix 1.33: Area of Expertise Minor Subject Water and Environmental Engineering**Appendix 1.32.a) Compulsory modules – not applicable****Appendix 1.32.b) Compulsory elective modules – not applicable****Appendix 1.33.c) Elective modules**

Beginning in the winter semester 2021/2022, students may select this minor subject only if they already completed it in their bachelor's degree programme.

Module	Courses	Semester	Coursework	Assessment	Credit points
Solid Waste Management	Lecture Tutorial	1 to 3		K/MP/VbP	6
Industrial Water Supply and Water Management	Lecture Tutorial	1 to 3		K/MP/VbP	6
Special Topics in Sanitary Engineering	Lecture Tutorial	1 to 3		K/MP/VbP	3
Water and Wastewater Engineering	Lecture Tutorial	1 to 3		K/MP/VbP	6
Water Resources Management and Environment	Lecture Tutorial	1 to 3		K/MP/VbP	6
Hydraulic Engineering and Waterway Construction	Lecture Tutorial	1 to 3		K/MP/VbP	6
Total					12-15

Appendix 1.34: Master's Thesis Module

The Master's Thesis Module comprises the master's thesis and an ungraded colloquium.

Module	Courses	Semester	Prerequisites for admission	Coursework	Assessment	Credit points
Master's thesis	-	4	60 ECTS		Master's thesis with colloquium	30
Total						30

The master's thesis module includes one assessment.

Appendix 2: Assessment Types

Appendix 2.1: Definitions

Bachelor's thesis (BA)

The bachelor's thesis module comprises the bachelor's thesis and, if applicable, an oral assessment and/or a piece of coursework as defined in the (degree programme-related) appendix.

Term paper (HA)

A term paper is an independently written paper on a subject-specific or interdisciplinary topic.

Written examination (K)

A written examination is a written or electronic assessment completed under supervision.

Multiple-choice examination (KA)

¹A written examination is a written or electronic assessment completed under supervision. ²Parts of written examinations may be conducted as multiple-choice examinations. ³When drafting the examination questions and answers, the examiner must determine which answers shall be recognised as correct. ⁴Two authorised examiners must review the examination questions and answers for multiple-choice examinations in advance for errors, consistency of content and appropriateness. ⁵Should a subsequent review of the examination questions reveal obvious errors in individual questions, these shall be deemed not to have been assigned. ⁶Evaluation of the examinations shall be based on the number of questions minus the number of erroneous questions. ⁷Reduction of the number of examination questions shall not have a disadvantageous effect for examination candidates.

Master's thesis (MA)

The master's thesis module comprises the master's thesis and, if applicable, an oral assessment and/or a piece of coursework as defined in the (degree programme-related) appendix.

Oral examination (MP)

¹Oral examinations are conducted privately in the presence of an observer who holds the qualification to be ascertained through said examination or an equivalent qualification. ²The essential topics of the examination shall be recorded in the minutes of the assessment. ³Students wishing to take the same examination at a later date and other members of the university who express legitimate interest must be permitted to observe the oral examination as guests. ⁴This permission does not extend to the consultations about the results and the announcement of the examination candidate's or candidates' results. ⁵At the request of the examination candidate or candidates, the guests specified in sentence 3 must be excluded.

Placement report (PB)

¹A placement report is a written paper relating to a placement organised individually by the student and undertaken outside of the determined registration and examination periods at an external institution or at one of the university facilities. ²Topics include, for example, preparing and performing the placement as well as critical reflection on a predetermined subject.

Project-related examination (PJ)

¹A project-related examination involves addressing a predefined subject-specific or interdisciplinary topic in a theoretical, empirical, experimental, constructive, conceptual, applied artistic or documentary manner. ²The results are presented in the form of a written and/or planning and/or artistic and/or electronic assignment. ³The examiner may require a presentation followed by a discussion. ⁴The scope of the work (in months or hours) specified in appendix 1 is binding.

Practical sports presentation (SP)

¹A practical sports presentation comprises one or more assignments to prove the demonstration and movement skills of examination candidates in the subject of sports. ²Skills such as techniques and tactics specific to a particular sport; coordinative-rhythmic, coordinative-technical or conditional basics as well as the situational ability to play or act may be evaluated. ³The type of presentation in a particular case is determined by agreement. ⁴The practical sports presentation is conducted before one examiner and one proficient observer. ⁵The essential topics of the examination shall be recorded in the minutes of the assessment. ⁶Students wishing to take the same examination at a later date and other members of the university who express legitimate interest must be permitted to observe the practical sports presentation as guests. ⁷This permission does not extend to the consultations about the results and the announcement of the examination candidate's or candidates' results. ⁸At the request of the examination candidate or candidates, the guests specified in sentence 6 must be excluded.

Independent assignment (ST)

¹In an independent assignment a subject-specific or interdisciplinary topic is addressed in a theoretical, experimental or constructive respect and the solutions developed are presented and explained in a manner usual for the professional activity. ²The scope of the work (in months or hours) specified in appendix 1 is binding. ³The stipulations in section 5 of these examination regulations shall apply. ⁴The topic of the independent assignment shall be determined by the examiner after hearing the examination candidate. ⁵The topic shall be assigned by the responsible body specified in section 3 or the entity appointed by that body; assignment of the topic must be recorded. ⁶The topic and a schedule for completion must also be set when the topic is assigned; the schedule for completion is to be prepared by the examination candidate. ⁷During preparation of the independent assignment, the examination candidate shall be supervised by the examiner, if appropriate in consultation with a person designated by the examiner. ⁸The period from assignment of the topic to submission of the independent assignment is six months. ⁹The student may return the topic of the independent assignment only once and only within the first eight weeks of the period provided for its preparation. ¹⁰Two copies of the independent assignment must be submitted to the entity appointed by the responsible body specified in section 3 by the deadline; the date and time of submission must be recorded. ¹¹Evaluation of the independent assignment may also include consideration of the process of its preparation.

Course-accompanying examination (VbP)

¹A course-accompanying examination (VbP) addresses a topic relating to a specific course and is conducted continuously during the semester. ²A VbP may comprise multiple examination components, which shall not exceed four components. ³The examiner shall determine and communicate the assessment type for a VbP by 15.10. for the winter semester or by 15.04. for the summer semester at the latest, at least for the semester in question. ⁴For courses and modules with a VbP, other assessments may be mandated as prerequisites only if the responsible dean of studies office can ensure that evaluation of the required module has been completed by the registration period for the VbP. ⁵The relevant registration and examination periods for the VbP examinations can be found in appendix 3.1 of the examination regulations.

⁶A VbP may comprise the following assessment types:

Written assignment (AA)

¹Written assignments are independent academic papers on a predetermined topic. ²They comprise a definition of the topic, a discussion of the problem, results and a conclusion. ³Written assignments include reports and/or minutes of field trips, placements or projects.

Documentation (DO)

¹A documentation comprises the analysis and presentation of an artistic, cognitive or action-oriented process. ²Documentations can take the form of reports and plans that correspond to those used in professional practice. ³Conditions regarding the number of pages or the number of plans or draft sheets may be determined by the examiner at the beginning of the examination and depend on the assignment. ⁴Further materials may be appended to the report.

Essay (ES)

¹An essay is a critical analysis of a literary and/or scientific question in written form. ²A topic is discussed in a greater overall context according to general academic standards and scientific positions are critically evaluated or analysed.

Colloquium (KO)

¹A colloquium comprises an oral presentation with a subsequent discussion of the topic, methods and results of the paper. ²The examination candidate is to demonstrate in the colloquium that they have the ability to defend their point of view within the scope of critical academic discussion. ³The essential topics of the assessment shall be recorded in the minutes of the assessment. ⁴Students wishing to take the same examination at a later date or other members of the university who express legitimate interest must be permitted to observe the colloquium as guests. ⁵This permission does not extend to the consultations about the results and the announcement of the examination candidate's or candidates' results. ⁶At the request of the examination candidate or candidates, the guests specified in sentence 4 must be excluded.

In-class test (KU)

¹An in-class test is a written assessment conducted under supervision during a set time. Following the requirements of the examiner, students must successfully complete a certain proportion of the assigned tasks in order to pass the in-class test.

Artistic academic presentation (KW)

¹An artistic academic presentation is based on the interaction between artistic processes and scientific analysis addressed in an artistic project and presented in an appropriate form. ²The lines of argument and interpretation featured in the presentation in the form of images and text are either expressed in an oral presentation with a subsequent discussion or explained in a term paper. ³An artistic academic presentation is conducted as an individual examination before an examiner and a proficient observer. ⁴The essential topics of the examination shall be recorded in the minutes of the assessment. ⁵Students wishing to take the same examination at a later date and other members of the university who express legitimate interest must be permitted to observe the artistic academic presentation as guests. ⁶This permission does not extend to the consultations about the results and the announcement of the examination candidate's or candidates' results. ⁷At the request of the examination candidate or candidates, the guests specified in sentence 5 must be excluded.

Lab exercise (LÜ)

¹A lab exercise comprises a series of practical tests or programming assignments, accompanied by written assignments (lab reports). ²As a rule, students explain their practical work, interpret the results and place them in a scientific context.

Model (MO)

¹Models are extensions of two-dimensional designs or plans and serve to illustrate a plan's spatial layout and to clarify planning issues. ²They are created to different scales, depending on the task and focus.

Teaching a group to play music (ME)

The aim of the VbP component "teaching a group to play music" is to demonstrate the ability to apply practical teaching skills (particularly practical music making at school) in a school class or a smaller group in an appropriate methodological and didactic manner.

Musical performance (MU)

¹The VbP component "musical performance" is conducted as an individual examination before two examiners or one examiner and one proficient observer. ²The essential topics of the examination shall be recorded in the minutes of the assessment. ³Students wishing to take the same examination at a later date and other members of the university who express legitimate interest must be permitted to observe the musical performance as guests. ⁴This permission does not extend to the consultations about the results and the announcement of the examination candidate's or candidates' results. ⁵At

the request of the examination candidate or candidates, the guests specified in sentence 3 must be excluded.

Musical performance by pupils (MK)

The VbP component “musical performance by pupils” is based on a music education seminar and includes a musical performance by pupils.

Concert with an educational focus (PK)

¹The VbP component “concert with an educational focus” is an assignment in relation to the artistic major in which the educational focus (if applicable, in terms of modern concert pedagogy) plays an important role in execution and presentation/performance. ²As a rule, it is presented in a school learning group.

Portfolio (PF)

¹A portfolio documents the learning process concerning certain topics or assignments set by the examiners at the start of the course. ²Students conduct systematic self-reflection during the course or retrospectively; in so doing, they may compile various materials in a folder, depending on what is agreed. ³An optional supplementary interview may be conducted to discuss the portfolio. ⁴Like the portfolio itself, the interview is competence-oriented.

Presentation (PR)

¹A presentation is an independent and in-depth analysis of a predetermined topic within the context of the course. ²The work and results are presented orally and/or using electronic and other media, as well as in the subsequent discussion. ³The examiner may require a written assignment. ⁴The type and duration of the presentation shall be determined by the examiner, unless this is specified in the (degree programme-related) appendix.

Practical examination (PP)

¹A practical examination comprises one or more assignments to prove students' movement skills in the subject of sports. ²Skills such as techniques and tactics specific to a particular sport; coordinative-rhythmic, coordinative-technical or conditional basics as well as the situational ability to play or act may be evaluated. ³The type of presentation in a particular case is determined by agreement. ⁴The ungraded practical examination is conducted by one examiner over the course of the semester.

Project assignment (P)

¹A project assignment involves addressing a predefined subject-specific or interdisciplinary topic in a theoretical, empirical, experimental, constructive, conceptual, applied artistic or documentary manner. ²The results are presented in the form of a written and/or planning and/or artistic and/or electronic assignment. ³The examiner may require a presentation followed by a discussion.

Seminar assignment (SE)

A seminar assignment comprises a term paper and – depending on the requirements of the examiner – may include a presentation with a subsequent discussion.

Theatrical performance (TP)

¹A theatrical performance is the presentation of practical theatrical work before an audience, either in a process-oriented or product-oriented form. ²The essential topics of the examination shall be recorded in the minutes of the assessment. ³Students wishing to take the same examination at a later date and other members of the university who express legitimate interest must be permitted to observe the theatrical performance as guests. ⁴This permission does not extend to the consultations about the results and the announcement of the examination candidate's or candidates' results. ⁵At the request of the examination candidate or candidates, the guests specified in sentence 3 must be excluded.

Practical assessment (Ü)

¹A practical assessment is an assessment conducted under supervision during a set time within the course schedule. ²Following the requirements of the examiner, students must successfully complete a certain proportion of the practical assessment assignments in order to pass.

Lesson preparation and implementation (U)

¹As an assessment type, lesson preparation and implementation entails independent planning and implementation of a lesson as part of a teaching placement at a school for children with special needs or in an inclusive environment. ²The lesson is reviewed and evaluated by a mentor and the seminar coordinator of the preparation seminar.

Graphic representation (ZD)

¹Graphic representations explain, clarify and present design and planning work. ²Depending on the task and thematic focus, they are prepared at different scales and using different techniques.

Appendix 2.2: Glossary of Assessment Types

BA	Bachelor's thesis
HA	Term paper
K	Written examination
KA	Multiple-choice examination
MA	Master's thesis
MP	Oral examination
PB	Placement report
PJ	Project-related examination
SP	Practical sports presentation
ST	Independent assignment
VbP	Course-accompanying examination
AA	Written assignment
DO	Documentation
ES	Essay
KO	Colloquium
KU	In-class test
KW	Artistic academic presentation
LÜ	Lab exercise
MO	Model
ME	Teaching a group to play music
MU	Musical performance
MK	Musical performance by pupils
PK	Concert with an educational focus
PF	Portfolio
PR	Presentation
PP	Practical examination
P	Project assignment
SE	Seminar assignment
TP	Theatrical performance
Ü	Practical assessment
U	Lesson preparation and implementation
ZD	Graphic representation

Appendix 3: Supplementary Provisions**Appendix 3.1: Registration and Examination Periods**

¹The responsible body specified in section 3 shall determine the variant for this degree programme and for the subjects in this degree programme. ²It shall decide either on variant 1 (one registration period/one examination period) or on variant 2 (two registration periods/two examination periods).

³In the case of modules that are exported to other degree programmes or made available to them, the degree programme or the responsible body of the faculty as specified in section 3 offering the module shall determine the variant; as a result, modules in this degree programme offered by other degree programmes (imported modules) may be assigned to a different variant. ⁴Students may register for the bachelor's thesis, master's thesis and independent assignments (ST) outside of the periods stated. ⁵Placement reports shall be registered in the registration period corresponding to the specified variant, but can be completed outside of the applicable examination periods and during the subsequent semester.

⁶Students must be notified of examination dates for oral examinations at least 14 days in advance via appropriate means of communication.

	Registration Period Summer Semester	Examination Period Summer Semester	Registration Period Winter Semester	Examination Period Winter Semester
Variant 1				
<i>Period for all assessment types except VbP</i>	15.05. – 31.05.	15.06. – 14.10.	15.11. – 30.11.	15.12. – 14.04.
<i>Period for VbP assessment types</i>	15.04. – 30.04.	01.05. – 31.08.	15.10. – 31.10.	01.11. – 28.02.
Variant 2				
<i>Period I for all assessment types except VbP</i>	15.05. – 31.05.	15.06. – 31.08.	15.11. – 30.11.	15.12. – 28.02.
<i>Period II for all assessment types except VbP</i>	16.09. – 23.09.	24.09. – 14.10.	16.03. – 23.03.	24.03. – 14.04.
<i>Period for VbP assessment types</i>	15.04. – 30.04.	01.05. – 31.08.	15.10. – 31.10.	01.11. – 28.02.

Appendix 3.2: Deadlines for Evaluation of Assessments

¹Depending on the variant selected, as specified in appendix 3.1, examiners shall submit marks as follows:

	Summer Semester	Winter Semester
Variant 1		
<i>Period for all assessment types except VbP</i>	by 26.10.	by 26.04.
<i>Period for VbP assessment types</i>	by 15.09.	by 15.03.
Variant 2		
<i>Period I for all assessment types except VbP</i>	by 12.09.	by 12.03.
<i>Period II for all assessment types except VbP</i>	by 26.10.	by 26.04.
<i>Period for VbP assessment types</i>	by 15.09.	by 15.03.

²Examiners shall evaluate assessments and submit marks within the deadline in accordance with section 17 paragraph 1. ³Assessments that occur at the end of the examination period shall be subject to a shorter deadline for evaluation of at least 12 days. ⁴The same shall apply for VbP.

Appendix 3.3: Deviating Stipulations Concerning Variant 2 Assessment Types

In variant 2, term papers must be registered during registration period I. In these cases, the assessment must be completed at the latest at the end of examination period II, as determined by the examiner.

Anlage 4: Nachweis der Prüfungsunfähigkeit**Proof of Incapacity to Take an Examination**
**Anlage 4 a: Rücktritt wegen Krankheit: Nachweis der
 Prüfungsunfähigkeit zur Vorlage beim Prüfungsausschuss (Prüfungen mit Prüfungstermin)**

*Withdrawal due to illness: proof of incapacity to take an examination for submission to the examination board
 (examinations with an exam date)*

Rücktrittserklärung wegen krankheitsbedingter Prüfungsunfähigkeit und ärztliches Attest
*Declaration of withdrawal because of incapacity to take an examination due to illness and medical
 certificate*

Angaben der/des Studierenden:*Student's details:*

Nachname: <i>Surname:</i>	Vorname: <i>First name:</i>
Geburtsdatum: <i>Date of birth:</i>	E-Mail-Adresse: <i>Email address:</i>
Telefonnummer: <i>Telephone number:</i>	Matrikelnummer: <i>Enrolment number:</i>
Studiengang: <i>Degree programme:</i>	

Betroffene Prüfung:*Examination concerned:*

Modul/Prüfung: <i>Module/examination:</i>	Form der Prüfung: <input type="checkbox"/> Klausur <i>Written examination</i> <input type="checkbox"/> mündliche Prüfung <i>Oral examination</i> <input type="checkbox"/> _____
Prüferin/Prüfer: <i>Examiner:</i>	Prüfungstermin: <i>Date of examination</i>

Erläuterungen der/des Studierenden zur Prüfungsunfähigkeit:*Additional information (to be completed by the student):*

Es wird empfohlen, zusätzlich zu den Angaben der/des behandelnden Ärztin/Arztes nähere Ausführungen zur Einschränkung zu machen.
 Bedenken Sie bitte, dass der Prüfungsausschuss nur anhand dieses Formulars in der Lage sein muss, eine Entscheidung zu treffen. *

We recommend that you provide a more detailed explanation of the limitations in addition to the information provided by your doctor.

*It is important to note that the examination board must be able to make a decision solely on the basis of this form. **

--

*Sollte der Platz für Ihre Ausführungen nicht ausreichen, fügen Sie bitte ein weiteres Blatt als Anlage bei.

** If the space provided for your additional information is insufficient, please attach an additional sheet of paper.*

Erklärung der/des Studierenden:

Declaration (to be completed by the student):

1. Hiermit erkläre ich meinen Rücktritt von der o.g. Prüfung.
 2. Die Datenschutzhinweise im Anhang habe ich zur Kenntnis genommen und auch meiner behandelnden Ärztin/meinem behandelnden Arzt zur Kenntnis gegeben.
 3. Meine behandelnde Ärztin/mein behandelnder Arzt wird hiermit von der ärztlichen Schweigepflicht entbunden und ermächtigt, relevante Informationen im Zusammenhang dieses Antrags an die Leibniz Universität weiterzugeben.
- 1. I confirm my withdrawal from the abovementioned examination.*
- 2. I acknowledge the enclosed data protection information and confirm that I have disclosed this information to my doctor.*
- 3. I hereby release my doctor from the obligation to maintain medical confidentiality and authorise my doctor to disclose relevant information to Leibniz University Hannover in connection with this application.*

Ort, Datum

Place, date

Unterschrift

Signature

Erläuterung für die behandelnde Ärztin/den behandelnden Arzt:

Wenn Studierende aus gesundheitlichen Gründen eine Prüfung versäumen oder von ihr zurücktreten, haben sie ihre krankheitsbedingte Prüfungsunfähigkeit glaubhaft zu machen. Dazu benötigen die Studierenden ein ärztliches Attest, das dem Prüfungsausschuss ermöglicht, aufgrund Ihrer Angaben als medizinischer Sachverständiger die Rechtsfrage zu beantworten, ob eine krankheitsbedingte Prüfungsunfähigkeit vorliegt. Dies erfordert Aussagen zu folgenden Punkten in dem ärztlichen Attest:

1. Den gesundheitlichen Beeinträchtigungen des Prüflings und
2. den sich daraus ergebenden Einschränkungen des Prüflings im Hinblick auf die betroffene Prüfung.

Bitte beachten:

Eine Diagnose wird explizit nicht abgefragt!

Die pauschale Bescheinigung von Arbeitsunfähigkeit oder Prüfungsunfähigkeit ist nicht ausreichend.

Studierende sind auf Grund ihrer Mitwirkungspflicht grundsätzlich dazu verpflichtet, zur Feststellung der Prüfungsunfähigkeit ihre Beschwerden offenzulegen und hierzu erforderlichenfalls den behandelnden Arzt von der Schweigepflicht zu entbinden. Im Rahmen der Aufgabenerfüllung notwendige personenbezogene Daten dürfen für diese Zwecke erhoben werden. (Anhang: Datenschutzhinweise nach Art. 13, 14 und 21 DSGVO)

Hinweis: Dieses Formular ist ein Muster. Das Attest kann auch formlos erstellt werden, soweit es die beiden oben genannten Punkte erhält.

Erklärung der Ärztin/des Arztes:

1. Meine heutige Untersuchung der Patientin/des Patienten _____ hat aus ärztlicher Sicht ergeben, dass folgende gesundheitliche Beeinträchtigungen (z. B. eingeschränkte Motorik der Hand – die Diagnose selbst braucht nicht genannt zu werden) und sich daraus ergebende Einschränkungen im Hinblick auf die betroffene Prüfung vorliegen:

1. Die Gesundheitsstörung ist (bitte ankreuzen!)

☐ auf Prüfungsstress zurückzuführen ☐ dauerhaft, d.h. auf nicht absehbare Zeit ☐ vorübergehend

(Hinweis: Examensängste und Prüfungsstress sind grundsätzlich keine Beeinträchtigung mit Krankheitswert, es sei denn, dass sie den Grad einer psychischen Erkrankung erreichen.)

2. Dauer der Krankheit:

von: _____ bis: _____

3. ☐ Die nachstehenden Datenschutzhinweise habe ich zur Kenntnis genommen. (Bitte ankreuzen!)

5. Datum, Unterschrift: _____

Praxisstempel



Leibniz
Universität
Hannover

Anlage 4 b: Verlängerung der Bearbeitungszeit:

Nachweis der Prüfungsunfähigkeit wegen Krankheit zur Vorlage beim Prüfungsausschuss

Appendix 4 b: Submission deadline extension:

proof of incapacity to take an examination due to illness for submission to the examination board

Verlängerung der Bearbeitungszeit wegen krankheitsbedingter Prüfungsunfähigkeit und ärztliches Attest
Submission deadline extension because of incapacity to take an examination due to illness and medical certificate

Angaben der/des Studierenden:

Student's details:

Nachname: <i>Surname:</i>	Vorname: <i>First name:</i>
Geburtsdatum: <i>Date of birth:</i>	E-Mail-Adresse: <i>Email address:</i>
Telefonnummer: <i>Telephone number:</i>	Matrikelnummer: <i>Enrolment number:</i>
Studiengang: <i>Degree programme:</i>	

Betroffene Prüfung:

Examination concerned:

Modul/Prüfung: <i>Module/examination:</i>	Form der Prüfung: <i>Assessment type:</i> <input type="checkbox"/> Bachelorarbeit <i>Bachelor's thesis</i> <input type="checkbox"/> Masterarbeit <i>Master's thesis</i> <input type="checkbox"/> _____
Prüferin/Prüfer: <i>Examiner:</i>	Aktueller Abgabetermin: <i>Current submission deadline:</i> Gab es bereits eine Verlängerung? <i>Was the deadline extended previously?</i> <input type="checkbox"/> ja <input type="checkbox"/> nein <i>Yes No</i> Falls ja, ursprünglicher Abgabetermin: <i>If yes, original submission deadline:</i>

Erläuterungen der/des Studierenden zur Prüfungsunfähigkeit:

Additional information (to be completed by the student):

Es wird empfohlen, zusätzlich zu den Angaben der/des behandelnden Ärztin/Arztes nähere Ausführungen zur Einschränkung zu machen. Bedenken Sie bitte, dass der Prüfungsausschuss nur anhand dieses Formulars in der Lage sein muss, eine Entscheidung zu treffen. *

We recommend that you provide a more detailed explanation of the limitations in addition to the information provided by your doctor.

It is important to note that the examination board must be able to make a decision solely on the basis of this form. *

--

*Sollte der Platz für Ihre Ausführungen nicht ausreichen, fügen Sie bitte ein weiteres Blatt als Anlage bei.

** If the space provided for your additional information is insufficient, please attach an additional sheet of paper.*

Erklärung der/des Studierenden:

Declaration (to be completed by the student):

1. Hiermit beantrage ich die Verlängerung der Bearbeitungszeit der o.g. Arbeit.
2. Die Datenschutzhinweise im Anhang habe ich zur Kenntnis genommen und auch meiner behandelnden Ärztin/meinem behandelnden Arzt zur Kenntnis gegeben.
3. Meine behandelnde Ärztin/mein behandelnder Arzt wird hiermit von der ärztlichen Schweigepflicht entbunden und ermächtigt, relevante Informationen im Zusammenhang dieses Antrags an die Leibniz Universität weiterzugeben.

1. I request an extension of the submission deadline for the abovementioned component.

2. I acknowledge the enclosed data protection information and confirm that I have disclosed this information to my doctor.

3. I hereby release my doctor from the obligation to maintain medical confidentiality and authorise my doctor to disclose relevant information to Leibniz University Hannover in connection with this application.

Ort, Datum

Place, date

Unterschrift

Signature

Erläuterung für die behandelnde Ärztin/den behandelnden Arzt:

Wenn Studierende aus gesundheitlichen Gründen eine Prüfung versäumen oder von ihr zurücktreten, haben sie ihre krankheitsbedingte Prüfungsunfähigkeit glaubhaft zu machen. Dazu benötigen die Studierenden ein ärztliches Attest, das dem Prüfungsausschuss ermöglicht, aufgrund Ihrer Angaben als medizinischer Sachverständiger die Rechtsfrage zu beantworten, ob eine krankheitsbedingte Prüfungsunfähigkeit vorliegt. Dies erfordert Aussagen zu folgenden Punkten in dem ärztlichen Attest:

1. Den gesundheitlichen Beeinträchtigungen des Prüflings und
2. den sich daraus ergebenden Einschränkungen des Prüflings im Hinblick auf die betroffene Prüfung.

Bitte beachten:

Eine Diagnose wird explizit nicht abgefragt!

Die pauschale Bescheinigung von Arbeitsunfähigkeit oder Prüfungsunfähigkeit ist nicht ausreichend.

Studierende sind auf Grund ihrer Mitwirkungspflicht grundsätzlich dazu verpflichtet, zur Feststellung der Prüfungsunfähigkeit ihre Beschwerden offenzulegen und hierzu erforderlichenfalls den behandelnden Arzt von der Schweigepflicht zu entbinden. Im Rahmen der Aufgabenerfüllung notwendige personenbezogene Daten dürfen für diese Zwecke erhoben werden. (Anhang: Datenschutzhinweise nach Art. 13, 14 und 21 DSGVO)

Hinweis: Dieses Formular ist nur ein Muster. Das Attest kann auch formlos erstellt werden, soweit es die beiden oben genannten Punkte erhält.

Erklärung der Ärztin/des Arztes:

2. Meine heutige Untersuchung der Patientin/des Patienten _____ hat aus ärztlicher Sicht ergeben, dass folgende gesundheitliche Beeinträchtigungen (z. B. eingeschränkte Motorik der Hand – die Diagnose selbst braucht nicht genannt zu werden) und sich daraus ergebende Einschränkungen im Hinblick auf die betroffene Prüfung vorliegen:

3. Die Gesundheitsstörung ist (bitte ankreuzen!)

☐ auf Prüfungsstress zurückzuführen ☐ dauerhaft, d.h. auf nicht absehbare Zeit ☐ vorübergehend

(Hinweis: Examensängste und Prüfungsstress sind grundsätzlich keine Beeinträchtigung mit Krankheitswert, es sei denn, dass sie den Grad einer psychischen Erkrankung erreichen.)

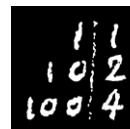
4. Dauer der Krankheit:

von: _____ bis: _____

5. ☐ Die nachstehenden Datenschutzhinweise habe ich zur Kenntnis genommen. (Bitte ankreuzen!)

5. Datum, Unterschrift: _____

Praxisstempel



**Anlage 4 c: Rücktrittserklärung/Verlängerung der Bearbeitungszeit:
Verlängerung der Bearbeitungszeit aus wichtigen Gründen (nicht krankheitsbedingt)**

*Appendix 4 c: Declaration of withdrawal/submission deadline extension:
submission deadline extension due to valid reasons (not due to illness):*

**Rücktrittserklärung/Verlängerung der Bearbeitungszeit aus wichtigen Gründen
(gem. § 15 Abs. 5 und 6 der Prüfungsordnung)**

*Declaration of withdrawal/submission deadline extension due to valid reasons
(as per section 15 (5) and (6) of the examination regulations)*

Angaben der/des Studierenden:

Student's details:

Nachname: <i>Surname:</i>	Vorname: <i>First name:</i>
Geburtsdatum: <i>Date of birth:</i>	E-Mail-Adresse: <i>Email address:</i>
Telefonnummer: <i>Telephone number:</i>	Matrikelnummer: <i>Enrolment number:</i>
Studiengang: <i>Degree programme:</i>	

Betroffene Prüfung:

Examination concerned:

Modul/Prüfung: <i>Module/examination:</i>	Form der Prüfung: <i>Assessment type:</i> <input type="checkbox"/> Klausur <i>Written examination</i> <input type="checkbox"/> mündliche Prüfung <i>Oral examination</i> <input type="checkbox"/> Bachelorarbeit <i>Bachelor's thesis</i> <input type="checkbox"/> Masterarbeit <i>Master's thesis</i> <input type="checkbox"/> _____
Prüferin/Prüfer: <i>Examiner:</i>	Prüfungstermin/Aktueller Abgabetermin: <i>Date of examination/current submission deadline:</i> Gab es bereits eine Verlängerung? <i>Was the deadline extended previously?</i> <input type="checkbox"/> ja <input type="checkbox"/> nein <i>Yes No</i> Falls ja, ursprünglicher Abgabetermin: <i>If yes, original submission deadline:</i>

Erklärung der/des Studierenden (Zutreffendes bitte ankreuzen):*Declaration (to be completed by the student) – select as applicable:*☐ Hiermit erkläre ich meinen Rücktritt von der o.g. Prüfung aus wichtigen Gründen.*I confirm my withdrawal from the abovementioned examination due to valid reasons.*☐ Hiermit beantrage ich die Verlängerung der Bearbeitungszeit der o.g. Arbeit aus wichtigen Gründen.*I request an extension of the submission deadline for the abovementioned component due to valid reasons.*

Die wichtigen Gründe werden auf Seite 2 ausführlich erläutert, ggf. notwendige Anlagen sind diesem Dokument beigelegt.

A detailed explanation of the reasons can be found on page 2; any further necessary information is enclosed with this document.

Ort, Datum*Place, date*_____
Unterschrift*Siganture***Ausführliche Erläuterung der für den Rücktritt/die Verlängerung geltend gemachten wichtigen Gründe:***Detailed explanation of the valid reasons given for withdrawal/submission deadline extension:***Anhang: Datenschutzhinweise nach Art. 13, 14 und 21 DSGVO**

Annex: Data protection information in accordance with articles 13, 14 and 21 of the EU General Data Protection Regulation (GDPR)

Datenschutzhinweise nach Art. 13, 14 und 21 DSGVO

Wir verarbeiten Ihre personenbezogenen Daten (im Folgenden „Daten“) gemäß den gesetzlichen Vorgaben und möchten dies in transparenter Weise gestalten. Wir informieren Sie hiermit, welche Daten wir verarbeiten, und zu welchen Zwecken und auf welcher Rechtsgrundlage dies erfolgt. Zudem erhalten Sie Auskunft über Ansprechpartner sowie Ihre Rechte in Zusammenhang mit der Datenverarbeitung.

Name und Kontaktdaten des Verantwortlichen:

Gottfried Wilhelm Leibniz Universität Hannover
vertreten durch den Präsidenten
Welfengarten 1
30167 Hannover

Kontakt Daten des Datenschutzbeauftragten:

Gottfried Wilhelm Leibniz Universität Hannover
– Stabsstelle Datenschutz –
Königsworther Platz 1
30167 Hannover
E-Mail: datenschutz@uni-hannover.de

Zwecke und Rechtsgrundlagen der Datenverarbeitung:

Wir verarbeiten die in diesem Formular abgefragten Daten für die Wahrnehmung unserer im öffentlichen Interesse liegenden Aufgabe, das Verfahren zur Abnahme von Hochschulprüfungen ordnungsgemäß durchzuführen. Insbesondere die Verarbeitung von Gesundheitsdaten ist für die Ausübung des Rechts der/des Studierenden zum Prüfungsrücktritt erforderlich, weil ansonsten nicht festgestellt werden kann, ob die Voraussetzungen für einen wirksamen Prüfungsrücktritt aus triftigen Gründen erfüllt sind. Die Rechtsgrundlage für diese Verarbeitung ergibt sich aus:

- § 3 S. 1 Nr. 1 Niedersächsisches Datenschutzgesetz (NDSG),
- Art. 6 Abs. 1 S. 1 Buchstabe e, Abs. 2 und 3; Art. 9 Abs. 2 Buchstabe f Datenschutzgrundverordnung (DSGVO) i. V. m.
- § 17 Abs. 1 S. 1 Niedersächsisches Hochschulgesetz (NHG) und
- der jeweils einschlägigen Prüfungsordnung der Gottfried Wilhelm Leibniz Universität Hannover.

Allgemeine Informationen:

Dieses Originalformular einschließlich des beinhalteten ärztlichen Attests wird Bestandteil Ihrer geführten Prüfungsakte. Mit regulärer Aussonderung und Vernichtung Ihrer Prüfungsakte nach Abschluss Ihres Studiums wird dieses Originalformular ebenfalls vernichtet werden. Im Rahmen der weiteren Verfahrensbearbeitung erhalten nur die Angehörigen des Akademischen Prüfungsamtes, die Mitglieder der für die Entscheidung gemäß der einschlägigen Prüfungsordnung zuständigen Prüfungsorgane sowie –soweit erforderlich– Angehörige des Justitiariats der Hochschule Kenntnis von diesem Originalformular und dessen Inhalten. Die Beteiligten sind zur Verschwiegenheit und vertraulichen Behandlung verpflichtet.

Wir möchten Sie darüber informieren, dass die Bereitstellung Ihrer Daten weder gesetzlich noch vertraglich vorgeschrieben ist. Sofern die Daten nicht bereitgestellt werden, hat dies zur Folge, dass nicht festgestellt werden kann, ob die Voraussetzungen für einen wirksamen Prüfungsrücktritt aus triftigen Gründen erfüllt sind. Eine automatisierte Entscheidungsfindung einschließlich Profiling i. S. d. Art. 22 Abs. 1 und 4 DSGVO findet nicht statt.

Ihr Recht auf Widerspruch gem. Art. 21 DSGVO:

Sie haben das Recht, aus Gründen, die sich aus Ihrer besonderen Situation ergeben, jederzeit gegen die Verarbeitung Sie betreffender personenbezogener Daten Widerspruch einzulegen. In diesem Fall verarbeiten wir diese Daten nicht mehr, es sei denn, wir können zwingende schutzwürdige, Ihre Interessen, Rechte und Freiheiten überwiegende Gründe für die Verarbeitung nachweisen, oder die Verarbeitung dient der Geltendmachung, Ausübung oder Verteidigung von Rechtsansprüchen.

Ihre weiteren Rechte:

Sie haben das Recht, von uns Auskunft über die Verarbeitung Sie betreffender Daten zu verlangen. Dieses Auskunftsrecht umfasst neben einer Kopie der Daten auch die Zwecke der Datenverarbeitung, die Datenempfänger sowie die Speicherdauer. Sollten unrichtige Daten verarbeitet werden, können Sie von uns unverzüglich die Berichtigung dieser Daten verlangen. Liegen die gesetzlichen Voraussetzungen nach Art. 17 bzw. 18 DSGVO vor, steht Ihnen zudem grundsätzlich das Recht auf unverzügliche Löschung oder auf Einschränkung der Verarbeitung der Daten zu.

Bitte beachten Sie, dass eine eingeschränkte Verarbeitung der Daten unter Umständen nicht möglich ist.

Zur Ausübung Ihrer oben genannten Rechte wenden Sie sich bitte – vorrangig an die/den für Ihren Studiengang zuständige/n Sachbearbeiter/in im Akademischen Prüfungsamt – im Übrigen an:

Gottfried Wilhelm Leibniz Universität Hannover; Akademisches Prüfungsamt; Welfengarten 1; 30167 Hannover; E-Mail: studium@uni-hannover.de

Bei weiteren Fragen berät Sie gerne unser Datenschutzbeauftragter.

Mit datenschutzrechtlichen Beschwerden wenden Sie sich bitte an:

Die Landesbeauftragte für den Datenschutz Niedersachsen; Prinzenstraße 5; 30159 Hannover; E-Mail: poststelle@lfd.niedersachsen.de

Data protection information in accordance with articles 13, 14 and 21 of the EU General Data Protection Regulation (GDPR)

We process your personal data (hereafter referred to as "data") in accordance with legal requirements and aim to do so in a transparent manner. In the following, we inform you what data we process for what purposes and the legal basis for doing so. We also provide information on contact persons, as well as your rights in relation to data processing.

Name and contact details of the data controller:

Gottfried Wilhelm Leibniz Universität Hannover
vertreten durch den Präsidenten
Welfengarten 1
30167 Hannover

Contact details of the Data Protection Officer:

Gottfried Wilhelm Leibniz Universität Hannover
- Stabsstelle Datenschutz -
Königsworther Platz 1
30167 Hannover
Email: datenschutz@uni-hannover.de

Purposes and legal basis for data processing:

We process the data requested in this form in order to perform our duty – which is in the public interest – to properly implement the procedure for conducting university examinations. Specifically, processing data on health is necessary for students to exercise their right to withdraw from an examination, as otherwise it cannot be established whether the prerequisites for withdrawing from an examination for valid reason have been met. The legal basis for processing this data is:

- Section 3 1 1 of the Lower Saxony regulations governing data protection (Niedersächsisches Datenschutzgesetz – NDSG),
- Article 6 (1) 1 (e), (2) and (3) GDPR; Article 9 (2) (f) GDPR in conjunction with
- Section 17 (1) sentence 1 of the Lower Saxony Higher Education Act (Niedersächsisches Hochschulgesetz – NHG) and
- the applicable examination regulations of Gottfried Wilhelm Leibniz Universität Hannover.

General information:

The original of this form – including the accompanying medical certificate – shall form part of your examination records. As part of the regular process of deleting and destroying your examination file after you have completed your degree programme, the original form will also be destroyed. With respect to the further processing of the case, only the members of the examination office, the members of the examination bodies responsible for the decision as per the relevant examination regulations and – if necessary – members of the university's legal department will be given access to this original form and its contents. Those involved are obliged to maintain secrecy and confidentiality.

Please be advised that you are not required by law or contract to provide your data. If no data is provided, consequently it will not be possible to determine whether the prerequisites for withdrawing from an examination for valid reasons have been met. An automated decision-making process, including profiling, within the meaning of Article 22 (1) and (4) GDPR shall not occur.

Right to objection as per Article 21 GDPR:

You have the right, for reasons resulting from your particular situation, to object to the processing of personal data concerning you at any time. In this case, we will then stop processing your data, unless legitimate grounds exist to continue that override your interests, rights and freedoms, or where processing serves to assert, exercise or defend legal claims.

Your other rights:

You have the right to obtain information from us about the processing of data concerning you. This comprises access to a copy of this data as well as information on the purposes of processing, the recipients and the duration of storage. If inaccurate personal data is processed, you have the right to request the rectification of this data without undue delay. If the legal requirements stipulated in Article 17 or Article 18 GDPR are met, you also have the right to erasure of data without undue delay or restriction of processing thereof.

Please note that in certain circumstances, it is not possible to restrict processing of data.

In order to exercise the abovementioned rights, please primarily contact the member of the examination office responsible for your degree programme, otherwise contact:

Gottfried Wilhelm Leibniz Universität Hannover, Akademisches Prüfungsamt, Welfengarten 1, 30167 Hannover; email: studium@uni-hannover.de

Our data protection officer will gladly provide advice regarding any further questions.

For any data protection complaints, please contact:

Landesbeauftragte für den Datenschutz Niedersachsen, Prinzenstraße 5, 30159 Hannover; email: poststelle@lfd.niedersachsen.de