Examination regulations

for

the Bachelor's programme in “Computer Science”,
the Bachelor's degree programme in “Cyber Security & Privacy”,
the Bachelor's degree programme in “Business Informatics”,
the Bachelor's degree programme in “Computer Science (cooperative)”,
the Master's degree programme in “Computer Science”,
the Master's degree programme in “Business Informatics, Sustainability and Digitalisation”,
the Master's programme in “Cyber Security & Privacy”,
the Master's programme in “Autonomous Systems”, and
the Master's programme in “Game Technologies”

at the Sankt Augustin campus of the Bonn-Rhein-Sieg University of Applied Sciences

from 28 November 2024

Disclaimer
This English text is provided for information purposes only. In the event of any discrepancies or ambiguities, the German version shall prevail and is legally binding.

Based on Section 2 (4) and Section 64 of the Hochschulgesetz (Higher Education Act) of North Rhine-Westphalia (Hochschulgesetz – HG NRW) of 16 September 2014 (GV. NRW, page 547), last amended by Article 2 of the Act of 5 December 2023 (GV. NRW. p. 1278), the Department of Computer Science at the Sankt Augustin campus of the Bonn-Rhein-Sieg University of Applied Sciences has adopted the following examination regulations for the Bachelor's degree programmes "Computer Science", "Computer Science (cooperative)", "Cyber Security & Privacy" and the Master's degree programmes "Computer Science", "Business Informatics, Sustainability and Digitalisation", "Cyber Security & Privacy", "Autonomous Systems" and "Game Technologies".

Contents

A. General provisions

§ 1 Scope

[1]These examination regulations govern the content, structure and procedure of examinations, including the final examination, in the following degree programmes offered by the Department of Computer Science at Bonn-Rhein-Sieg University of Applied Sciences:

- Bachelor of Science in Computer Science (Bachelor Informatik, BI)
- Bachelor of Science in Cyber Security & Privacy (BCSP)
- Bachelor of Science in Business Informatics (Bachelor Wirtschaftsinformatik BWI)
- Bachelor of Science in Computer Science (cooperative) (Bachelor Informatik (kooperativ) BIk)
- Master of Science in Computer Science (Master Informatik MI)
- Master of Science in Business Informatics, Sustainability and Digitalisation (Master Wirtschaftsinformatik, Nachhaltigkeit und Digitalisierung MWI)
- Master of Science in Cyber Security & Privacy (MCSP)
- Master of Science in Autonomous Systems (MAS)
- Master of Science in Game Technologies (MGT)

§ 2 Objectives of the programme

(1) [1] The Bachelor's programme imparts skills for dealing with comprehensive, complex and frequently changing technical tasks and problems, as well as for independently managing processes in the respective subject area. [2]The necessary methods are taught. [3]This includes the evaluation of new situations, taking into account different standards. [4]The programme imparts broad and integrated knowledge on a scientific basis, taking into account the connection to related fields of knowledge. [5]Students are enabled to work responsibly in teams of experts or to lead such teams, to provide technical guidance to others, and to present their problems and solutions to experts in a well-argued manner and develop them further in collaboration with them. [6]They can define, reflect on and evaluate goals for learning and work processes and shape these independently and sustainably. [7] The Bachelor's degree is a first professional academic qualification with the title "Bachelor of Science".

(2) [1] The master's programme builds on the skills and content of the bachelor's programme to provide students with the skills to tackle new, complex tasks and problems in areas subject to frequent and unpredictable change, such as independently managing processes in the respective subject area. [2]The programme imparts comprehensive, detailed and specialised knowledge based on the latest findings in the respective subject area, as well as advanced skills in related areas. [3]Students have specialised technical and conceptual skills for solving even strategic problems. [4]They can weigh up alternatives when information is incomplete, develop and apply new ideas or procedures, and evaluate them taking into account different standards. [5]They can responsibly lead groups and organisations in complex tasks, present their work results and provide targeted technical support to others.

[6]They can lead field-specific and cross-disciplinary discussions. [7]They can define new application- or research-oriented tasks and goals, reflecting on the possible social, economic and cultural implications, and use appropriate means and independently acquire knowledge for this purpose. [8]The Master's degree is a further professional qualification with the title "Master of Science". [9]The degree generally qualifies the holder to pursue a doctorate.

(3) [1]The final examination determines whether the student has fulfilled the requirements of the respective programme.

§ 3 Study programme: Prerequisites and admission

(1) [1]The admission requirements for Bachelor's programmes are specified in § 27, the admission requirements for Master's programmes in § 32, in particular for the Master's programme in Computer Science in § 36, for the Master's programme in Cyber Security & Privacy in § 40, for the Master's programme in Autonomous Systems in § 44 and for the Master's programme in Games Technologies in § 48.

(2) [1]If an applicant for a degree programme at a higher education institution within the scope of the Basic Law has definitively failed an examination required under the examination regulations or has lost the right to take the examination for any other reason, enrolment in this degree programme is excluded in accordance with § 50 (1) No. 2 HG NRW. [2]This shall apply mutatis mutandis to degree programmes that are substantially similar in content to the previous degree programme. [3]The respective examination board shall decide on the substantial similarity in content.

(3) [1]In the case of an application for a degree programme with compulsory teaching or examination components in German, sufficient knowledge of the German language must be demonstrated by means of a German university entrance qualification, or by passing the DSH (at least D S H - 2) or an equivalent German language test in accordance with the Regulations for the German Language Test for University Admission for Study Applicants with foreign educational qualifications at the Bonn-Rhein-Sieg University of Applied Sciences (DSH Regulations, DSH-Ordnung) in their current version.

(4) [1]Students from international partner universities who complete most of their studies at their home university but in cooperation with the Department of Computer Science may be admitted to the Bonn-Rhein-Sieg University of Applied Sciences without proof of special German language skills, provided that a double degree agreement exists and the application requirements specified therein are met.

(5) [1]In the case of an application for a degree programme with compulsory teaching or examination components in English, sufficient knowledge of English must be demonstrated. [2]The required level, according to the Common European Framework of Reference for Languages (CEFR), is specified for each degree programme. [3]Results from various language tests may be used for classification purposes. [4]The scheme used to convert results from other language tests (e.g. TOEFL, CESOLE, IELTS) to CEFR levels is provided by the university.

(6) [1]In addition, applicants may be admitted in accordance with the university's "Admission Requirements for Applicants with Foreign Qualifications" („Zugangsprüfungsordnung für im Ausland qualifizierte Studienbewerberinnen und Studienbewerber“) in its currently valid version.

§ 4 Course of study: Structure

(1) [1]To ensure that the programme is structured appropriately, a study plan is drawn up as a recommendation for students. [2]An individual study plan can be drawn up for individual students upon request.

(2) [1]The degree programmes are divided into modules. [2]Their contents are specified in the module handbook. [3]The modules are assessed with credit points in accordance with the European Credit Transfer System (ECTS), which measure the amount of work done by students. [4]For each ECTS credit, a workload of 30 hours of classroom and self-study is assumed per student. [5]The completion of all coursework in a standard semester is assessed with an average of 30 ECTS credits.

(3) [1]The ECTS credits for a module are obtained by completing the corresponding coursework in accordance with § 6.

(4) [1]ECTS credits for a piece of coursework can only be credited once in a consecutive degree programme, even if there are alternative ways of crediting this piece of coursework.

(5) [1]The department expressly recommends and supports study visits and the completion of academic achievements abroad.

§ 5 Courses

(1) [1]No later than two weeks before the start of the courses, the Dean shall announce the courses taking place in that semester and, for each of these, their assignment to modules and semesters, the ECTS credits and the academic achievements to be completed. [2]The announcement shall be made in electronic form.

(2) [1]The languages of instruction are German and English. [2]The language of instruction must be specified in the course announcement in accordance with § 5 (1). [3]In individual cases, a language of instruction other than that specified in the course announcement may be chosen for a course with the consent of all contributors and participants.

(3) [1]Courses may be conducted using electronic media (e.g. in the form of e-learning, video conferencing, etc.).

(4) [1]A course is considered as

1. Compulsory course if it is the only opportunity for students to complete the coursework for a module in the respective semester, or as

2. Non-compulsory course if there are other opportunities for students to complete coursework for the modules to which the course is assigned in the respective semester.

(5) [1]If, due to the nature or purpose of a course or for other reasons related to research or teaching, it is necessary to limit the number of participants and the number of applicants exceeds the capacity, the lecturer shall regulate access in consultation with the dean of the department. [2]In the case of compulsory courses in accordance with § 5 (4), the following criteria shall be taken into account in the order listed:

1. Study progress of the student in question,

2. Impairment of the student's ability to study properly due to circumstances worthy of protection as defined by law (e.g. care of persons, maternity leave, parental leave or physical disabilities),

3. (if specified in the course announcement:) Level of subject-specific skills based on previous academic achievements and

4. a random selection process.

[3]For non-compulsory courses pursuant to § 5 (4), access may be regulated in the same manner. [4]Alternatively, in such cases, access may be determined on the basis of a lottery, the chronological order of registration or other criteria specified in advance. [5] Students shall be informed of the relevant provisions in the course announcement in accordance with § 5 (1).

(6) [1]Compulsory attendance at courses may be required for excursions, language courses, internships, practical exercises and comparable events. [2]Projects pursuant to § 13 (3) are considered comparable events. [3]For seminars with no more than 25 participants, whose main learning objective is academic discourse and which are classified as comparable courses within the meaning of the previous sentence, the examination board may, in justified individual cases, exceptionally stipulate compulsory participation. [4]Mandatory attendance must be announced to students in the course announcement in accordance with § 5 (1).

(7) [1]Before or at the beginning of a course with compulsory attendance pursuant to § 5 (6), which is assessed by means of a performance record (Leistungsnachweis), the lecturer may offer students with appropriate prior knowledge the option of completing the coursework in an alternative manner without attending the course.

§ 6 Academic achievements: Examinations and performance records

(1)[1]Academic achievements are demonstrated by passing examinations and providing performance records (Leistungsnachweis). [2]The academic achievements required for the individual modules are listed in Part I of these examination regulations. [3]For identical modules according to Appendix I.8, the examination procedure may only be taken once in total if the student is enrolled in several degree programmes at the same time.

(2) [1]Unless otherwise specified, an examination that has been failed may be repeated no more than twice. [2]Students may attempt to improve their grade in up to three examinations that they have passed in their degree programme. [3]This does not apply to the final thesis and final colloquium. [4]Onceregistered for the final thesis, one cannot register for any more attempts to improve your grades.

(3) [1]Attempts to obtain a performance record (Leistungsnachweis) may be repeated without restriction. [2]A performance record that has been successfully completed cannot be repeated. [3]Regulations regarding absences do not apply.

(4) [1]Performance records (Leistungsnachweis) do not have to be graded. [2]A performance record may also be graded as "pass" or "fail". [3]The grading system for a performance record must be communicated to students in the course announcement in accordance with § 5 (1).

(5) [1]The examination languages are German and English. [2]The examination language shall be announced to students in the course announcement in accordance with § 5 (1).

(6) 1Examinations may be taken orally as

1. an examination interview

2. presentation or
3. colloquium,

or in writing, as a

4. written exam,
5. seminar paper or term paper,
6. project work or
7. final thesis

[2]An examination may consist of written and oral parts. [3]The form of examination shall be announced to students in the course announcement in accordance with § 5 (1), but no later than when the examination date is announced (in accordance with § 7, no later than 6 weeks before the start of the first examination period of the respective semester).

(7) [1]Any impairments prior to the examination or during the examination must be asserted immediately if and as soon as it is possible and reasonable to do so. [2]Unconditional participation in an examination with knowledge or reasonable knowledge of relevant impairments excludes any subsequent appeal on the basis of such impairments.

(8) [1]The use of electronic media to conduct written and oral examinations (e.g. online questionnaires or video conferences) is permitted (examination in electronic communication). [2]Further details are regulated by the digital teaching regulations of the Department of Computer Science (digitale Lehrverordnung des Fachbereichs Informatik).

(9) [1]Written or oral examinations for which there is no opportunity to make up for a final failure or which conclude a degree programme shall be assessed by two examiners and, in the case of oral examinations, shall be conducted and assessed by two examiners. [2]Written examinations that do not fall under sentence 1 shall be assessed by one examiner. [3]Oral examinations not covered by sentence 1 shall be conducted and assessed by two examiners or by one examiner in the presence of a competent proctor. [4]The proctor may be consulted by the examiner before the grade is determined.

(10) [1]Examiners shall assess examination performance independently. [2]In the event of differing assessments, the grade shall be determined by taking the arithmetic mean of the points awarded. [3]§§ 9(3) and (4) shall be taken into account.

(11) [1]If a student fails the second examination attempt, they are advised to arrange a consultation with the examiner. [2]The purpose of the consultation is to identify the reasons for the previous failure and to identify opportunities for improvement.

(12) [1]Performance records are individual academic achievements that serve in particular to demonstrate the testing and practice of the application of the acquired specialist knowledge and skills as well as the methods learned. [2]The following may be used as performance records: exercises, written examinations, term papers, research papers, presentations, essays, practical project reports or project work are considered. [3]Proof of mere participation in a course does not constitute a performance record within the meaning of these examination regulations.

(13) [1]In the case of coursework and other written assignments, the individuality of the work must be ensured by appropriate measures (e.g. colloquium, technical discussion, written examination, etc.). [2]In particular, students may be required to submit a declaration that the work has been completed independently in the form of a sworn statement.

(14) [1]The performance record may also take the form of group work if the contribution of the individual student to be assessed is clearly distinguishable and assessable on the basis of criteria that allow for differentiation.

(15) [1]The reasons for the assessment of performance in oral examinations shall be communicated to the examinee at his or her request. [2]The request may be made to the examiner or examiners immediately after the examination has ended. [3]If the examinee explicitly requests a justification, this shall be provided in writing.

(16) [1]Objections to the assessment of examination performance must be justified in detail and in a comprehensible manner in writing within four weeks at the latest. [2]In the case of written examinations, the period begins after the examination has been inspected. [3]In the case of oral examinations, the period begins with the announcement of the examination result or with the expiry of the day on which the assessment justification is communicated in writing. [4]After expiry of the objection period, all further objections are excluded.

§ 6a Admissibility of e-exams and further specifications

(1) [1]Examinations and performance records may be conducted in electronic form. [2]Electronic examinations and performance records (e-examinations, E-Prüfungen) are examination procedures that are conducted and/or evaluated using computer-based or digital media.

(2) [1]The authenticity and integrity of examination results must be ensured. [2]An automatically generated assessment of an examination performance or a performance record (Leistungsnachweis) shall be reviewed by an examiner at the request of the student concerned.

(3) [1]Before an electronic examination procedure is carried out for the first time in a study program, a general introduction shall take place.

(4) [1]Candidates shall be given the opportunity to inspect the electronic examination or performance record and to grant them the results they have achieved.

(5) [1] In all other respects, the relevant provisions of these examination regulations shall continue to apply.

§ 6b Data protection for electronic and digital examinations and performance records

(1) [1] The purpose of examinations and performance records in electronic form or communication is to enable qualitatively new and application-oriented examination options as well as more objective evaluation of examination performance and performance records. [2] In addition, they offer an additional modality for the flexible and needs-based design of examinations and performance records.

(2) [1]The data will only be processed internally and on the basis of Article 6 (1) (e) GDPR in conjunction with §§ 64 (2) sentence 2, 82a HG NRW, whereby the public interest lies in the performance and acceptance of examinations and performance records in electronic form or electronic communication.

(3) [1]Only systems approved by the relevant examination boards may be used to conduct examinations or performance records in electronic form or via electronic communication. [2]These shall be announced in an appropriate place. [3]Further details on use are set out in the relevant data protection declarations for the systems. [4]Reference must be made to the data protection information required under Article 13 GDPR and to the data protection declaration.

(4) [1]Examinations may also be taken at other locations and with the support of third parties.

§ 7 Academic achievements: Dates, registration, admission

(1) [1]Adademic achievements are completed during the course of study. [2]For each adademic achievement, an opportunity to complete it is offered in each semester until the end of the respective course. [3]This can take place during the semester or after the end of the courses in examination periods at the beginning and end of the lecture-free period. [4]Dates for the completion of an adademic achievements shall be announced by the examination board at least six weeks before the start of the first examination period of the semester. [5]For individual examinations, the appointed examiners may, in consultation with the students, set different dates within the same examination period or, with the approval of the examination board, outside the examination period. [6]The lecturers responsible may, in consultation with the students, set different dates for performance records.

(2) [1]The examination board shall determine the registration and deregistration procedure for examinations and performance records. [2]In particular, the examination board shall determine for each semester the periods during which students may register and deregister for the examinations and performance records of that semester. [3]The registration period shall begin no later than three weeks before the start of the first examination period and shall last for at least 14 days. [4]Students must register for examinations and performance records electronically on their own. [5]Withdrawals are permitted up to one week before the respective examination or performance record. [6]Students may withdraw from an examination or performance record electronically up to one week before the examination date and only in exceptional cases they can do so in writing.

(3) [1]The examination procedure for an examination begins with the first registration for that examination. [2]It ends with the final decision on the examination becoming binding. [3]If, after the start of the examination procedure, achievements obtained at other higher education institutions are to be credited as this examination achievement, these external examination attempts must be registered with the examination board in the same way as internal attempts. [4]Otherwise, recognition is excluded. [5]In the case of deadlines for registration and deregistration for external examination attempts, the examination board may, at the request of the student, deviate from the rules applicable to internal examination attempts. [6]Upon admission to an external attempt, the examination board also determines the academic recognition in accordance with § 10.

(4) [1]The module handbook may stipulate that access to a course is only granted if certain requirements are met. [2]These include, in particular, proof of a certain minimum number of ECTS credits and/or the successful completion of preparatory modules from previous semesters. [3]If access is regulated, the requirements must be published in the module handbook in good time.

(5) [1]Admission to examinations and performance records shall be denied if the student has definitively failed the final examination in the respective degree programme.

(6) [1]The lecturer of a course may specify course-related work. [2]This course-related work may be defined by the lecturer as work

1. for admission to the examination
2. as part of the examination
3. as bonus points for the examination

[3]Students must be informed of the definition and type of coursework in the course announcement in accordance with § 5 (1). [4]The assessment points from the coursework are *a priori* only creditable in the examination period of the semester in which the coursework was completed. [5]A partial or complete transfer to subsequent semesters is possible in accordance with the specifications of the lecturer of the corresponding course in subsequent semesters. [6]Attempts to complete coursework may be repeated without restriction.

(7) [1]For admission to examinations and performance records, coursework in accordance with § 6 (12) shall be taken into account in particular. [2]In cases of doubt, the examination board shall decide on admission to the examination.

(8) [1]The completion of coursework for bonus points is voluntary. [2]There is no entitlement to a renewed offer to earn bonus points. [3]The proportion of bonus points that can be earned through such course-related activities may not exceed 30% of the maximum number of points available for the respective examination. [4]The final examination must allow the

maximum number of assessment points to be achieved independently of the bonus points. [5]If the final examination is passed on its own, the assessment points achieved in the examination and the bonus points are added together. [6]If the final examination is not passed on its own, the bonus points are not added.

(9) [1]Information on questions relating to the examination procedure shall be provided exclusively by the examination board, in cases of doubt after consultation with the examination service. [2]Information provided by other parties does not constitute grounds for protection of legitimate expectations. [3]This also applies to information or commitments provided or made by the course instructor or other responsible persons. [4]The Examination Office is the sole addressee of declarations or legal or quasi-legal acts relating to questions concerning the examination procedure.

§ 8 Academic achievements: Compensation for disadvantages, students in special situations

(1) [1]If a candidate can credibly demonstrate that they are unable to complete the required examination performance in whole or in part in the prescribed manner due to a permanent impairment, the examination board may grant compensation for disadvantages. [2]In cases where this is not obvious, proof shall be provided by submitting a current medical certificate from a specialist. [3]In decisions pursuant to sentence 2, the representative for students with disabilities or chronic illnesses shall be involved in accordance with §62b (2) HG NRW.

(2) [1] An impairment is considered permanent if it is expected to last for at least two regular examination periods. [2] In the case of non-permanent impairments, the option to withdraw from the examination remains unaffected.

(3) [1]Compensation for disadvantages must not lead to a change in the content of the performance requirements. [2]An extension of the processing time is possible by up to half of the time originally allocated.

(4) [1]Compensation for disadvantage for persons with disabilities or chronic illnesses shall extend to all examinations to be taken during the course of study, unless a change in the nature of the illness or disability is to be expected.

(5) [1]The provisions of paragraph 1 also apply to students who, due to other interests worthy of protection as defined by law, are only able to participate in their studies to a limited extent. [2]In particular, the provisions on the care of persons, the provisions of the Maternity Protection Act and those on parental leave shall be taken into account appropriately.

(6) [1]Pregnant or breastfeeding students are not required to attend courses or take examinations. [2]Non-attendance does not give rise to any legal obligations. [3]Withdrawal from a legally valid and ongoing examination relationship, as well as compensation for disadvantages, are subject to the general requirements.

(7) [1]A reasoned application for special treatment must be submitted to the Examination Board at least six weeks before registration for the first of the relevant examinations – or before registration for the first of the relevant courses in the case of courses that do not require separate registration.

(8) [1]An application for special treatment may relate to specific benefits or to benefits in

general during a specific period or to benefits of a specific type, e.g. all examinations of a specific type. [2]Even if a general rule applies, special treatment deviating from this rule may be applied for in respect of specific benefits.

(9) [1]The compensation for disadvantages approved for examinations also applies to admission requirements and coursework.

§ 9 Academic achievements: Assessment

(1) [1]Academic performance in examinations and graded performance records shall be evaluated using a grading scale. [2]The evaluation must be comprehensible.

(2) [1]If several examiners conduct an examination or a graded performance record, they shall evaluate the entire study performance jointly. [2]In the event of a discrepancy in the evaluation, the grade shall be determined by the arithmetic mean of the points achieved. [3]§ 9 (3) shall be taken into account.

(3) [1]The following grades shall be used to evaluate graded academic achievements:

1 = “sehr gut” (very good) = an outstanding performance;

2 = “gut” (good) = a performance that significantly exceeds average requirements;

3 = “befriedigend” (satisfactory) = a performance that meets average requirements;

4 = “ausreichend” (sufficient) = a performance that still meets the requirements despite its shortcomings;

5 = “nicht ausreichend” (not sufficient) = a performance that no longer meets the requirements due to significant shortcomings.

[2]To further differentiate the assessment, grades may be reduced or increased by 0.3, excluding grades 0.7 and 4.3, 4.7 and 5.3.

(4) [1] The overall grade is calculated from an intermediate value

Up to 1.5	the grade “sehr gut/very good”
From 1.5 to 2.5	the grade “gut/good”
From 2.5 to 3.5	the grade “befriedigend/satisfactory”
From 3.5 to 4.0	the grade “ausreichend/sufficient”
Over 4.0	the grade “nicht ausreichend/not sufficient“

[2]In this case, intermediate values are only taken into account with the first decimal place; all further digits after the decimal point are deleted without rounding.

(5) [1]An examination or graded performance record is passed if and only if the academic performance has been graded at least "sufficient".

§ 10 Recognition of academic achievements and degrees

(1) [1]Academic achievements obtained in degree programmes at other state or state-recognised higher education institutions, at state or state-recognised vocational academies, in degree programmes at foreign state or state-recognised higher education institutions or in another degree programme at the same higher education institution shall only be recognised upon application, provided that there is no significant difference in the skills acquired compared to the achievements being replaced. [2]The same applies to degrees with which degree programmes within the meaning of sentence 1 have been completed.

(2) [1]Recognition may be refused if the content of the examination does not correspond to the content of the examination for which recognition is sought, or if the form or duration of the examination does not correspond. [2]Recognised achievements shall be indicated as such in the certificate documents.

(3) [1]The initial legally binding registration for the completion of an examination excludes any subsequent application for recognition of the same examination if this has not been applied for and approved in advance in accordance with §7 (3). [2]This also applies in the event of a legally effective subsequent withdrawal from the examination. [3]Recognition of parts of examination performance is excluded. [4]Recognition of individual examination performance as part of a module examination is excluded if this would lead to an individual adjustment of the examination procedure for the examination performance still outstanding within the module.

(4) [1]Previous recognition of academic achievements and examinations by other higher education institutions does not automatically lead to continued recognition; the requirements for recognition are reviewed by the relevant examination boards.

(5) [1]In the event of re-enrolment in the same degree programme, all academic achievements previously attained in this degree programme shall be recognised ex officio. [2]Recognition within the meaning of this paragraph serves the purpose of continuing studies, taking examinations or commencing further studies.

(6) [1]Upon application, the university may recognise knowledge and qualifications acquired in ways other than through a degree programme on the basis of submitted documents up to a maximum of 50% of the credit points required for the respective degree programme, provided that this knowledge and these qualifications are equivalent in content and level to the examination requirements they are intended to replace.

(7) [1]The examination board shall conduct the recognition procedure. [2]In cases of doubt, the examination board shall decide on the recognition of credits after consulting the examiners.

(8) [1]If the recognition requested on the basis of an application within the meaning of § 10 and § 10 (6) is denied, the student may request a review of the decision by the Presidium; the Presidium shall make a recommendation to the Examination Board for further processing of the application.

(9) [1]It is the responsibility of the applicant to provide the necessary information about the achievement to be recognised. [2]The examination board must give reasons for rejecting an application.

(10) [1]The application for recognition of academic achievements must be submitted in full after enrolment in a degree programme by 30 April in the summer semester or by 31 October in the winter semester. [2]Decisions on applications within the meaning of § 10 shall be made within a period of 6 weeks from the submission of the complete documents in accordance with § 10 (9).

(11) [1]On the basis of recognition pursuant to § 10, the university may, and upon application by the student must, place the student in a subject semester whose difference from the first semester is determined by the ratio of the number of ECTS credits acquired through recognition to the number of ECTS credits that can be acquired on average per semester in the respective degree programme. [2]If the decimal place is less than 5, it is rounded down to whole semesters; otherwise, it is rounded up.[3]In degree programmes that begin annually, students can only be classified into a subject semester for which courses are available. [4]If applicable, this is the preceding subject semester. [5]If this is the first subject semester, the student must apply for a place on the programme.

(12) [1]If academic achievements are credited, the examination board shall determine an individual study plan in consultation with the student. [2]In case of doubt, the examination board shall decide.

§ 11 Oral examinations

(1) [1]In oral examinations, students should demonstrate that they understand the interrelationships within the examination area and are able to classify specific tasks within these interrelationships and solve them methodically. [2]Furthermore, oral examinations should determine whether the student has a sufficiently broad basic knowledge of the examination subject.

(2) [1]Oral examinations may be conducted as individual or group examinations. [2]The examiners shall determine whether an examination is to be conducted as an individual or group examination.

(3) [1]Individual examinations last between 20 and 40 minutes, group examinations between 40 and 120 minutes. [2]The duration of an oral examination is determined by the examiners in the examination schedule prior to the examination.

(4) [1]If the examination is conducted by an examiner in the presence of an assessor, the examiner must consult the assessor regarding the assessment of the examination.

(5) [1]The main subjects and results, especially the facts relevant to the grading of an oral examination, must be recorded in a transcript. [2]The transcript may also be recorded electronically if the student agrees. [3]The result of the examination shall be communicated to the student immediately after the examination, at the latest by the end of the examination day.

(6) [1]Students enrolled in the same degree programme may attend oral examinations as observers, subject to the availability of space, unless a candidate objects or the observer is taking the same examination during that examination period. [2]Upon reasoned request, the examination board may exclude the possibility of participation if the examination covers content for which confidentiality has been agreed. [3]Participation as an observer does not

extend to the consultation and announcement of examination results to candidates.

§ 12 Written examinations

(1) [1]In written examinations, students shall demonstrate that they are able to identify problems in the respective examination area within a limited time and with limited resources, based on scientific knowledge, methods and techniques, and develop a solution to these problems. [2]The examiner shall decide on the use of resources. [3]Multiple-choice questions are permitted in written examinations.

(2) [1]A written examination lasts between 45 and 180 minutes.

(3) [1]Students shall be notified of the results of examinations within six weeks. [2]Announcement in the university's student information system or on the department's non-public website is sufficient. [3]Any exceeding of the deadline must be justified in writing to the dean in each individual case. [4]If sufficient justification is provided, the dean will approve the exceeding of the deadline in exceptional cases.

§ 13 Seminars, coursework, projects, colloquiums

(1) [1]In seminar papers, students independently examine specialist topics and present them in their own way in accordance with academic principles.

(2) [1]Coursework serves to document contributions to research and development work in which students participate as part of their chosen courses.

(3) [1]In a project, students work on an academic task that they tackle on the basis of skills they have already acquired in this field.

(4) [1]The scope of a seminar paper, term paper or project is determined by the corresponding proportion of independent work required for the course as specified in the course announcement.

(5) [1]Acceptance of a topic for a seminar paper, term paper or project means registration for the corresponding examination.

(6) [1]Seminar papers and projects shall be assessed by at least one examiner, and coursework by at least two examiners. [2]The assessment shall be based on a written paper to be prepared within this framework. [3]If there are several examiners, the grade shall be determined by taking the arithmetic mean of the individual assessments. [4]§ 9 (3) shall be taken into account.

(7) [1]A colloquium is part of the examination for a seminar, a student research project or a project. [2]The colloquium includes a public presentation by the student. [3]Upon justified request, the examination board may exclude the public if confidentiality has been agreed for the content covered. [4]The colloquium serves to determine whether the student is able to present the results of the seminar paper, student research project or project, their technical foundations, their interdisciplinary connections and their extra-curricular relevance orally and independently justify them, as well as assess their scientific and practical significance. [5]The colloquium may be used to discuss the approach taken in the preparation of the seminar paper, student research project or project. [6]The colloquium should last between 20 and 40 minutes.

(8) [1]The colloquium shall be assessed by the examiners of the corresponding seminar paper, coursework or project. [2]The examination board may appoint additional examiners or, at the request of the examiners, other examiners.

(9) [1]An examination consisting of a seminar paper or study paper or a project and a subsequent colloquium is passed if both parts are passed. [2]In this case, the grade is calculated as the weighted arithmetic mean of the grade for the seminar paper or study paper or for the project and the grade for the colloquium. [3]Unless otherwise specified in the course announcement, the colloquium and the written paper are weighted equally.

§ 14 Final module: Final thesis

(1) [1]The thesis is a written examination. [2]It should demonstrate that the student is capable of independently working on a defined problem within a limited time frame, in accordance with scientific methods, both in terms of its technical details and interdisciplinary contexts. [3]The thesis may be written in German or English, or in another language in consultation with the examiners and the examination board.

(2) [1]With the approval of the examination board, the final thesis may be written at an institution outside the Bonn-Rhein-Sieg University of Applied Sciences.

(3) [1]The final thesis may also be completed as a group project if the contribution of each individual student can be clearly distinguished and assessed on the basis of sections, page numbers or other objective criteria that allow for a clear demarcation of content, and if the requirements set out in § 14 (1) are met.

(4) [1]The thesis shall be supervised by two examiners (first and second examiners). [2]The first examiner must be a Professor at the Department of Computer Science at Bonn-Rhein-Sieg University of Applied Sciences. [3]The examiners may call upon additional experts to assist them (additional supervisors).

(5) [1]Students may submit proposals for the topic of their thesis, for examiners and, if applicable, for additional supervisors to the examination board. [2]The proposed examiners shall declare their agreement after reviewing the exposé, usually electronically or in writing. [3]The proposals do not constitute a legal claim. [4]The application may also be submitted in electronic form.

(6) [1]At the request of the student, the examination board shall ensure that he or she receives a topic for a final thesis in good time and that examiners are appointed.

(7) [1]Upon approval by the examination board, the topic of the thesis is assigned, the submission date is set, and the examiners are appointed in accordance with § 25 (1).

(8) [1]The processing time for a thesis is based on the assumption that it will be worked on full-time. [2]When submitting the thesis to the examination board, the applicant may request a longer processing time if full-time work is not possible due to personal circumstances. [3]The application must be justified by the applicant and will be decided upon by the examination board. [4]There is no entitlement to an extension of the processing time.

(9) [1]The date on which the examination board issues the final thesis must be recorded in the files.

(10) [1]The topic, assignment and scope of the thesis must be defined in such a way that the processing time can be adhered to. [2]The examination board may extend the processing time by one month upon justified request by the student. [3]The examination board shall obtain an opinion from the first examiner for its decision.

(11) [1]In the case of final theses, the processing time shall be suspended at the request of the student in cases of temporary inability to take examinations if it can be proven that the regular performance of the examination is impossible for the duration of the inability. [2]The rules for inability to take examinations and proof thereof shall apply accordingly. [3]There shall be no retroactive suspension or suspension beyond the last day of the inability to take the examination. [4]The student may not perform any work on the thesis during the period of suspension.

(12) [1]The topic of a thesis may only be changed once by the student and only within the first month of the thesis period.

(13) [1]The thesis must be submitted to the chair of the examination board by the deadline. [2]The date of submission shall be recorded in the files. [3]The thesis must be accompanied by a sworn statement that the student has completed the work independently and has not used any sources or aids other than those indicated. [4]The number of copies and the medium for submission shall be determined by the examination board.

(14) [1]The final thesis may only be repeated once if it is failed. [2]Repeating a final thesis that has been passed is not permitted.

§ 15 Final module: Final colloquium

(1) [1]The final colloquium serves to verify the independence of the work submitted in the form of the final thesis and to determine whether the student is able to present the results of his or her final thesis, its technical foundations, its interdisciplinary connections and its extra-curricular references orally and independently justify them, as well as assess their scientific and practical significance. [2]The final colloquium may also be used to discuss the approach taken in writing the final thesis.

(2) [1]Part of the final colloquium is a public presentation by the student. [2]Upon justified request, the examination board may exclude the public if confidentiality has been agreed for the content covered.

(3) [1]Admission to the final colloquium requires that the student has passed all other modules in the programme, in particular the final thesis, subject to verification of the independence of the work performed therein within the framework of the colloquium.

(4) [1]The final colloquium shall take place no later than five weeks after all admission

requirements have been met.

(5) [1]The application for admission must be submitted to the examination board by the student, together with evidence of the admission requirements pursuant to § 15 (3), if these have not yet been submitted to the examination board. [2]The application must be accompanied by a statement of previous attempts to pass the relevant final examinations. [3]The application may be submitted in electronic form.

(6) [1]The final colloquium may be repeated once in the event of failure. [2]Repeating a final colloquium that has been passed is not permitted.

§ 16 Final module: Assessment

(1) [1]The final module comprises the thesis and the final colloquium. [2]To pass the final module, both components (thesis and final colloquium) must be passed independently of each other.

(2) [1]In the case of Master's theses, the second examiner shall be a person who holds an academic title (i.e. doctorate or higher) in the subject area to be examined.

(3) [1]The final thesis shall be assessed by the appointed examiners. [2]Examiners may consult an expert or request additional supervisors to provide an opinion. [3]In the case of a bachelor's thesis, it is sufficient to prepare a report which is approved by the second examiner. [4]In the event of differing assessments, the second examiner may prepare an independent report.

(4) [1]If the examiners' assessments do not agree, the grade for the paper shall be the arithmetic mean of the individual assessments. [2]If exactly one examiner assesses the paper as "unsatisfactory", the examination board shall appoint another examiner. [3]The worst individual assessment shall be ignored and the grade for the work shall be calculated as the arithmetic mean of the remaining individual assessments. [4]However, the work can only be graded as "sufficient" (4.0) or better if all remaining individual assessments are "sufficient" (4.0) or better.

(5) [1]All assessments must be justified in writing.

(6) [1]The final colloquium shall be assessed by the examiners of the corresponding final thesis. [2]In the case of § 16 (5), the final colloquium shall be conducted by the examiners whose individual assessments were used to determine the grade for the final thesis. [3]In any case, the examination board may appoint additional or different examiners. [4]The grade for the final colloquium is calculated as the arithmetic mean of the assessments of the examiners involved.

§ 17 Completion of studies, award of degree, overall grade

(1) [1]Upon passing the final colloquium, the student has successfully completed the programme. [2]On this basis, the Bonn-Rhein-Sieg University of Applied Sciences awards the academic degree "Bachelor of Science" or "Master of Science".

(2) [1]The overall grade for the degree is calculated as the weighted average of the grades for all examination components, weighted by the respective ECTS.

(3) [1]In addition to the grade based on the German grading scale from 1 to 5, a relative grade is also assigned for the final grade in accordance with the ECTS Users Guide in its currently valid version.

§ 18 Certificate, diploma, diploma supplement

(1) [1]If a student has passed the programme, they will receive a certificate containing the results of the examinations, the ECTS credits earned and the overall grade in accordance with § 17 (2). [2]The certificate shall be signed by the chair of the examination board.

(2) [1]Together with the certificate, the student shall be given a document bearing the date of the certificate. [2]This document certifies the award of the academic degree. [3]The document shall be signed by the dean and bear the seal of the university.

(3) [1]A diploma supplement shall be issued together with the certificate. [2]The diploma supplement shall be signed by the chair of the examination board.

(4) [1] The certificate, diploma and diploma supplement shall be issued in both German and English.

§ 19 Certification of academic achievements

If the student has withdrawn from the programme before completing their studies or has definitively failed the programme, they will be issued with a written certificate by the central examination office (Prüfungsservice) upon request and upon presentation of the relevant evidence and the certificate of withdrawal from the programme stating the academic achievements, ECTS credits and, if applicable, grades, as well as the academic achievements still required for the Bachelor's examination and, if applicable, indicating that the degree programme has not been passed overall.

§ 20 Absences, withdrawal

(1) [1]An examination shall be deemed failed if the examinee does not attend an examination despite being required to do so, or if the examinee withdraws after its completion or fails to complete the examination within the specified time limit. [2]If the examinee is not responsible for the reasons, the examination attempt will not be brought to account. [3]Withdrawal must be declared in writing without delay. [4]The reasons for non-participation or withdrawal must be stated in writing and substantiated without delay after they arise.

(2) [1]If an examinee cannot take the exam because of illness, they need to provide evidence via a doctor's note indicating they could not take the exam at the time it was scheduled.

(3) [1]In the event of a delay, e.g. withdrawal during or after completion of the examination or after notification of the examination results, the previous non-recognition and the reasons for the previous non-recognition, as well as the date of subsequent recognition of the reasons given, must be reported immediately in writing and substantiated. [2]If these reasons are due to illness, they must be substantiated by certificates and attestations issued by a medical examiner appointed by the university. [3]The current list of medical examiners is published on the university's website and is available for inspection at the examination office. [4]In this case, the submission of a medical certificate confirming the inability to take the examination is not sufficient. [5]If the medical examiners cannot be

reached, proof may be provided by means of another medical certificate; the reasons for the inability to reach the medical examiners must be substantiated.

(4) [1]Any proof by means of a medical certificate of incapacity for work is excluded.

(5) [1]Permanent impairments do not entitle the candidate to withdraw from the examination; the possibility of compensation for disadvantages remains unaffected.

§ 21 Deception, disruption

(1) 1Deception within the meaning of these examination regulations refers to completed acts of deception and attempts of deception.

(2) [1]An examination is failed if the examinee

1. misrepresents the requirements for taking the examination, or
2. participates in an examination knowing or having reasonable grounds to know that they do not meet an admission requirement, or
3. attempts to influence the examination performance or its assessment by deception, or
4. misrepresents the requirements for compensation for disadvantages, for withdrawal from an examination or for the recognition or crediting of an examination performance.

[2]Failure to pass the examination results in failure of the module. [3]Possession in the examination room or use of unauthorised aids from the start of the examination period, failure to cite a reference text, unauthorised influence on the examination procedure or the examination assessment, and assistance in attempts to cheat are also considered attempts of cheating.

(3) [1]In order to determine possible fraudulent behaviour, the examination board may question the examinee or request a written or electronic statement from them. [2]The examinee is obliged to cooperate in the investigation of the facts, in particular to appear for questioning and to make a statement or to respond in writing or electronically. [3]The examination board may instruct the examiner or one or more of the examiners to conduct the questioning. [4]The members of the examination board are entitled to be present during the questioning and to participate in it. [5]The above provisions apply equally to the questioning of witnesses.

(4) [1]Verbatim quotations or translations from other languages must be clearly identified as such by citing the source (usually in quotation marks). [2]Paraphrases must be identified as such without quotation marks, in the same way as verbatim quotations. [3]Reference text also includes

1. an unpublished or not generally accessible text, e.g. a learning document provided by a course instructor, or
2. a text created in part or in full by the examiner that was not originally created for the specific exam, or
3. a text created partially or entirely by artificial intelligence systems.

(5) [1]Attempting to submit an examination paper late may be treated as cheating.

(6) [1]Deception also includes the unauthorised influencing of the examination procedure or

the examination assessment. [2]This also applies in cases of collusion with the examiner or with a third party.

(7) [1]Serious deception or repeated deception may result in the permanent loss of the right to take the examination; the decision shall be made by the examination board. [2]A serious case is generally considered to be the use of unauthorised technical aids or the commissioning of third parties to perform the examination.

(8) [1]A favourable examination decision may be revoked with effect for the future if the beneficiary participates in deception relating to the same examination. [2]This shall also apply if the deception relates to a related examination.

(9) [1]An examination shall be deemed failed if the examinee disrupts the proper conduct of the examination and is therefore excluded from continuing the examination by the invigilator or if the examination board subsequently determines that the examinee has failed due to the disruption. [2]The decision to exclude a candidate from continuing the examination must be confirmed by the examination board.

§ 22 Invalidity of academic achievements, revocation of degree

(1) [1]If a student has committed fraud in the course of their studies and this fact only becomes known after the certificate or attestation has been issued in accordance with § 19, the examination board may subsequently adjust the grades for those academic achievements in which the student cheated and declare the course of study to have been failed in whole or in part. [2]If the course of study is declared to have been failed in whole or in part, any academic degree already awarded shall be revoked.

(2) [1]The incorrect certificate and document or the incorrect attestation pursuant to §19 shall be withdrawn and, if necessary, reissued. [2]A decision pursuant to §22 (1) shall be excluded after a period of five years following the issue of the examination certificate and the document or attestation pursuant to §19.

§ 23 Access to examination files

(1) [1]Students may inspect the documents relating to individual examinations or performance records upon request after the respective study performance has been evaluated. [2]The request must be submitted within one month of the announcement of the examination results. [3]If the student attends an exam review appointment, the request may be submitted within 14 days of the review appointment. [4]§32 of the Administrative Procedure Act for the State of North Rhine-Westphalia on reinstatement to the previous status applies accordingly. [5]The chair of the examination board shall determine the place and time of inspection.

(2) [1]Upon request, students shall be granted access to their written examination papers, the examiners' reports relating thereto and the examination records after completion of the final examination procedure. [2]The request for inspection must be submitted to the chair of the examination board within one month of the examination certificate and the certificate or notification of failure being issued. [3]In all other respects, §23 (1) shall apply mutatis mutandis.

(3) [1]Students are permitted to make a copy or other faithful reproduction of the examination file. [2]Further distribution by the examinee on the basis of the inspection is not permitted.

§ 24 Examination Board

(1) [1]The Department of Computer Science at Bonn-Rhein-Sieg University of Applied Sciences shall establish an examination board or joint examination boards for each of the degree programmes governed by these regulations. [2]The examination board is an independent body in matters relating to examinations. [3]The examination board is responsible for admitting students to examinations, organising examinations, including appointing examiners and assessors, and dealing with appeals against examination decisions. [4]The examination board monitors compliance with the provisions of these examination regulations and reports regularly to the Department of Computer Science on the development of study times and the distribution of academic achievements. [5]The examination board decides on the consequences of violations of examination regulations and on the recognition and crediting of academic achievements.

(2) [1]The examination board consists of six members:

- 3 members from the group of university lecturers,
- 1 member from the academic staff,
- 1 member from among the students enrolled in one of the degree programmes governed by these examination regulations, and
- 1 member from the technical and administrative staff.

[2]There shall also be a deputy representative for the group of students. [3]The members of the examination board and their deputies are elected by the departmental council. [4]Their term of office is four years, and that of the student member and his or her deputy is one year. [5]Membership continues until the respective new election. [6]Re-election is permitted.

(3) [1]The members of the examination board shall elect a chairperson and a deputy chairperson from the group of university lecturers. [2]The examination board may delegate the performance of its duties to the chairperson, either generally or in individual cases, in the following circumstances:

1. Recognition of academic achievements and degrees
2. Decisions on the significant similarity of study programmes or the equivalence of academic achievements
3. Admission to examinations in cases of doubt or upon individual application
4. Ordering and cancelling examiners, postponing examinations or changing the type of examination
5. Approval of withdrawal from an exam

6. Regulations on the submission of a medical certificate from a medical examiner
7. Regulations governing the consequences of violations of examination regulations
8. Statements within the framework of BAföG (Federal Training Assistance Act), foreign national law procedures, and study grants and loans
9. Determination of individual study programmes and regulations in accordance with § 8
10. Admission to and completion of final theses and final colloquiums
11. Special permission for admission to courses and examinations
12. in all cases of urgency, if the examination board would no longer be able to meet in time

[3]This does not apply to decisions on appeals.

(4) [1]A transfer shall remain valid even if the composition of the respective examination board changes (change of members). [2]Examination board members who were not yet members of the examination board at the time of the transfer may revoke the transfer at any time by notifying the chairperson.

(5) [1]The Examination Board shall constitute a quorum if at least three members entitled to vote are present, including the chairperson or deputy chairperson. [2]The other members may be represented by their deputies for the respective group in the event of absence. [3]The Examination Board shall pass resolutions by a simple majority of the members entitled to vote who are present. [4]In the event of a tie, the chairperson shall have the casting vote; in his or her absence, the deputy chairperson shall have the casting vote. [5]Abstentions are permitted; they shall not be counted when determining the majority of votes. [6]Resolutions may be passed by written circulation. [7]A committee member may transfer their voting right to another member by written notification to the chair of the examination committee; no member may exercise more than two voting rights. [8]In educational and academic decisions, in particular decisions on the recognition and assessment of academic achievements and the appointment of examiners and assessors, the member from the technical and administrative staff shall only have an advisory voice, unless he or she is entitled to vote in accordance with § 11 (3) of the Higher Education Act of North Rhine-Westphalia (HG NRW). [9]The student member shall not participate in deliberations and decisions on matters concerning the determination of examination tasks or his or her own examination. [10]Guests may participate in the deliberations and votes of the Examination Board at the invitation of the chairperson and are equally bound to secrecy. [11]Guests are entitled to speak but are not entitled to submit motions or vote.

(6) [1]The members of the examination board have the right to be present when examinations are taken. [2]This does not apply to the student member if he or she is taking the same examination during the same examination period.

(7) [1]The members of the examination board are bound to maintain confidentiality. [2]Unless they are civil servants, they shall be bound to confidentiality by the chairperson. [3]The meetings of the examination board are not open to the public. [4]Minutes of the deliberations and decisions shall be taken at each meeting of the Examination Board. [5]The Dean of the Department of Computer Science shall be invited to attend the meetings of the Examination Board. [6]The Dean shall participate in the meetings in an advisory capacity.

(8) [1]The examination boards of the department may hold joint meetings. [2]In this case, the members of other examination boards shall be considered guests within the meaning of § 24 (5), sentences 7 and 8.

§ 25 Examiners and assessors

(1) [1]The examination board appoints the examiners and assessors for the examinations, the final thesis and the final colloquium. [2]Only professors, honorary professors, lecturers for special tasks and lecturers, as well as persons with professional experience and training, may be appointed as examiners, insofar as this is necessary or appropriate to achieve the purpose of the examination. [3]Examination performances may only be assessed by persons who themselves possess at least the qualification to be determined by the examination or an equivalent qualification. [4]Only persons who themselves possess at least the qualification to be determined by the examination or an equivalent qualification may be appointed as assessors.

(2) [1]Examiners shall be independent in their examination activities and shall not be bound by instructions.

B. Further regulations for Bachelor's degree programmes

B.1. General regulations for Bachelor's degree programmes

§ 26 Validity

(1) [1]Part A of these examination regulations applies to bachelor's degree programmes unless otherwise specified below.

§ 27 Studies: Prerequisites and admission

[1]Admission to the programme requires a general higher education entrance qualification, a technical college entrance qualification or a qualification recognised as equivalent.

§ 28 Studies: Structure

(1) [1]The standard period of study is 6 semesters. [2]In accordance with § 4 (2), a Bachelor's degree programme therefore comprises a total of 180 ECTS credits. [3]This includes a supervised practical project worth 12 ECTS credits in accordance with § 29.

(2) [1] The structure of the degree programmes is specified in the appendix to these examination regulations:

- I.1.2 Bachelor's degree in Computer Science
- I.2.2 Bachelor's degree in Cyber Security & Privacy
- I.3.2 Bachelor's degree in Business Informatics

(3) [1] The academic achievements to be completed are listed in the appendix to these examination regulations:

- I.1.3 Bachelor's degree in Computer Science
- I.2.3 Bachelor's degree in Cyber Security & Privacy
- I.3.3 Bachelor's degree in Business Informatics

(4) [1]At the beginning of the fourth semester, students enrolled in the Bachelor's programme in Computer Science shall select subjects from the SPZ and WPF module groups. [2]If at least four subjects from the module group of a specialisation have been successfully completed, this specialisation shall be indicated in the degree certificate.

(5) [1]At the beginning of the fourth semester, students enrolled in the Bachelor's programme in Cyber Security & Privacy choose a specialisation from which all coursework required for the SPZ module group must be completed. [2]Students have the option of changing their chosen specialisation. [3]Credits earned in specialisation modules will only be credited if the courses in which the credits were earned are also assigned to modules of the new specialisation.

(6) [1]Students enrolled in the Bachelor's programme in Business Informatics must take six compulsory elective subjects and one seminar in the third to fifth semesters. [2]For these elective courses, there are three modules from three subject clusters and free elective courses, some of which are listed in the Bachelor's programme in Computer Science. [3]The subjects in the clusters do not build on each other. [4]Students must take at least one module from each cluster; the three additional compulsory elective subjects can be chosen freely from the remaining cluster modules or other compulsory elective subjects. [5]Separate modules are offered for seminars.

§ 29 Practical project

(1) [1]A practical project worth 12 ECTS credits is integrated into the programme. [2]The practical project lasts at least 10 weeks and no more than 3 months on a full-time basis. [3]In justified exceptional cases, different arrangements may be made. [4]The practical project usually begins immediately after the lecture period of the fifth semester. [5]The practical project can be carried out outside or within the university (practical project location); it is recommended that the practical project be carried out abroad. [6]During the practical project, the student remains a member of the university with all rights and obligations.

(2) [1]The practical project should introduce students to professional work through specific tasks and practical participation in projects. [2]In particular, it should serve to apply the skills, knowledge and abilities acquired in previous studies and to reflect on and evaluate the experience gained in practical work. [3]The practical project may serve as preparation for the final thesis.

(3) [1]During the practical project, the student will be supervised by a professor or honorary professor from the department and by a designated person working at the company providing the practical project (Praxisprojektstelle).

(4) [1]If the practical project is carried out at the university, the person responsible for supervision on the part of the department should not be the same person as the person responsible for supervision on the part of the company providing the practical project .

(5) [1]If the practical project is carried out outside the university, the obligations of the company providing the practical project, the student and the university must be set out in writing. [2]This shall specify the rights and obligations as well as the organisational and technical support.

(6) [1]The content and objectives of the practical project must be set out in writing in a task description.

(7) [1]The courses accompanying the practical project shall take place at the university.

(8) [1]Students will be admitted to the practical project by the person responsible for supervision in the department upon application if they

1. have achieved at least 102 ECTS credits,
2. have completed all academic achievements for the first 3 semesters,
3. have a confirmation of supervision for the practical project position,
4. can submit a suitable task description for the practical project, and
5. (if the practical project is carried out outside the university:) have an agreement with the company providing the practical project that covers the minimum project duration.

[2]In justified cases, the examination board may grant exceptions.

(9) [1]Successful participation in the practical project shall be confirmed by the person responsible for supervision on behalf of the department if

1. the student has regularly participated in the accompanying and evaluation events assigned to the practical project,
2. the student has prepared a report on the practical work carried out in the practical project, which has been countersigned by the practical project supervisor and approved by the person responsible for supervision within the department, and which meets the previously agreed criteria,
3. the practical work corresponded to the purpose of the practical project and the student carried out the work assigned to him or her.

§ 30 Final thesis (Bachelor's thesis) and final colloquium

(1) [1]Students will be admitted to write a Bachelor's thesis upon application if they

1. have earned at least 120 ECTS credits,
2. have completed all coursework in the first 3 semesters and
3. are able to complete the colloquium in accordance with § 13 (7) in the practical project, and if
4. the topic and the exposé have been accepted by the examination board.

[2]The examination board may grant exceptions to this rule in justified cases.

(2) [1]The processing time for the Bachelor's thesis is 3 months.

(3) [1]A student who is enrolled in two bachelor's degree programmes may apply to have a thesis credited to both programmes. [2]To do so the requirements of these examination regulations must be met in both programmes. [3]In this case, the student is only permitted to write the thesis if both examination boards have approved the topic and the exposé.

(4) [1]The final colloquium should last between 40 and 60 minutes. [2]The presentation should last between 20 and 30 minutes.

(5) [1]If, in accordance with § 30 (3), the final thesis was completed for credit in several Bachelor's degree programmes, the corresponding final colloquium shall also be credited in

the relevant degree programmes.

B.2. Special regulations for the Bachelor's degree programme in Computer Science (cooperative)

§ 30a Validity

[1]Parts A and B of these examination regulations apply unless otherwise specified below. [2]In addition to § 2 (1), the following applies: In the cooperative Bachelor's programme in Computer Science (BIk), students can obtain a double qualification through a training-integrated course of study, consisting of a recognised vocational qualification and a first academic qualification qualifying for a profession with the degree "Bachelor of Science". [3]The academic prerequisite, the accredited Bachelor's degree, is obtained at the university. [4]The qualification within the framework of vocational training takes place in a cooperating company/organisation. [5]Further details are regulated in cooperation agreements between Bonn-Rhein-Sieg University of Applied Sciences and the cooperating companies/organisations. [6]This enables students to put the knowledge they have acquired at the university into practice to a particular extent. [7]In addition, they acquire skills in business dealings at an early stage.

§ 30b Studies: Requirements and admission

[1]In addition to § 27, the following applies: The admission requirement for admission to the cooperative Bachelor's programme in Computer Science is the secondment of students and the conclusion of a contract with the company or organisation cooperating with the university.

§ 30c Studies: Structure

(1) [1]Specialisation options within the meaning of § 28 (4) and elective options within the meaning of § 28 (2) may be restricted by special provisions in the cooperation agreement with the respective cooperation partner. [2]If such restrictions exist, they shall apply in the same way to a possible change within the meaning of § 28 (5).

(2) [1]Upon enrolment in the BIk programme, students will be informed of any restrictions agreed upon in the cooperation agreement with the respective cooperating partners.

§ 30d Practical project and final thesis

[1]§29 (1) is supplemented by the following: Students enrolled in the Bachelor's programme

in Computer Science shall complete the practical project/Bachelor's thesis as part of the practical training component at the cooperating institution. [2]Further details are set out in the cooperation agreement.

C. Further regulations for Master's degree programmes

§ 31 Validity

Part A of these examination regulations applies to Master's programmes unless otherwise specified below.

§ 32 Studies: Prerequisites and admission

(1) [1]Admission to the Master's programme requires a professional university degree (Bachelor's or Master's degree) in a subject in which the proportion of computer science was at least 120 ECTS credits (excluding the Master's degree in Business Informatics, Sustainability and Digitalisation, see §52) , as well as sufficient skills in the concepts, methods and tools of computer science. [2]If the university degree was obtained in a computer science programme or a mathematical/natural science programme or in an engineering programme or in an economics programme, and the proportion of computer science was at least 90 ECTS credits, but less than 120 ECTS credits, the applicant may be admitted on condition that he or she additionally completes individually determined coursework equivalent to the difference between the required 120 ECTS credits and the ECTS credits previously obtained in the field of computer science. [3]The additional credits to be earned shall be determined by the relevant selection committee in accordance with § 32 (3).

(2) [1]An application for admission to a Master's programme must be submitted for the winter or summer semester, if possible in the respective degree programme.

(3) [1]A selection committee shall conduct the admission procedure for a Master's programme, including the decision as to which applicants fulfil the admission requirements pursuant to § 32 (1). [2]The provisions of the examination board pursuant to § 24 (2) and § 24 (3) shall apply to the composition, election, term of office and chairmanship of the selection committee.

(4) [1]The members of the selection committee shall elect a chairperson and a deputy chairperson from among their number from the group of university lecturers.

(5) [1]The selection committee shall constitute a quorum if at least three members are present, including the chairperson or deputy chairperson. [2]The other members may be represented in their absence by their deputies for the respective group.

[3]The selection committee shall pass resolutions by a simple majority of the members present. [4]In the event of a tie, the chairperson shall have the casting vote; in his or her absence, the deputy chairperson shall have the casting vote.

(6) [1]The meetings of the selection committee are not open to the public. [2]The members of the selection committee are bound to official secrecy.

(7) [1]Minutes shall be taken of the deliberations and decisions of the selection committee.

§ 33 Studies: Structure

[1]The standard period of study for a Master's programme is four semesters, including the time required for writing the Master's thesis. [2]In accordance with § 4 (2), a Master's programme therefore comprises a total of 120 ECTS credits.

§ 34 Final thesis (Master's thesis) and final colloquium

(1) [1]Students are admitted to write their Master's thesis if they have completed all coursework in the first two semesters.

(2) [1]The time allowed for writing the Master's thesis is six months.

(3) [1]The final colloquium should last between 45 and 90 minutes. [2]The presentation should last between 20 and 30 minutes.

(4) [1]§ 14 (4) applies to the appointment of examiners for the Master's thesis, with the provisio that the examination board may admit additional examiners upon request.

D. Further regulations for the Master's programme in Computer Science

§ 35 Validity

[1]Part C of these examination regulations applies to the Master's programme in Computer Science (MI), unless otherwise specified below.

§ 36 Studies: Prerequisites and admission

(1) [1]Studies may be commenced in either the winter or summer semester.

(2) [1]§ 32 (1) applies to admission to the degree programme, with the proviso that the grade of the professional qualification must be 3.0 or better.

§ 37 Course structure

(1) [1]The structure of the programme is specified in I.4.2.

(2) [1]The examinations to be taken are specified in I.4.3.

§ 38 Master's project

(1) [1]In the Master's project, students work on a task using scientific methods based on the skills they have already acquired. [2]A thesis must be written or a project developed, followed by a colloquium in accordance with § 13 (7).

(2) [1]The Master's project is graded in accordance with § 13 (9), whereby the grade for the thesis or project and the grade for the colloquium are weighted in a ratio of 3/4 for the project and 1/4 for the colloquium.

(3) [1] The scope of the master's project is determined by the scope estimated for the module. [2]The processing time is a maximum of 6 months.

(4) [1]The topic, assignment and scope of the Master's project must be defined in such a way that the processing time can be adhered to. [2]The examination board may extend the processing time by one month upon justified request by the student. [3]The examination board shall obtain an opinion from the examiner for its decision.

(5) [1]Notwithstanding § 6 (2), a passed Master's project cannot be repeated.

E. Further regulations for the Master's programme in Cyber Security & Privacy

§ 39 Validity

[1]Part C of these examination regulations applies to the Master's programme in Cyber Security & Privacy (MCSP), unless otherwise specified below.

§ 40 Studies: Prerequisites and admission

(1) [1]The programme can be started in either the winter or summer semester.

(2) [1]Admission to the programme is governed by § 32 (1), with the proviso that the grade of the professional qualification must be 3.0 or better.

§ 41 Study programme: Structure

(1) [1]The structure of the programme is specified in I.5.2.

(2) [1]The examinations to be taken are specified in I.5.3.

§ 42 Master's project

(1) [1]In the Master's project, students work on a task using scientific methods based on the skills they have already acquired. [2]A thesis must be written or a project developed, followed by a colloquium in accordance with § 13 (7).

(2) [1]The Master's project is graded in accordance with § 13 (9), whereby the grade for the term paper or project and the grade for the colloquium are weighted in a ratio of 3/4 for the project and 1/4 for the colloquium.

(3) [1]The scope of the master's project is determined by the estimated workload for the module. [2]The processing time shall not exceed 6 months.

(4) [1]The topic, assignment and scope of the Master's project must be defined in such a way that the processing time can be adhered to. [2]The examination board may extend the processing time by one month upon justified request by the student. [3]The examination board shall obtain a statement from the examiner for its decision.

(5) [1]Notwithstanding § 6 (2), a passed Master's project cannot be repeated.

F. Further regulations for the Master's programme in Autonomous Systems

§ 43 Validity

[1]Part C of these examination regulations applies to the Master's programme in Autonomous Systems (MAS), unless other provisions are made below.

§ 44 Studies: Prerequisites and admission

(1) [1]The programme is research-oriented and interdisciplinary.

(2) [1]Studies may commence in either the winter or summer semester.

(3) [1]§ 32 (1) applies to admission to the degree programme, with the proviso that the grade of the professional qualification must be 2.5 or better, and with the addition that the selection committee may deviate from the given limit of 90 ECTS credits in justified exceptional cases.

(4) [1] For admission, proof of English language skills at level B2+ (GER) is required, taking into account § 3 (5).

(5) [1]The selection committee shall draw up a qualified list based on the written application documents. [2]The qualification shall take into account the scope and relevance of the IT-related content as well as the grades of the qualifying admission requirements. [3]The top-ranked applicants will be admitted in accordance with the above criteria and within the limits of available capacity.

(6) [1]Admission to the examinations from the second semester onwards requires that the applicant has concluded a study programme-related project contract for the duration of the remaining studies with the Fraunhofer Institute for Intelligent Analysis and Information Systems (IAIS) or another cooperation partner of the Bonn-Aachen International Centre for Information Technology (b-it) at the Department of Computer Science. [2]A project contract may also be concluded with other institutions upon special request, provided that the examination board has approved this. [3]The project contract must remain in force for the entire remaining period of study. [4]If the project contract ends before the end of the degree programme, the student must conclude a new project contract in accordance with sentence 1 without delay, at the latest within 3 months of the end of the previous contract. [5]Otherwise, the student must be exmatriculated.

§ 45 Studies: Structure, Language

(1) [1]The structure of the programme is specified in I.6.2.

(2) [1]The examinations to be taken are specified in I.6.3.

(3) [1]The language of instruction and examination is English. [2]In all other respects, § 5 (2) applies.

(4) [1]The Master's thesis must generally be written in English. [2]In consultation with the examiners and the examination board, the Master's thesis may also be written in another language.

(5) [1]In addition, § 14 (4) & (5) and § 16 (2) apply to the Master's thesis.

§ 46 RND project

(1) [1]In the RND ("Research and Development") project, students use scientific methods to work on a task based on skills they have already acquired. [2]As a rule, a term paper or project must be completed, followed by a colloquium in accordance with § 13 (7). [3]The grade for the examination is determined in accordance with § 13 (9), whereby the grade for the student research project or project is weighted by a factor of 3/4 and the grade for the colloquium by a factor of 1/4. [4]The scope of the RND project is determined by the scope estimated for the module. [5]The processing time is a maximum of 6 months.

(2) [1]Notwithstanding § 6 (2), a passed RND project cannot be repeated.

G. Further regulations for the Master's programme in Game Technologies

§ 47 Validity

[1]Part C of these examination regulations applies to the Master's programme in Game Technologies, unless otherwise specified below.

§ 48 Studies: Prerequisites and admission

(1) [1]The programme is research-oriented.

(2) [1]Studies may only commence in the winter semester.

(3) [1]For admission to the degree programme, § 32 (1) applies with the proviso that, if the degree includes at least 120 ECTS credits in computer science, the grade of the professionally qualifying degree must be 3.0 or better. [2]Or, if at least 90 ECTS credits but less than 120 ECTS credits have been earned, the grade of the professionally qualifying degree must be 2.5 or better. [3]In justified exceptional cases, the selection committee may deviate from the given limit of 90 ECTS credits.

(4) [1]For admission, proof of English language skills at level B2 (GER) is required, taking into account § 3 (5).

(5) [1]The application must be accompanied by a letter of motivation written by the applicant, focusing on their motivation for studying with a focus on the technical/scientific fundamentals of game development. [2]A link to the applicant's CV, highlighting any special skills and/or experience in these areas, must be provided. [3]The letter of motivation should not exceed two pages in length.

(6) [1]The selection committee shall draw up a qualified list based on the written application documents. [2]The qualification shall take into account the scope and relevance of the IT-related content as well as the grades of the qualifying admission qualification. [3]The best-ranked applicants will be admitted in accordance with the above criteria and within the limits of available capacity.

§ 49 Studies: Structure, language

(1) [1]The structure of the programme is specified in I.7.2.

(2) [1]The examinations to be taken are specified in I.7.3.

(3) [1]The languages of instruction and examination are English and German. [2] In principle, all examinations can be offered in English.

§ 50 Project

[1]The programme comprises a consecutive project, which is spread over one module in each of the first three semesters. [2]The tasks in the second and third modules build on the results of the previous module, but the modules are assessed independently of each other. [3]In exceptional cases, the consecutive nature of the tasks may be waived when assigning tasks for a module, provided that the respective module objectives are met.

H. Further regulations for the Master's programme in Business Informatics, Sustainability and Digitalisation

§ 51 Validity

[1] Part C of these examination regulations applies to the Master's programme in Business Informatics, Sustainability and Digitalisation, unless other provisions are made below.

§ 52 Studies: Prerequisites and admission

(1) [1]The programme can be started in the summer or winter semester.

(2) [1]The programme is aimed at Bachelor's graduates in Business Informatics, Computer Science and Economics. [2]Graduates in Computer Science and Economics are required to have taken subjects in Business Informatics during their Bachelor's programme. [3]The proportion of subjects with computer science content should comprise at least 20 ECTS for graduates in economics; similarly, the proportion of subjects with economics content should also comprise at least 20 ECTS for graduates in computer science.

(3) [1]If the ECTS credits defined in §52 (2) cannot be demonstrated in subjects with computer science or economics content, the applicant may be admitted on condition that he or she additionally completes individually determined coursework equivalent to the difference between the required and already demonstrated credits.may be admitted on condition that they additionally complete individually determined coursework equivalent to the difference between the required and already proven ECTS credits. [2]The additional coursework to be completed shall be determined by the relevant selection committee in accordance with § 32 (3).

(4) [1]§ 32 (1) applies to admission to the degree programme, with the proviso that the grade of the professional qualification must be 3.0 or better.

§ 53 Study programme: Structure and academic achievements

(1) [1] The structure of the programme is specified in I.8.2.

(2) [1] The examinations to be taken are specified in I.8.3.

§ 54 Start-up and implementation project

[1]The degree programme includes a consecutive project that spans one module in each of the first two semesters, the start-up project in the first semester and the implementation project in the second semester. [2]The tasks of the implementation project build on the results of the start-up project, but the modules are assessed independently of each other. [3]In exceptional cases, the consecutive nature of the tasks may be waived when assigning tasks for a module, provided that the respective module objectives are maintained.

§ 55 Research project

(1) [1]The provisions of §38 on the Master's project in the Master's programme in Computer Science apply to the research project.

H. Final provisions

§ 56 Entry into force, validity and transitional provisions

(1) [1]These examination regulations are published in the official announcements of the Bonn-Rhein-Sieg University of Applied Sciences (Verkündigungsblatt).

(2) [1]It shall apply from the day after its publication to all students who enrol in one of the degree programmes addressed in these examination regulations for the winter semester 2025/26.

(3) [1]A transitional regulation governs the transition from previous examination regulations to these examination regulations.

Issued on the basis of the decision of the Departmental Council of the Department of Computer Science on 28 November 2024.

Sankt Augustin,

Prof. Dr. Sascha Alda
Dean of the Department of
Computer Science at Bonn-Rhein-
Sieg University of Applied Sciences

I. Appendix

Abbreviations for all appendices:

CP ECTS credit points
SL Type of academic achievement (one of the following:)
P Examination
L Performance record

I.1. Bachelor's programme in Computer Science (BI)

I.1.1. Module groups

MAT Mathematik
(Mathematics)
THI Theoretische Informatik
(Theoretical Computer Science)
PSE Programmierung und Softwareentwicklung
(Programming and software development)
PI Praktische Informatik
(Practical Computer Science)
TIN Technische Informatik und Netze
(Technical Informatics and Networks)
WPS Wahlpflicht/Spezialisierung
(Elective / Specialization)
ÜK Überfachliche Kompetenzen
(Interdisciplinary Skills)
WAP Wissenschaftliches Arbeiten und Projektarbeit
(Scientific work and project work)
PRJ Praxisprojekt
(Practical project)
THS Thesis und Kolloquium
(Thesis and Colloquium)

I.1.2. Structure

Table 1: Structure of the Bachelor's programme in Informatik (BI)

Semester	**1.**		**2.**		**3.**		**4.**		**5.**		**6.**		**Summe**	
Gruppe	**CP**	**SL**	**CP**	**SL**	**CP**	**SL**	**CP**	**SL**	**CP**	**SL**	**CP**	**SL**	**CP**	**SL**
MAT	9	1 P	6	1 P	6	1 P							21	3 P
THI			6	1 P	6	1 P	6	1 P					18	3 P
PSE	9	1 P	6	1 P	6	1 P	6	1 P					27	4 P
PI			6	1 P	6	1 P							12	2 P
TIN	12	2P	6	1 P	6	1 P							24	4 P
WPS							18	3 P	18	3 P			36	6 P

ÜK			3	1 L					6	2 L			9	3L
WAP					3	1 L			3	1 P			6	1 P 1 L
PRJ											12	1 L	12	1 L
THS											15	2 P	12	2 P
Summe	30	4 P	33	5 P 1 L	33	5 P 1 L	30	5 P	27	4 P 2 L	27	2 P 1 L	180	25 P 5 L

I.1.3. Academice Achievements

Table 2: Academic achievements for the Bachelor's programme in Informatik (BI)

Gruppe	Modul	Titel (exemplarisch)	CP	SL
MAT	BI-2024-1-MAT-1	Mathematische Grundlagen und Lineare Algebra (BI)	9	P
PSE	BI-2024-1-PSE-1	Programmierung 1	9	P
TIN	BI-2024-1-TIN-1	Technische Informatik	6	P
TIN	BI-2024-1-TIN-2	Netze	6	P
MAT	BI-2024-2-MAT-1	Analysis	6	P
THI	BI-2024-2-THI-1	Algorithmen, Datenstrukturen und Graphentheorie	6	P
PSE	BI-2024-2-PSE	Programmierung 2	6	P
PI	BI-2024-2-PI-1	Datenbanken	6	P
TIN	BI-2024-2-TIN-1	Systemnahe Programmierung	6	P
ÜK	BI-2024-2-ÜK-1	BI Überfachliche Kompetenzen	3	L
MAT	BI-2024-3-MAT-1	Wahrscheinlichkeitstheorie und Statistik	6	P
THI	BI-2024-3-THI-1	Automatentheorie und Formale Sprachen	6	P
PSE	BI-2024-3-PSE-1	Software Engineering 1	6	P
PI	BI-2024-3-PI-1	IT-Sicherheit	6	P
TIN	BI-2024-3-TIN-1	Betriebssysteme	6	P
WAP	BI-2024-3-WAP-1	Informatik-Projekt	3	L
THI	BI-2024-4-THI-1	Berechenbarkeit und Komplexität	6	P
PSE	BI-2024-4-PSE-1	Software Engineering 2	6	P
WPS	BI-2024-4-WPS-1	BI Wahlpflicht/Spezialisierung	6	P
WPS	BI-2024-4-WPS-2	BI Wahlpflicht/Spezialisierung	6	P
WPS	BI-2024-4-WPS-3	BI Wahlpflicht/Spezialisierung	6	P
WPS	BI-2024-5-WPS-1	BI Wahlpflicht/Spezialisierung	6	P
WPS	BI-2024-5-WPS-2	BI Wahlpflicht/Spezialisierung	6	P
WPS	BI-2024-5-WPS-3	BI Wahlpflicht/Spezialisierung	6	P
ÜK	BI-2024-5-ÜK-1	BI Überfachliche Kompetenzen (Ethik)	3	L
ÜK	BI-2024-5-ÜK-2	BI Überfachliche Kompetenzen	3	L
WAP	BI-2024-5-WAP-1	Literatur-Seminar	3	P
PRJ	BI-2024-6-PRJ-1	Praxisprojekt	12	L
THS	BI-2024-6-THS-1	BI Thesis	12	P
THS	BI-2024-6-THS-2	BI Kolloquium	3	P

I.2. Bachelor-Studiengang Cyber Security & Privacy (BCSP)

I.2.1. Module groups

MAT	Mathematik (Mathematics)
THI	Theoretische Informatik (Theoretical Computer Science)
PSE	Programmierung und Softwareentwicklung (Programming and software development)
PI	Praktische Informatik (Practical Computer Science)
TIN	Technische Informatik und Netze (Technical Informatics and Networks)
WPF	Wahlpflicht (Elective)
ÜK	Überfachliche Kompetenzen (Interdisciplinary Skills)
WAP	Wissenschaftliches Arbeiten und Projektarbeit (Scientific work and project work)
PRJ	Praxisprojekt (Practical project)
THS	Thesis und Kolloquium (Thesis and Colloquium)

I.2.2. Structure

Table 3: Structure of the Bachelor's programme in Cyber Security & Privacy (BCSP)

Semester	**1.**		**2.**		**3.**		**4.**		**5.**		**6.**		**Summe**	
Gruppe	**CP**	**SL**	**CP**	**SL**	**CP**	**SL**	**CP**	**SL**	**CP**	**SL**	**CP**	**SL**	**CP**	**SL**
MAT	6	1 P	6	1 P	6	1 P							18	3 P
THI					6	1 P	6	1 P					12	2 P
PSE	9	1 P											9	1 P
PI			6	1 P			6	1 P					12	2 P
TIN	6	1 P	12	2 P	6	1 P							24	4 P
SPZ	9	1 P 1 L	6	1 P	12	2 P	12	2 P	18	3 P			57	9 P 1 L
WPF							6	1 P	6	1 P			12	2 P
ÜK							3	1 L	3	1 L			3	1 L
WAP					3	1 L	3	1 P	3	1 P			6	1 P 1 L
PRJ											12	1 L	12	1 L
THS											15	2 P	15	2 P
Summe	30	4 P 1 L	30	5 P	33	5 P 1 L	30	5 P 1 L	30	5 P 1 L	27	2 P 1 L	180	26 P 4 L

I.2.3. Academic Achievements

Table 4: Academic achievements for the Bachelor's programme in Bachelor Cyber Security & Privacy (BCSP)

Gruppe	Modul	Titel (exemplarisch)	CP	SL
MAT	BCSP-2024-1-MAT-1	Algebraische Strukturen	6	P
PSE	BCSP-2024-1-PSE-1	Programmierung 1	9	P
TIN	BCSP-2024-1-TIN-1	Netze	6	P
SPZ	BCSP-2024-1-SPZ-1	Informationssicherheit	3	L
SPZ	BCSP-2024-1-SPZ-2	Datenschutz, IT-Recht und Privatheit	6	P
MAT	BCSP-2024-2-MAT-1	Lineare Algebra und Analysis	6	P
PI	BCSP-2024-2-PI-1	Datenbanken	6	P
TIN	BCSP-2024-2-TIN-1	Systemnahe Programmierung	6	P
TIN	BCSP-2024-2-TIN-2	Technische Informatik	6	P
SPZ	BCSP-2024-2-SPZ-1	Einführung in das Management der Informationssicherheit	6	P
MAT	BCSP-2024-3-MAT-1	Wahrscheinlichkeitstheorie und Statistik	6	P
THI	BCSP-2024-3-THI-1	Algorithmen, Datenstrukturen und Graphentheorie	6	P
TIN	BCSP-2024-3-TIN-1	Betriebssysteme	6	P
SPZ	BCSP-2024-3-SPZ-1	Grundlagen Netzwerk- und Betriebssystemsicherheit	6	P
SPZ	BCSP-2024-3-SPZ-2	Angewandte Kryptographie	6	P
WAP	BCSP-2024-3-WAP-1	CSP Projekt	3	L
THI	BCSP-2024-4-THI-1	Algorithmische Komplexität	6	P
PI	BCSP-2024-4-PI-1	Künstliche Intelligenz und Maschinelles Lernen	6	P
SPZ	BCSP-2024-4-SPZ-1	BCSP Wahlpflicht CSP	6	P
SPZ	BCSP-2024-4-SPZ-2	BCSP Wahlpflicht CSP	6	P
WPF	BCSP-2024-4-WPF-1	BCSP Wahlpflicht	6	P
SPZ	BCSP-2024-5-SPZ-1	BCSP Wahlpflicht CSP	6	P
SPZ	BCSP-2024-5-SPZ-2	BCSP Wahlpflicht CSP	6	P
SPZ	BCSP-2024-5-SPZ-3	BCSP Wahlpflicht CSP	6	P
WPF	BCSP-2024-5-WPF-1	BCSP Wahlpflicht	6	P
ÜK	BCSP-2024-5-ÜK-1	Ethik	3	L
WAP	BCSP-2024-5-WAP-1	Literatur-Seminar	3	P
PRJ	BCSP-2024-6-PRJ-1	Praxisprojekt	12	L
THS	BCSP-2024-6-THS-1	BCSP Thesis	12	P
THS	BCSP-2024-6-THS-2	BCSP Kolloquium	3	P

I.3. Bachelor-Studiengang Wirtschaftsinformatik (BWI)

I.3.1. Module groups

MAT	Mathematische Grundlagen und Lineare Algebra (BWI) (Mathematical Foundations and Linear Algebra (BWI))
INF	Informatik (Computer Science)
WIN	Wirtschaftsinformatik (Business Informatics)
BWL	Betriebswirtschaftslehre (Business Administration)
CIS	Cluster: Integrated Business Systems
CDA	Cluster: Business Data Analytics
CED	Cluster: Entrepreneurship und Digitalisierung
WPC	Wahlpflicht/Cluster (Elective/Cluster)
ÜK	Überfachliche Kompetenzen (Interdisciplinary Skills)
WIA	Wissenschaftliches Arbeiten (Scientific Work)
PRJ	Praxisprojekt (Practical Project)
THS	Thesis und Kolloquium (Thesis and Colloquium)

I.3.2. Structure

Table 5: Structure of the Bachelor's programme in Wirtschaftsinformatik (BWI)

Semester	**1.**		**2.**		**3.**		**4.**		**5.**		**6.**		**Summe**	
Gruppe	**CP**	**SL**	**CP**	**SL**	**CP**	**SL**	**CP**	**SL**	**CP**	**SL**	**CP**	**SL**	**CP**	**SL**
MAT	6	1 P	6	1 P	6	1 P							18	3 P
INF	9	1 P	9	1 P	12	2 P							30	4 P
WIN	6	1 P	12	2 P			12	2 P	6	1 L			36	5P 1 L
BWL	6	1 P	6	1 P	6	1 P	3	1 L					21	3 P 1 L
CIS					6	1 P							6	1 P
CDA							6	1 P					6	1 P
CED							6	1 P					6	1 P
WPC									18	3 P			18	3 P
ÜK	3	1 L					3	1 L	3	1 L			9	3 L
WIA									3	1 P			3	1 P
PRJ											12	1 L	12	1 L
THS											15	2 P	15	2 P
Summe	30	4 P 1 L	33	5 P	30	5 P	30	4 P 2 L	30	4 P 2 L	27	2 P 1 L	180	24 P 6 L

I.3.3. Academic Achievements

Table 6: Academic achievements for the Bachelor's programme in Wirtschaftsinformatik (BWI)

Gruppe	Modul	Titel (exemplarisch)	CP	SL
MAT	BWI-2024-1-MAT-1	Mathematische Grundlagen und Lineare Algebra (BWI)	6	P
INF	BWI-2024-1-INF-1	Programmierung 1	9	P
WIN	BWI-2024-1-WIN-1	Einführung in die Wirtschaftsinformatik	6	P
BWL	BWI-2024-1-BWL-1	Einführung in die Betriebswirtschaftslehre	6	P
ÜK	BWI-2024-1-ÜK-1	Business English for BIS	3	L
MAT	BWI-2024-2-MAT-1	Analysis	6	P
INF	BWI-2024-2-INF-1	Programmierung, Algorithmen und Datenstrukturen	9	P
WIN	BWI-2024-2-WIN-1	Modellierung betrieblicher Informationssysteme	6	P
WIN	BWI-2024-2-WIN-2	Einführung in das Management der Informationssicherheit	6	P
BWL	BWI-2024-2-BWL-1	Kosten- und Leistungsrechnung	6	P
MAT	BWI-2024-3-MAT-1	Wahrscheinlichkeitstheorie und Statistik	6	P
INF	BWI-2024-3-INF-1	Software Engineering 1	6	P
INF	BWI-2024-3-INF-2	Datenbanken	6	P
BWL	BWI-2024-3-BWL-1	Finanzierung und Investitionsrechnung	6	P
CIS	BWI-2024-3-CIS-1	BWI Cluster: Integrated Business Systems	6	P
WIN	BWI-2024-4-WIN-1	Künstliche Intelligenz und Maschinelles Lernen	6	P
WIN	BWI-2024-4-WIN-2	IT-Servicemanagement	6	P
BWL	BWI-2024-4-BWL-1	Unternehmensplanspiel	3	L
CDA	BWI-2024-4-CDA-1	BWI Cluster: Business Data Analytics	6	P
CED	BWI-2024-4-CED-1	BWI Cluster: Entrepreneurship und Digitalisierung	6	P
ÜK	BWI-2024-4-ÜK-1	Einführung in das IT-Recht	3	L
WIN	BWI-2024-5-WIN-1	Wirtschaftsinformatik-Projekt	6	L
WPC	BWI-2024-5-WPC-1	BWI Wahlpflicht/Cluster	6	P
WPC	BWI-2024-5-WPC-2	BWI Wahlpflicht/Cluster	6	P
WPC	BWI-2024-5-WPC-3	BWI Wahlpflicht/Cluster	6	P
ÜK	BWI-2024-5-ÜK-1	BWI Überfachliche Kompetenzen 3	3	L
WIA	BWI-2024-5-WIA-1	BWI Seminar	3	P
PRJ	BWI-2024-6-PRJ-1	Praxisprojekt	12	L
THS	BWI-2024-6-THS-1	BWI Thesis	12	P
THS	BWI-2024-6-THS-2	BWI Kolloquium	3	P

I.4. Master-Studiengang Informatik (MI)

I.4.1. Module groups

WPG MI Wahlpflicht Grundlagen
(MI Elective Basics)
WPX MI Wahlpflicht extern
(MI Elective external)
WPS MI Wahlpflicht/Spezialisierung
(MI Elective/Specialization)
WIA Wissenschaftliches Arbeiten
(Scientific Working)
PRJ Projekt
(Project)
THS Thesis und Kolloquium
(Thesis and Colloquium)

I.4.2. Structure

Table 7: Structure of the Master's programme in Informatik (MI)

Semester	**1.**		**2.**		**3.**		**4.**		**Summe**	
Gruppe	**CP**	**SL**	**CP**	**SL**	**CP**	**SL**	**CP**	**SL**	**CP**	**SL**
WPG	6	1 P	6	1 P					12	2 P
WPX					6	1 P			6	1 P
WPS	24	4 P	24	4 P	6	1 P			54	9 P
WIA					6	1 P			6	1 P
PRJ					12	1 P			12	1 P
THS							30	2 P	30	2 P
Summe	30	5 P	30	5 P			30	2 P	120	16 P

I.4.3. Academic Achievements

Table 8: Academic achievements for the Master's programme in Informatik (MI)

Gruppe	**Modul**	**Titel (exemplarisch)**	**CP**	**SL**
WPG	MI-2024-1-WPG-1	MI Wahlpflicht Grundlagen	6	P
WPS	MI-2024-1-WPS-1	MI Wahlpflicht/Spezialisierung	6	P
WPS	MI-2024-1-WPS-2	MI Wahlpflicht/Spezialisierung	6	P
WPS	MI-2024-1-WPS-3	MI Wahlpflicht/Spezialisierung	6	P
WPS	MI-2024-1-WPS-4	MI Wahlpflicht/Spezialisierung	6	P
WPG	MI-2024-2-WPG-1	MI Wahlpflicht Grundlagen	6	P
WPS	MI-2024-2-WPS-1	MI Wahlpflicht/Spezialisierung	6	P
WPS	MI-2024-2-WPS-2	MI Wahlpflicht/Spezialisierung	6	P
WPS	MI-2024-2-WPS-3	MI Wahlpflicht/Spezialisierung	6	P
WPS	MI-2024-2-WPS-4	MI Wahlpflicht/Spezialisierung	6	P
WPX	MI-2024-3-WPX-1	MI Wahlpflicht extern	6	P
WPS	MI-2024-3-WPS-1	MI Wahlpflicht/Spezialisierung	6	P

WIA	MI-2024-3-WIA-1	MI Seminar	6	P
PRJ	MI-2024-3-PRJ-1	MI Projekt	12	P
THS	MI-2024-4-THS-1	MI Thesis	24	P
THS	MI-2024-4-THS-2	MI Kolloquium	6	P

I.5. Master-Studiengang Cyber Security & Privacy (MCSP)

I.5.1. Module groups

WPC Wahlpflicht CSP
(Elective CSP)
WPF Wahlpflicht
(Elective)
WIA Wissenschaftliches Arbeiten
(Scientific Working)
PRJ Projekt
(Project)
THS Thesis und Kolloquium
(Thesis and Colloquium)

I.5.2. Structure

Table 9: Structure of the Master's programme in Cyber Security & Privacy (MCSP)

Semester	**1.**		**2.**		**3.**		**4.**		**Summe**	
Gruppe	**CP**	**SL**	**CP**	**SL**	**CP**	**SL**	**CP**	**SL**	**CP**	**SL**
WPC	24	4 P	24	4 P	12	2 P			60	10 P
WPF	6	1 P	6	1 P					12	2 P
WIA					6	1 P			6	1 P
PRJ					12	1 P			12	1 P
THS							30	2 P	30	2 P
Summe	30	5 P	30	5 P	30	4 P	30	2 P	120	16 P

I.5.3. Academic Achievements

Table 10: Academic achievements for the Master's programme in Cyber Security & Privacy (MCSP)

Gruppe	**Modul**	**Titel (exemplarisch)**	**CP**	**SL**
WPC	MCSP-1-WPC-1	MCSP Wahlpflicht CSP	6	P
WPC	MCSP-1-WPC-2	MCSP Wahlpflicht CSP	6	P
WPC	MCSP-1-WPC-3	MCSP Wahlpflicht CSP	6	P
WPC	MCSP-1-WPC-4	MCSP Wahlpflicht CSP	6	P
WPF	MCSP-1-WPF-1	MCSP Wahlpflicht	6	P
WPC	MCSP-2-WPC-1	MCSP Wahlpflicht CSP	6	P
WPC	MCSP-2-WPC-2	MCSP Wahlpflicht CSP	6	P
WPC	MCSP-2-WPC-3	MCSP Wahlpflicht CSP	6	P
WPC	MCSP-2-WPC-4	MCSP Wahlpflicht CSP	6	P
WPF	MCSP-2-WPF-1	MCSP Wahlpflicht	6	P

WPC	MCSP-3-WPC-1	MCSP Wahlpflicht CSP	6	P
WPC	MCSP-3-WPC-2	MCSP Wahlpflicht CSP	6	P
WIA	MCSP-3-WIA-1	MCSP Seminar	6	P
PRJ	MCSP-3-PRJ-1	MCSP Projekt	12	P
THS	MCSP-4-THS-1	MCSP Thesis	24	P
THS	MCSP-4-THS-2	MCSP Kolloquium	6	P

I.6. Master-Studiengang Autonomous Systems (MAS)

I.6.1. Module groups

CMP Compulsory
LAB Laboratory
ELC Elective
ARW Academic Research and Writing
RND Research and Development
THS Thesis and Colloquium

I.6.2. Structure

Table 11: Structure of the Master's programme in Autonomous Systems (MAS)

Semester	**1.**		**2.**		**3.**		**4.**		**Summe**	
Gruppe	**CP**	**SL**	**CP**	**SL**	**CP**	**SL**	**CP**	**SL**	**CP**	**SL**
CMP	24	4 P							24	4 P
LAB			9	2 P					9	2 P
ELC			18	3 P	12	2 P			30	5 P
ARW	6	1 P	6	1 P					12	2 P
RND					15	1 P			15	1 P
THS							30	2 P	30	2 P
Summe	30	5 P	33	6 P	27	3 P	30	2 P	120	16 P

I.6.3. Academic Achievements

Table 12: Academic achievements for the Master's programme in Autonomous Systems (MAS)

Gruppe	Modul	Titel (exemplarisch)	CP	SL
CMP	MAS-2024-1-CMP-1	Software Engineering for Robotics	6	P
CMP	MAS-2024-1-CMP-2	Fundamentals of Artificial Intelligence for Robotics	6	P
CMP	MAS-2024-1-CMP-3	Autonomous Mobile Robots	6	P
CMP	MAS-2024-1-CMP-4	Mathematics for Robotics	6	P
ARW	MAS-2024-1-ARW-1	Introduction to Scientific Work	6	P
LAB	MAS-2024-2-LAB-1	Autonomous Systems Development Lab	6	P
LAB	MAS-2024-2-LAB-2	Scientific Experimentation and Evaluation	6	P
ELC	MAS-2024-2-ELC-1	MAS Elective	6	P
ELC	MAS-2024-2-ELC-2	MAS Elective	6	P
ELC	MAS-2024-2-ELC-3	MAS Elective	6	P
ARW	MAS-2024-2-ARW-1	Planning, Writing, and Presenting Scientific Projects	6	P
ELC	MAS-2024-3-ELC-1	MAS Elective	6	P
ELC	MAS-2024-3-ELC-2	MAS Elective	6	P
RND	MAS-2024-3-RND-1	Research and Development Project	15	P
THS	MAS-2024-4-THS-1	MAS Thesis	24	P
THS	MAS-2024-4-THS-2	MAS Colloquium	6	P

I.7. Master-Studiengang Game Technologies (MGT)

I.7.1. Module groups

GT	Game Technologies
SWP	Scientific Work and Practice
ELC	Elective
PRJ	Project
THS	Thesis and Colloquium

I.7.2. Structure

Table 13: Structure of the Master's programme in Game Technologies (MGT)

Semester	**1.**			**2.**		**3.**		**4.**		**Summe**	
Gruppe	**CP**	**SL**		**CP**	**SL**	**CP**	**SL**	**CP**	**SL**	**CP**	**SL**
GT	18	3 P		12	2 P					30	5 P
SWP	6	1 P				12	2 P			18	3 P
ELC				6	1 P	12	2 P			18	3 P
PRJ	6	1 P		12	1 P	6	1 P			24	3 P
THS								30	2 P	30	2 P
Summe	30	5 P		30	4 P	30	5 P	30	2 P	120	16 P

I.7.3. Academic Achievements

Table 14: Academic achievements for the Master's programme in Game Technologies (MGT)

Gruppe	**Modul**	**Titel (exemplarisch)**	**CP**	**SL**
GT	MGT-2024-1-GT-1	Visualization	6	P
GT	MGT-2024-1-GT-2	Digital Storytelling	6	P
GT	MGT-2024-1-GT-3	Games - Advanced User Interfaces	6	P
SWP	MGT-2024-1-SWP-1	Introduction to Scientific Work	6	P
PRJ	MGT-2024-1-PRJ-1	Project 1	6	P
GT	MGT-2024-2-GT-1	Advanced Computer Graphics	6	P
GT	MGT-2024-2-GT-2	Game Technologies Prototyping	6	P
ELC	MGT-2024-2-ELC-1	MGT Elective	6	P
PRJ	MGT-2024-2-PRJ-1	Project 2	12	P
SWP	MGT-2024-3-SWP-1	Creating Innovation	6	P
SWP	MGT-2024-3-SWP-2	MGT Seminar	6	P
ELC	MGT-2024-3-ELC-1	MGT Elective	6	P
ELC	MGT-2024-3-ELC-2	MGT Elective	6	P
PRJ	MGT-2024-3-PRJ-1	Project 3	6	P
THS	MGT-2024-4-THS-1	MGT Thesis	24	P
THS	MGT-2024-4-THS-2	MGT Colloquium	6	P

I.8. Master-Studiengang Wirtschaftsinformatik, Nachhaltigkeit und Digitalisierung (MWI)

I.8.1. Module groups

TEC	Technologie (Technology)
NHD	Nachhaltigkeit und Digitalisierung (Sustainability and Digitization)
MGM	Management
WPF	Wahlpflicht (Elective)
PRJ	Projekt (Project)
THS	Thesis und Kolloquium (Thesis and Colloquium)

I.8.2. Structure

Table 15: Structure of the Master's programme in Wirtschaftsinformatik, Nachhaltigkeit und Digitalisierung (MWI)

Semester	**1.**		**2.**		**3.**		**4.**		**Summe**	
Gruppe	**CP**	**SL**	**CP**	**SL**	**CP**	**SL**	**CP**	**SL**	**CP**	**SL**
TEC	12	2 P	6	1 P	6	1 P			24	4 P
NHD	6	1 P	6	1 P	6	1 P			18	3 P
MGM	6	1 P	6	1 P					12	2 P
WPF			6	1 P	6	1 P			12	2 P
PRJ	6	1 P	6	1 P	12	1 P			24	3 P
THS							30	2 P	30	2 P
Summe	30	5 P	30	5 P	30	5	30	2 P	120	16 P

I.8.3. Academic Achievements

Table 16: Academic achievements for the Master's programme in Wirtschaftsinformatik, Nachhaltigkeit und Digitalisierung (MWI)

Gruppe	**Modul**	**Titel (exemplarisch)**	**CP**	**SL**
TEC	MWI-2025-1-TEC-1	Big Data Analyse und Visualisierung	6	P
TEC	MWI-2025-1-TEC-2	Business Software und Architecture Management	6	P
TEC	MWI-2025-2-TEC-1	Konzepte und Anwendungsbereiche künstlicher Intelligenz	6	P
TEC	MWI-2025-3-TEC-1	Prozessmanagement & -mining	6	P
NHD	MWI-2025-1-NHD-1	Grundlagen der Nachhaltigkeit und Digitalisierung	6	P
NHD	MWI-2025-2-NHD-1	Nachhaltige Verbraucherinformatik	6	P
NHD	MWI-2025-3-NHD-1	Ethik in Digitalisierung und Nachhaltigkeit	6	P
MGM	MWI-2025-1-MGM-1	Organisationsentwicklung & Führung	6	P

MGM	MWI-2025-2-MGM-1	Strategisches IT-Management & IT-Sicherheit	6	P
WPF	MWI-2025-2-WPF-1	MI Wahlpflicht	6	P
WPF	MWI-2025-3-WPF-1	MI Wahlpflicht	6	P
PRJ	MWI-2025-1-PRJ-1	Projekt Startup / Business Konzept	6	P
PRJ	MWI-2025-2-PRJ-1	Umsetzungsprojekt	6	P
PRJ	MWI-2025-3-PRJ-1	Forschungsprojekt	12	P
THS	MWI-2025-4-THS-1	MWI Thesis	24	P
THS	MWI-2025-4-THS-2	MWI Kolloquium	6	P

I.9. Specification of identical modules in the Bachelor's degree programmes

The following compulsory modules of the BI, BCSP and BWI degree programmes are identical:

Table 17: Identical compulsory modules in the Bachelor's degree programmes

Studiengang BI		**Studiengang BCPS**		**Studiengang BWI**
BI-2024-1-PSE-1	=	BCSP-2024-1-PSE-1	=	BWI-2024-1-INF-1
BI-2024-1-TIN-1	=	BCSP-2024-2-TIN-2		
BI-2024-1-TIN-2	=	BCSP-2024-1-TIN-1		
BI-2024-2-MAT-1	=		=	BWI-2024-2-MAT-1
BI-2024-2-THI-1	=	BCSP-2024-3-THI-1		
BI-2024-2-PI-1	=	BCSP-2024-2-PI-1	=	BWI-2024-3-INF-2
BI-2024-2-TIN-1	=	BCSP-2024-2-TIN-1		
BI-2024-3-MAT-1	=	BCSP-2024-3-MAT-1	=	BWI-2024-3-MAT-1
BI-2024-3-PSE-1	=		=	BWI-2024-3-INF-1
BI-2024-3-TIN-1	=	BCSP-2024-3-TIN-1		
BI-2024-5-WAP-1	=	BCSP-2024-5-WAP-1		
BI-2024-6-PRJ-1	=	BCSP-2024-6-PRJ-1	=	BWI-2024-6-PRJ-1

I. Appendix

Abbreviations for all appendices:

CP	ECTS credit points
SL	Type of academic achievement (one of the following:)
P	Examination
L	Performance record

I.1. Bachelor's programme in Computer Science (BI)

I.1.1. Module groups

MAT	Mathematics
THI	Theoretical Computer Science
PSE	Programming and software development
PI	Practical computer science
TIN	Technical Informatics and Networks
WPS	Elective/specialisation
ÜK	Interdisciplinary skills
WAP	Scientific work and project work
PRJ	Practical project
THS	Thesis and colloquium

I.1.2. Structure

Table18 : Structure of the Bachelor's programme in Computer Science (BI)

Semester	1		2		3		4		5		6.		Total	
Group	CP	SL	CP	SL	CP	SL	CP	SL	CP	SL	CP	SL	CP	SL
MAT	9	1 P	6	1	6	1							21	3
THI			6	1	6	1	6	1					18	3
PSE	9	1	6	1	6	1	6	1					27	4
PI			6	1	6	1							1	2
TIN	12	2	6	1	6	1							24	4
WPS							18	3	18	3			3	6
ÜK			3	1 L					6	2 L			9	3L
WAP					3	1 L			3	1 P			6	1 P 1 L

PRJ											12	1 L	12	1 L
THS											15	2	1	2 P
Total	30	4	33	5 1 L	33	5 1 L	30	5 P	27	4 2 L	27	2 1 L	180	25 P 5

I.1.3. Coursework

Table19 : Academic achievements for the Bachelor's programme in Computer Science (BI)

Group	Module	Title (example)	CP	SL
MAT	BI-2024-1-MAT-1	Mathematical Foundations and Linear Algebra (BI)	9	P
PSE	BI-2024-1-PSE-1	Programming 1	9	P
TIN	BI-2024-1-TIN-1	Technical Informatics	6	P
TIN	BI-2024-1-TIN-2	Networks	6	P
MAT	BI-2024-2-MAT-1	Analysis	6	P
THI	BI-2024-2-THI-1	Algorithms, Data Structures and Graph Theory	6	P
PSE	BI-2024-2-PSE	Programming 2	6	P
PI	BI-2024-2-PI-1	Databases	6	P
TIN	BI-2024-2-TIN-1	System-related programming	6	P
ÜK	BI-2024-2-ÜK-1	BI Interdisciplinary skills	3	L
MAT	BI-2024-3-MAT-1	Probability theory and statistics	6	P
THI	BI-2024-3-THI-1	Automatic Theory and Formal Languages	6	P
PSE	BI-2024-3-PSE-1	Software Engineering 1	6	P
PI	BI-2024-3-PI-1	IT Security	6	P
TIN	BI-2024-3-TIN-1	Operating systems	6	P
WAP	BI-2024-3-WAP-1	Computer science project	3	L
THI	BI-2024-4-THI-1	Computability and complexity	6	P
PSE	BI-2024-4-PSE-1	Software Engineering 2	6	P
WPS	BI-2024-4-WPS-1	BI Elective/Specialisation	6	P
WPS	BI-2024-4-WPS-2	BI Elective/Specialisation	6	P
WPS	BI-2024-4-WPS-3	BI Compulsory/Specialisation	6	P
WPS	BI-2024-5-WPS-1	BI Elective/Specialisation	6	P
WPS	BI-2024-5-WPS-2	BI Elective/Specialisation	6	P
WPS	BI-2024-5-WPS-3	BI Elective/Specialisation	6	P
ÜK	BI-2024-5-ÜK-1	BI Interdisciplinary skills (ethics)	3	L
ÜK	BI-2024-5-ÜK-2	BI Interdisciplinary skills	3	L
WAP	BI-2024-5-WAP-1	Literature seminar	3	P
PRJ	BI-2024-6-PRJ-1	Practical project	1	L
THS	BI-2024-6-THS-1	BI Thesis	12	P
THS	BI-2024-6-THS-2	BI Colloquium	3	P

I.2. Bachelor's degree programme in Cyber Security & Privacy (BCSP)

I.2.1. Module groups

MAT Mathematics
THI Theoretical Computer Science
PSE Programming and Software Development PI
Practical Computer Science
TIN Technical Computer Science and
Networks SPZ Specialisation
WPF Elective
ÜK Interdisciplinary skills
WAP Scientific work and project work PRJ
Practical project
THS Thesis and colloquium

I.2.2. Structure

Table20 : Structure of the Bachelor's programme in Cyber Security & Privacy (BCSP)

Semester	**1**		**2**		**3**		**4**		**5**		**6.**		**Total**	
Group	**CP**	**SL**	**CP**	**SL**	**CP**	**SL**	**CP**	**SL**	**CP**	**SL**	**CP**	**SL**	**CP**	**SL**
MAT	6	1 P	6	1	6	1							18	3
THI					6	1	6	1					1	2
PSE	9	1											9	1
PI			6	1			6	1					1	2
TIN	6	1	1	2	6	1							24	4
SPZ	9	1 P 1 L	6	1 P	1	2	12	2	18	3			57	9 1 L
WPF							6	1	6	1 P			12	2
ÜK							3	1 L	3	1 L			3	1 L
WAP					3	1 L	3	1 P	3	1			6	1 1 L
PRJ											12	1	12	1 L
THS											15	2	15	2
Total	30	4 1 L	30	5	33	5 1 L	30	5 1 L	30	5 P 1 L	27	2 1 L	180	26 4

I.2.3. Coursework

Table21 : Academic achievements for the Bachelor's programme in Cyber Security & Privacy (BCSP)

Group	Module	Title (example)	CP	SL
MAT	BCSP-2024-1-MAT-1	Algebraic structures	6	P
PSE	BCSP-2024-1-PSE-1	Programming 1	9	P
TIN	BCSP-2024-1-TIN-1	Networks	6	P
SPZ	BCSP-2024-1-SPZ-1	Information security	3	L
SPZ	BCSP-2024-1-SPZ-2	Data protection, IT law and privacy	6	P
MAT	BCSP-2024-2-MAT-1	Linear Algebra and Analysis	6	P
PI	BCSP-2024-2-PI-1	Databases	6	P
TIN	BCSP-2024-2-TIN-1	System-oriented programming	6	P
TIN	BCSP-2024-2-TIN-2	Technical Informatics	6	P
SPZ	BCSP-2024-2-SPZ-1	Introduction to Information Security Management	6	P
MAT	BCSP-2024-3-MAT-1	Probability Theory and Statistics	6	P
THI	BCSP-2024-3-THI-1	Algorithms, Data Structures and Graph Theory	6	P
TIN	BCSP-2024-3-TIN-1	Operating systems	6	P
SPZ	BCSP-2024-3-SPZ-1	Fundamentals of network and operating system security	6	P
SPZ	BCSP-2024-3-SPZ-2	Applied Cryptography	6	P
WAP	BCSP-2024-3-WAP-1	CSP Project	3	L
THI	BCSP-2024-4-THI-1	Algorithmic complexity	6	P
PI	BCSP-2024-4-PI-1	Artificial intelligence and machine learning	6	P
SPZ	BCSP-2024-4-SPZ-1	BCSP Elective CSP	6	P
SPZ	BCSP-2024-4-SPZ-2	BCSP Elective CSP	6	P
WPF	BCSP-2024-4-WPF-1	BCSP Elective	6	P
SPZ	BCSP-2024-5-SPZ-1	BCSP Elective CSP	6	P
SPZ	BCSP-2024-5-SPZ-2	BCSP Elective CSP	6	P
SPZ	BCSP-2024-5-SPZ-3	BCSP Elective CSP	6	P
WPF	BCSP-2024-5-WPF-1	BCSP Elective	6	P
ÜK	BCSP-2024-5-ÜK-1	Ethics	3	L
WAP	BCSP-2024-5-WAP-1	Literature seminar	3	P
PRJ	BCSP-2024-6-PRJ-1	Practical project	1	L
THS	BCSP-2024-6-THS-1	BCSP Thesis	12	P
THS	BCSP-2024-6-THS-2	BCSP Colloquium	3	P

I.3. Bachelor's degree programme in Business Informatics (BWI)

I.3.1. Module groups

MAT Mathematical Foundations and Linear Algebra (BWI) INF
Computer Science
WIN Business Informatics
Business Administration
Business Administration
CIS Cluster: Integrated Business Systems
CDA Cluster: Business Data Analytics
CED Cluster: Entrepreneurship and Digitalisation
WPC Elective/Cluster
ÜK Interdisciplinary skills WIA
Scientific work PRJ
Practical project
THS Thesis and colloquium

I.3.2. Structure

Table22 : Structure of the Bachelor's programme in Business Informatics (BWI)

Semester	1		2		3		4		5		6.		Total	
Group	**CP**	**SL**	**CP**	**SL**	**CP**	**SL**	**CP**	**SL**	**CP**	**SL**	**CP**	**SL**	**CP**	**SL**
MAT	6	1 P	6	1 P	6	1							18	3
INF	9	1	9	1	12	2							30	4
WIN	6	1	12	2			12	2	6	1 L			36	5P 1 L
Business Administration	6	1	6	1 P	6	1	3	1 L					21	3 1 L
CIS					6	1							6	1 P
CDA							6	1					6	1
CED							6	1					6	1
WPC									18	3			18	3
ÜK	3	1 L					3	1 L	3	1 L			9	3 L
WIA									3	1 P			3	1
PRJ											12	1 L	1	1 L
THS											15	2	15	2
Total	30	4 1 L	33	5	30	5	30	4 2 L	30	4 2 L	27	2 1 L	180	24 6

I.3.3. Coursework

Table23 : Coursework for the Bachelor's degree programme in Business Informatics (BWI)

Group	Module	Title (example)	CP	SL
MAT	BWI-2024-1-MAT-1	Mathematical Foundations and Linear Algebra (BWI)	6	P
INF	BWI-2024-1-INF-1	Programming 1	9	P
WIN	BWI-2024-1-WIN-1	Introduction to Business Informatics	6	P
Business	BWI-2024-1-BWL-1	Introduction to Business Administration	6	P
ÜK	BWI-2024-1-ÜK-1	Business English for BIS	3	L
MAT	BWI-2024-2-MAT-1	Analysis	6	P
INF	BWI-2024-2-INF-1	Programming, Algorithms and Data Structures	9	P
WIN	BWI-2024-2-WIN-1	Modelling of business information systems	6	P
WIN	BWI-2024-2-WIN-2	Introduction to information security management	6	P
Business	BWI-2024-2-BWL-1	Cost and performance accounting	6	P
MAT	BWI-2024-3-MAT-1	Probability theory and statistics	6	P
INF	BWI-2024-3-INF-1	Software Engineering 1	6	P
INF	BWI-2024-3-INF-2	Databases	6	P
Business	BWI-2024-3-BWL-1	Financing and investment accounting	6	P
CIS	BWI-2024-3-CIS-1	BWI Cluster: Integrated Business Systems	6	P
WIN	BWI-2024-4-WIN-1	Artificial Intelligence and Machine Learning	6	P
WIN	BWI-2024-4-WIN-2	IT service management	6	P
Business Administration	BWI-2024-4-BWL-1	Business simulation game	3	L
CDA	BWI-2024-4-CDA-1	BWI Cluster: Business Data Analytics	6	P
CED	BWI-2024-4-CED-1	BWI Cluster: Entrepreneurship and Digitalisation	6	P
ÜK	BWI-2024-4-ÜK-1	Introduction to IT law	3	L
WIN	BWI-2024-5-WIN-1	Business Informatics Project	6	L
WPC	BWI-2024-5-WPC-1	BWI Elective/Cluster	6	P
WPC	BWI-2024-5-WPC-2	BWI Elective/Cluster	6	P
WPC	BWI-2024-5-WPC-3	BWI Elective/Cluster	6	P
ÜK	BWI-2024-5-ÜK-1	BWI Interdisciplinary skills 3	3	L
WIA	BWI-2024-5-WIA-1	BWI Seminar	3	P
PRJ	BWI-2024-6-PRJ-1	Practical project	1	L
THS	BWI-2024-6-THS-1	BWI Thesis	12	P
THS	BWI-2024-6-THS-2	BWI Colloquium	3	P

I.4. Master's programme in Computer Science (MI)

I.4.1. Module groups

WPG	MI Elective Fundamentals
WPX	MI Elective external
WPS	MI Elective/Specialisation WIA
	Scientific work PRJ
	Project
THS	Thesis and colloquium

I.4.2. Structure

Table24 : Structure of the Master's programme in Computer Science (MI)

Semester	1		2		3		4		Total	
Group	**CP**	**SL**	**CP**	**SL**	**CP**	**SL**	**CP**	**SL**	**CP**	**SL**
WPG	6	1	6	1					12	2
WPX					6	1			6	1
WPS	24	4	24	4	6	1			54	9
WIA					6	1 P			6	1 P
PRJ					12	1			1	1
THS							30	2	30	2
Total	30	5	30	5			30	2	120	16

I.4.3. Coursework

Table25 : Academic achievements for the Master's programme in Computer Science (MI)

Group	Module	Title (example)	CP	SL
WPG	MI-2024-1-WPG-1	MI Elective Fundamentals	6	P
WPS	MI-2024-1-WPS-1	MI Elective/Specialisation	6	P
WPS	MI-2024-1-WPS-2	MI Elective/Specialisation	6	P
WPS	MI-2024-1-WPS-3	MI Elective/Specialisation	6	P
WPS	MI-2024-1-WPS-4	MI Elective/Specialisation	6	P
WPG	MI-2024-2-WPG-1	MI Compulsory elective Fundamentals	6	P
WPS	MI-2024-2-WPS-1	MI Elective/Specialisation	6	P
WPS	MI-2024-2-WPS-2	MI Elective/Specialisation	6	P
WPS	MI-2024-2-WPS-3	MI Elective/Specialisation	6	P
WPS	MI-2024-2-WPS-4	MI Elective/Specialisation	6	P
WPX	MI-2024-3-WPX-1	MI Elective external	6	P
WPS	MI-2024-3-WPS-1	MI Elective/Specialisation	6	P
WIA	MI-2024-3-WIA-1	MI Seminar	6	P
PRJ	MI-2024-3-PRJ-1	MI Project	12	P
THS	MI-2024-4-THS-1	MI Thesis	24	P
THS	MI-2024-4-THS-2	MI Colloquium	6	P

I.5. Master's programme in Cyber Security & Privacy (MCSP)

I.5.1. Module groups

WPC	Elective CSP
WPF	Elective
WIA	Scientific work PRJ
	Project
THS	Thesis and colloquium

I.5.2. Structure

Table26 : Structure of the Master's programme in Cyber Security & Privacy (MCSP)

Semester	**1**		**2**		**3**		**4**		**Total**	
Group	**CP**	**SL**	**CP**	**SL**	**CP**	**SL**	**CP**	**SL**	**CP**	**SL**
WPC	24	4	24	4 P	12	2			60	10
WPF	6	1	6	1					1	2
WIA					6	1			6	1
PRJ					12	1			1	1
THS							30	2	30	2
Total	30	5	30	5	30	4	30	2	120	16

I.5.3. Coursework

Table27 : Coursework for the Master's programme in Cyber Security & Privacy (MCSP)

Group	Module	Title (examples)	CP	SL
WPC	MCSP-1-WPC-1	MCSP Elective CSP	6	P
WPC	MCSP-1-WPC-2	MCSP Elective CSP	6	P
WPC	MCSP-1-WPC-3	MCSP Elective CSP	6	P
WPC	MCSP-1-WPC-4	MCSP Elective CSP	6	P
WPF	MCSP-1-WPF-1	MCSP Elective	6	P
WPC	MCSP-2-WPC-1	MCSP Elective CSP	6	P
WPC	MCSP-2-WPC-2	MCSP Elective CSP	6	P
WPC	MCSP-2-WPC-3	MCSP Elective CSP	6	P
WPC	MCSP-2-WPC-4	MCSP Elective CSP	6	P
WPF	MCSP-2-WPF-1	MCSP Elective	6	P
WPC	MCSP-3-WPC-1	MCSP Elective CSP	6	P
WPC	MCSP-3-WPC-2	MCSP Elective CSP	6	P
WIA	MCSP-3-WIA-1	MCSP Seminar	6	P
PRJ	MCSP-3-PRJ-1	MCSP Project	12	P
THS	MCSP-4-THS-1	MCSP Thesis	24	P
THS	MCSP-4-THS-2	MCSP Colloquium	6	P

I.6. Master's programme in Autonomous Systems (MAS)

I.6.1. Module groups

CMP Compulsory
LAB Laboratory
ELC Elective
ARW Academic Research and Writing
RND Research and Development THS
Thesis and Colloquium

I.6.2. Structure

Table28 : Structure of the Master's programme in Autonomous Systems (MAS)

Semester	1		2		3		4		Total	
Group	**CP**	**SL**	**CP**	**SL**	**CP**	**SL**	**CP**	**SL**	**CP**	**SL**
CMP	24	4							24	4 P
LAB			9	2					9	2 P
ELC			18	3	12	2			30	5
ARW	6	1	6	1					12	2
RND					15	1			15	1
THS							30	2	30	2
Total	30	5	33	6	27	3	30	2	120	16

I.6.3. Coursework

Table29 : Academic achievements for the Master's programme in Autonomous Systems (MAS)

Group	Module	Title (example)	CP	SL
CMP	MAS-2024-1-CMP-1	Software Engineering for Robotics	6	P
CMP	MAS-2024-1-CMP-2	Fundamentals of Artificial Intelligence for Robotics	6	P
CMP	MAS-2024-1-CMP-3	Autonomous Mobile Robots	6	P
CMP	MAS-2024-1-CMP-4	Mathematics for Robotics	6	P
ARW	MAS-2024-1-ARW-1	Introduction to Scientific Work	6	P
LAB	MAS-2024-2-LAB-1	Autonomous Systems Development Lab	6	P
LAB	MAS-2024-2-LAB-2	Scientific experimentation and evaluation	6	P
ELC	MAS-2024-2-ELC-1	MAS Elective	6	P
ELC	MAS-2024-2-ELC-2	MAS Elective	6	P
ELC	MAS-2024-2-ELC-3	MAS Elective	6	P
ARW	MAS-2024-2-ARW-1	Planning, Writing, and Presenting Scientific Projects	6	P
ELC	MAS-2024-3-ELC-1	MAS Elective	6	P
ELC	MAS-2024-3-ELC-2	MAS Elective	6	P
RND	MAS-2024-3-RND-1	Research and Development Project	15	P
THS	MAS-2024-4-THS-1	MAS Thesis	24	P
THS	MAS-2024-4-THS-2	MAS Colloquium	6	P

I.7. Master's programme in Game Technologies (MGT)

I.7.1. Module groups

GT	Game Technologies
SWP	Scientific Work and Practice
ELC	Electives
PRJ	Project
THS	Thesis and Colloquium

I.7.2. Structure

Table30 : Structure of the Master's programme in Game Technologies (MGT)

Semester	1		2		3		4		Total	
Group	**CP**	**SL**	**CP**	**SL**	**CP**	**SL**	**CP**	**SL**	**CP**	**SL**
GT	18	3	12	2					30	5
SWP	6	1			12	2			18	3
ELC			6	1	12	2			18	3
PRJ	6	1	1	1	6	1			24	3
THS							30	2	30	2
Total	30	5	30	4	30	5	30	2	120	16

I.7.3. Coursework

Table31 : Master's programme in Game Technologies (MGT)

Group	Module	Title (example)	CP	SL
GT	MGT-2024-1-GT-1	Visualisation	6	P
GT	MGT-2024-1-GT-2	Digital storytelling	6	P
GT	MGT-2024-1-GT-3	Games - Advanced User Interfaces	6	P
SWP	MGT-2024-1-SWP-1	Introduction to Scientific Work	6	P
PRJ	MGT-2024-1-PRJ-1	Project 1	6	P
GT	MGT-2024-2-GT-1	Advanced Computer Graphics	6	P
GT	MGT-2024-2-GT-2	Game Technologies Prototyping	6	P
ELC	MGT-2024-2-ELC-1	MGT Elective	6	P
PRJ	MGT-2024-2-PRJ-1	Project 2	1	P
SWP	MGT-2024-3-SWP-1	Creating Innovation	6	P
SWP	MGT-2024-3-SWP-2	MGT Seminar	6	P
ELC	MGT-2024-3-ELC-1	MGT Elective	6	P
ELC	MGT-2024-3-ELC-2	MGT Elective	6	P
PRJ	MGT-2024-3-PRJ-1	Project 3	6	P
THS	MGT-2024-4-THS-1	MGT Thesis	24	P
THS	MGT-2024-4-THS-2	MGT Colloquium	6	P

I.8. Master's programme in Business Informatics, Sustainability and Digitalisation (MWI)

I.8.1. Module groups

TEC	Technology
NHD	Sustainability and Digitalisation
MGM	Management
WPF	Elective
PRJ	Project
THS	Thesis and colloquium

I.8.2. Structure

Table32 : Structure of the Master's programme in Business Informatics, Sustainability and Digitalisation (MWI)

Semester	1		2		3		4		Total	
Group	**CP**	**SL**	**CP**	**SL**	**CP**	**SL**	**CP**	**SL**	**CP**	**SL**
TEC	12	2	6	1	6	1			24	4
NHD	6	1	6	1	6	1			18	3
MGM	6	1	6	1					12	2
WPF			6	1	6	1			1	2
PRJ	6	1	6	1	1	1			24	3
THS							30	2	30	2
Total	30	5	30	5	30	5	30	2	120	16 P

I.8.3. Coursework

Table33 : Academic achievements for the Master's programme in Business Informatics, Sustainability and Digitalisation (MWI)

Group	Module	Title (example)	CP	SL
TEC	MWI-2025-1-TEC-1	Big Data Analysis and Visualisation	6	P
TEC	MWI-2025-1-TEC-2	Business Software and Architecture Management	6	P
TEC	MWI-2025-2-TEC-1	Concepts and areas of application for artificial intelligence	6	P
TEC	MWI-2025-3-TEC-1	Process management & mining	6	P
NHD	MWI-2025-1-NHD-1	Fundamentals of Sustainability and Digitalisation	6	P
NHD	MWI-2025-2-NHD-1	Sustainable consumer information technology	6	P
NHD	MWI-2025-3-NHD-1	Ethics in digitalisation and sustainability	6	P
MGM	MWI-2025-1-MGM-1	Organisational Development & Leadership	6	P
MGM	MWI-2025-2-MGM-1	Strategic IT Management & IT Security	6	P
WPF	MWI-2025-2-WPF-1	MI Elective	6	P
WPF	MWI-2025-3-WPF-1	MI Elective	6	P
PRJ	MWI-2025-1-PRJ-1	Project Startup / Business Concept	6	P
PRJ	MWI-2025-2-PRJ-1	Implementation project	6	P

PRJ	MWI-2025-3-PRJ-1	Research project	12	P
THS	MWI-2025-4-THS-1	MWI Thesis	24	P
THS	MWI-2025-4-THS-2	MWI Colloquium	6	P

I.9. Specification of identical modules in the Bachelor's degree programmes

The following compulsory modules of the BI, BCSP and BWI degree programmes are identical:

Table34 : Identical compulsory modules in the Bachelor's degree programmes

BI programme		**BCPS programme**		**BWI programme**
BI-2024-1-PSE-1	=	BCSP-2024-1-PSE-1	=	BWI-2024-1-INF-1
BI-2024-1-TIN-1	=	BCSP-2024-2-TIN-2		
BI-2024-1-TIN-2	=	BCSP-2024-1-TIN-1		
BI-2024-2-MAT-1	=		=	BWI-2024-2-MAT-1
BI-2024-2-THI-1	=	BCSP-2024-3-THI-1		
BI-2024-2-PI-1	=	BCSP-2024-2-PI-1	=	BWI-2024-3-INF-2
BI-2024-2-TIN-1	=	BCSP-2024-2-TIN-1		
BI-2024-3-MAT-1	=	BCSP-2024-3-MAT-1	=	BWI-2024-3-MAT-1
BI-2024-3-PSE-1	=		=	BWI-2024-3-INF-1
BI-2024-3-TIN-1	=	BCSP-2024-3-TIN-1		
BI-2024-5-WAP-1	=	BCSP-2024-5-WAP-1		
BI-2024-6-PRJ-1	=	BCSP-2024-6-PRJ-1	=	BWI-2024-6-PRJ-1