

**UNOFFICIAL ENGLISH TRANSLATION
OF THE EXAMINATION REGULATIONS FOR THE DEGREE PROGRAMMES IN
ARTIFICIAL INTELLIGENCE & DATA SCIENCE, BIOCHEMISTRY, BIOCHEMISTRY INTERNATIONAL,
BIOLOGY, BIOLOGY – 1-YEAR VARIANT, CHEMISTRY, INDUSTRIAL PHARMACY, COMPUTER SCIENCE,
MATHEMATICS, MEDICAL PHYSICS, AND PHYSICS
LEADING TO A “MASTER OF SCIENCE” DEGREE
WITHIN THE FACULTY OF MATHEMATICS AND NATURAL SCIENCES
AT HEINRICH HEINE UNIVERSITY DÜSSELDORF**

**in the version of the
sixth order amending the examination regulations dated
November 10th, 2023**

Based on Articles 2(4) and 64(1) of the Higher Education Act of the State of North Rhine-Westphalia dated 16 September 2014 (GV. NRW. p. 547) last amended on 30 June 2022 (GV. NRW p. 780b), Heinrich Heine University Düsseldorf hereby issues the following regulations:

Table of contents

| | |
|------------|---|
| Article 1 | Scope of application |
| Article 2 | Studies: requirements and qualification goals |
| Article 3 | Studies: programme structure |
| Article 4 | Examination board |
| Article 5 | Examiners |
| Article 6 | Master’s examination: purpose |
| Article 7 | Master’s examination: admission |
| Article 8 | Master’s examination: regulations |
| Article 9 | Recognition of coursework and examination achievements |
| Article 10 | Module examinations: general rules, admission restrictions |
| Article 11 | Module examinations: registration and withdrawal, deadlines |
| Article 12 | Module examinations: assessment, grading scale |
| Article 13 | Module examinations: success and failure |
| Article 14 | Module examinations: repeating examinations |
| Article 15 | Module examinations: absence, withdrawal, deception and breaches of the regulations |
| Article 16 | Master’s dissertation: topic assignment |
| Article 17 | Master’s dissertation: assessment and acceptance |
| Article 18 | Master’s dissertation: repeating examinations |
| Article 19 | Additional modules |
| Article 20 | Viewing of examination files |
| Article 21 | Master’s examination: assessment |
| Article 22 | Master’s examination: failure |

Article 23 Master's examination: academic degree, transcript of records, degree certificate

Article 24 Master's examination: invalidity

Article 25 Interim arrangements

Entry into force

Master of Science in Artificial Intelligence & Data Science

Master of Science in Biochemistry

Master of Science in Biochemistry International

Master of Science in Biology – two-year variant

Master of Science in Biology – one-year variant

Master of Science in Chemistry

Master of Science in Industrial Pharmacy

Master of Science in Computer Science

Master of Science in Mathematics

Master of Science in Medical Physics

Master of Science in Physics

Article 1

Scope of application

These examination regulations apply for the master's degree programmes "Artificial Intelligence & Data Science", "Biochemistry", "Biochemistry International", "Biology", "Biology – 1-year variant", "Chemistry", "Computer Science", "Industrial Pharmacy", "Mathematics", "Medical Physics", and "Physics" and lead to awarding of a Master of Science (MSc) degree from the Faculty of Mathematics and Natural Sciences at Heinrich Heine University Düsseldorf. Subject-specific regulations can be found in the appendix forming part of these regulations.

Article 2

Studies: requirements and qualification goals

(1) A first degree in the subject of the master's degree programme or a closely related subject in addition to the special aptitude to complete scientific work are required to enrol on the master's degree programme. Further details, along with the exact procedure for determining special aptitude, are set out in the regulations on the determination of special aptitude for the respective master's degree programme.

(2) In deviation from (1), provisional enrolment in a master's degree programme (in the sense of Article 49(6) of the Higher Education Act) is possible if special aptitude has been determined in accordance with the regulations on the determination of special aptitude for the corresponding master's degree programme and at least 160 credits have already been earned in a bachelor's degree programme. The provisional enrolment shall expire if proof of the first degree is not provided within six (6) months, calculated from the first day of the semester of enrolment.

(3) The master's degree programme aims to provide students with the advanced subject-specific knowledge, skills and methods needed for scientific work and science-oriented professional activities and to enable them to critically review new scientific findings and apply these in professional practice. It moreover aims to familiarise students with the current state of research in a specialised area within their selected subject and serves to prepare them for independent scientific work.

(4) The master's degree programme includes an introduction to the principles of good research practice as per the currently valid version of the guidelines issued by the German Research Foundation.

(5) In addition to imparting subject-specific knowledge, the master's degree programme aims to encourage students to engage with society and to foster the development of individual personalities. Students should thus be empowered to act responsibly in a free, democratic and social constitutional state. The social and personal skills required for this are taught through the course formats and content (in particular, seminars, tutorials, practical laboratory courses, project work, group work) and are supported and reinforced through the supervision during the courses.

Article 3

Studies: programme structure

(1) The period during which the master's degree programme should normally be completed (standard study period) totals four (4) semesters. This includes the completion of all module examinations and preparation of the master's dissertation. Exceptions are detailed in the subject-specific appendix.

(2) Each master's degree programme is designed in such a way that it can be completed with an average workload of 900 hours per semester.

(3) Each master's degree programme is divided into modules, as detailed in the subject-specific appendix. The module contents are explained in the degree programme-specific module handbooks. As a rule, each module concludes with a module examination.

(4) Students who, pursuant to Article 2(5) of the doctoral regulations of the Faculty of Mathematics and Natural Sciences at Heinrich Heine University Düsseldorf, can be admitted to doctoral studies even though they do not have a master's degree or Diplom ("fast-track doctoral studies"), can pursue a master's degree programme with a slightly different structure in some subjects upon application. Further details can be found in the subject-specific appendix.

(5) Any specification of the degree programme contents by the examination board or responsible teaching staff above and beyond the provisions of these examination regulations and their subject-specific appendix is only admissible insofar as the degree programme can still be completed within the standard study period.

(6) Student & Examination Administration uses ECTS statistics to address students with specific advising needs in order to make this group aware of relevant offers.

Article 4

Examination board

(1) For organisation of the examinations and tasks assigned in these examination regulations, the Faculty Council of the Faculty of Mathematics and Natural Sciences at Heinrich Heine University Düsseldorf shall elect an examination board for each degree programme.

(2) The examination board shall consist of five members:

- chairperson (from the group of professors)
- deputy chairperson (from the group of professors)
- one further member from the group of professors
- one member from the group of academic staff
- one member from the group of students for the corresponding degree programme

Deputies shall also be elected from the same group for each of the last three members. Each group may submit nominations for its members and their deputies to the Faculty Council. The term in office is one year for student members and three years for the other members and their deputies. Members can be re-elected. If a member resigns prematurely, a successor shall be elected for the remaining term in office. Further provisions on the composition of the examination board are stipulated in the subject-specific appendix.

(3) The examination board shall ensure that the provisions set out in these examination regulations are complied with and that examinations are conducted in an orderly manner. In particular, it is responsible for the recognition of coursework and examination achievements pursuant to Article 9 and for deciding on appeals against rulings reached during examination procedures.

(4) The examination board may delegate the execution of its tasks in all standard cases to the chairperson or her/his deputy. This does not apply for decisions on appeals.

(5) The examination board shall be quorate if at least one other voting member is present in addition to two professors. Decisions shall be based on a simple majority of the members present; in case of a tied vote, the chairperson, or in the event of her/his absence, the deputy chairperson shall have the casting vote. The student members of the examination board are not eligible to vote on the assessment, recognition or crediting of coursework and examination achievements or the appointment of examiners and assessors. Deputy members of the examination board may take part in meetings, but shall only be eligible to vote if the member they represent is not present.

(6) The meetings of the examination board shall not be open to the public. Its members and their deputies are duty bound to keep its proceedings confidential. If they are not in public service, they shall be obliged by the chairperson of the examination board to maintain confidentiality.

(7) The members of the examination board have the right to be present during examinations.

Article 5

Examiners

(1) The examination board is responsible for appointing examiners for the module examinations (Article 10) and the master's dissertation (Article 16). It may delegate this responsibility to its chairperson.

(2) Only persons belonging to the group of persons detailed in Article 65(1) of the Higher Education Act may be appointed as examiners for module examinations.

(3) As a rule, the person who was last responsible for teaching the module shall be appointed as the examiner for the module examination.

(4) The examiners shall be independent in all matters relating to their examination activities.

(5) When an oral examination must be repeated, the student may propose an alternative examiner to the examination board. Written justification must be provided for this proposal and the stipulations laid out in paragraph (2) observed. The proposal does not constitute any entitlement, but should be taken into account wherever possible.

(6) Repeat examinations for which a fail is definitive and no possibility exists to compensate for this must be evaluated by at least two examiners.

(7) Oral examinations must always be conducted by several examiners or by one examiner in the presence of a competent assessor. Only persons, who have completed the degree programme in which the examination is being taken or a related degree programme may be appointed as an assessor for oral examinations.

(8) The examiners and assessors are duty bound to maintain confidentiality. Examiners, who are not in public service, shall be obliged by the chairperson of the examination board to maintain confidentiality. Assessors shall also be obliged by the appointed examiners to maintain confidentiality.

Article 6

Master's examination: purpose

The master's examination constitutes the qualifying conclusion to the master's degree programme. This examination thus serves to determine whether the goals set out in Article 2(2) have been achieved.

Article 7

Master's examination: admission

(1) Only students who are enrolled on the corresponding master's degree programme at Heinrich Heine University Düsseldorf or admitted as a visiting student pursuant to Article 52(2) of the Higher Education Admission Act may be admitted to the master's examination.

(2) Admission to the master's examination must be refused if

- the requirement set out in paragraph (1) is not met, or
- the student has definitively failed an examination in the same or a closely related degree programme at another university where the provisions of the German Higher Education Framework Act apply.

(3) A student is automatically registered for the master's examination as soon as s/he registers for a module examination for the first time pursuant to Article 11.

Article 8

Master's examination: regulations

(1) The master's examination consists of the module examinations taken during the degree programme pursuant to Article 10 and the master's dissertation pursuant to Article 16. As a rule, the master's examination should be completed by the end of the fourth subject semester.

(2) According to the subject-specific appendix, a total of at least 120 credits generally need to have been earned in the module examinations, the master's dissertation and creditable coursework. Exceptions are detailed in the subject-specific appendix.

(3) One credit within the sense of these examination regulations corresponds to one credit from the European Credit Transfer System (ECTS) and is awarded for achievements requiring a workload of approximately 30 hours when successful completion of this work is proven by a module examination or creditable coursework.

(4) Examination achievements within the sense of these examination regulations are determined by means of marked examinations and form the basis for the mark awarded for the module pursuant to Article 12.

(5) Study credits within the sense of these examination regulations are earned through the active participation in courses. No marks are awarded for study credits.

(6) If a student can demonstrate by means of a medical certificate that s/he is unable to complete an examination in whole or in part in the prescribed format or time due to a prolonged illness or permanent mental or physical disability, the examination board shall enable her/him to complete equivalent examinations in another format in order to compensate for disadvantages. Before the examination board makes its decision, it may, with the student's consent, consult the university's representative for students with disabilities and/or chronic illnesses. A written application for compensation for disadvantages must be submitted to the examination board at least four (4) weeks before the respective examination.

(7) Upon application by the student, the examination board must decide whether individual elements of an examination may be taken within a grace period after the scheduled deadline has passed. Valid reasons for the need for compensation for disadvantages must be provided in the application.

(8) The protective provisions of the German maternity protection act and the deadlines of the German federal parental allowance and parental leave act must be taken into account when registering and scheduling coursework and examinations. Time off to care for persons requiring care must be recognised. The student must apply in writing to Student & Examination Administration for application of the protective provisions or deadline and the examination board must be notified.

Article 9

Recognition of coursework and examination achievements

(1) Upon application, equivalent coursework and examination achievements completed in the same or a closely related degree programme at another university or equivalent institute of higher education shall be recognised. The applicant is responsible for providing the documents required for recognition.

(2) Coursework and examination achievements from other degree programmes shall be recognised once equivalence has been determined.

(3) Study credits and examination achievements shall be deemed equivalent if they essentially correspond to or exceed in their content, scope and requirements those for the master's degree to which these regulations apply. The assessment of equivalence shall be based on an overall review and evaluation rather than a schematic comparison. Coursework and examination achievements

completed in states party to the Convention on the Recognition of Qualifications concerning Higher Education in the European Region dated 11.04.1997 (known as the Lisbon Recognition Convention) shall only not be recognised if substantial differences are deemed to exist between the coursework and examination achievements being compared. The examination board is responsible for providing proof that coursework or examination achievements do not meet the requirements for recognition. Pursuant to Article 63a(5) of the Higher Education Act, applicants may request a review of the decision by the Rectorate should recognition be denied.

(4) The equivalence agreements approved by the Standing Conference of the Ministers of Education and Cultural Affairs of the Länder in the Federal Republic of Germany and the German Rectors' Conference as well as any agreements reached within university partnerships are to be taken into account in the recognition and crediting of qualifications, coursework and examination achievements completed outside the jurisdiction of German Basic Law.

(5) Students admitted to a degree programme based on a placement test pursuant to Section 49(11) of the Higher Education Act shall receive credits for the knowledge and skills demonstrated in the placement test corresponding to the contents of the master's degree to which these regulations apply. The equivalence documented in the placement test certificate is binding for the examination board.

(6) The examination board is responsible for recognising and awarding credits in accordance with paragraphs (1) to (5) and for assigning the coursework and examination achievements to the individual modules. The student must provide the documents required for recognition. The responsible subject representatives may be consulted before equivalence is determined.

(7) If examination achievements are recognised for the master's degree to which these regulations apply, the marks shall also be recognised (insofar as the grading systems are comparable) and, in accordance with these examination regulations, taken into account in calculation of the overall mark. If the grading systems are incomparable, a "Pass" shall be indicated. Such indications of recognition shall be permitted in the transcript of records.

(8) If study credits earned externally are recognised, no module with comparable content may be completed again as part of the master's degree programme at Heinrich Heine University Düsseldorf. Therefore, students must submit any applications for recognition no later than three months after commencing their studies at Heinrich Heine University Düsseldorf and before registering for any modules with comparable content. Recognition is not possible at a later date. If an examination has already been taken at Heinrich Heine University Düsseldorf in a module for which an application for the recognition of credits has been submitted, the study credits earned for this module elsewhere cannot be recognised.

(9) As a rule, a master's dissertation completed elsewhere cannot be recognised.

Article 10

Module examinations: general rules, admission restrictions

(1) Module examinations are based on the content covered during a module. They take place throughout the degree programme shortly after the relevant courses for the module have been attended.

(2) A module consists of one or more courses. Students cannot select the same course as a component for different modules of a degree programme.

(3) Admission restrictions (e.g. a maximum number of participants) may be set for individual modules or courses for educational, capacity or infrastructural reasons. The examination board shall be

responsible for determining and announcing any restrictions as well as for setting the criteria before the start of the application period. The following criteria shall be used to rank students for admission:

- degree programme for which the module/course is being taken
- number of subject semesters completed by the student to date
- past academic achievements

(4) The examination board shall announce the content of the examinations and/or coursework required for each module. As a rule, this content shall be specified in the module descriptions published by the examination board.

(5) The examiners appointed pursuant to Article 5 shall specify the type and exact procedure for each module examination. Students shall be informed of each module examination on the internet and/or noticeboards at the start of the module:

- admission requirements (e.g. specific academic achievements)
- type, scope and duration of the examination(s)
- permitted aids
- procedure for determining the marks or successful passing of the module

(6) As a rule, three dates at least three weeks apart shall be offered for each module examination in an academic year:

- shortly after the last course for the module
- within six (6) months of the first examination date
- within six (6) months of the second examination date

The examination dates shall be announced at the start of the module or no less than three (3) months before each examination at the latest. For oral examinations, time windows shall be announced rather than specific dates.

(7) Module examinations usually take the form of a final examination covering all of the material explored during the module. Examiners can set written or oral examinations or other assessment formats (e.g. presentations or final reports).

(8) A written examination is a written piece of work completed under supervision, which is set and evaluated by the examiner and awarded a mark. Such examinations should last no less than one (1) hour and no more than four (4) hours.

(9) An oral examination is an individual or group examination involving no more than six (6) students. Such examinations should last no less than 15 minutes and no more than 60 minutes per student. The examination is assessed by the appointed examiner(s). The examination contents and results shall be recorded in a protocol. The mark shall be determined by the examiner(s). The opinion of an assessor present during the examination shall be heard before the mark is decided. The student shall be informed of the result of the oral examination immediately after the examination.

(10) Space permitting, oral module examinations may be conducted in the presence of an audience. Admission shall not constitute any entitlement to involvement in the deliberations and announcement of the examination result. Upon written application by the student when registering for the examination, listeners shall be excluded from the examination. The examiners have the right to exclude members of the audience in case of concern about possible disruption to the examination procedure.

(11) An individual presentation completed during a seminar can be deemed an examination achievement and awarded a mark. The responsible member of teaching staff shall inform of the assessment criteria at the start of the seminar. A mark shall be provided within four (4) weeks of the end of the seminar.

(12) A written report is a piece of written work for which a mark is usually awarded. The responsible member of teaching staff shall inform of the assessment criteria. A mark shall be provided within four (4) weeks of submission of the report.

(13) Further examination formats are detailed in the subject-specific appendix to these examination regulations.

(14) If a student can credibly demonstrate by means of a medical certificate that s/he is unable to complete an examination in whole or in part in the prescribed format due to a health impairment, the examination board may allow equivalent examinations to be completed in another format.

(15) In exceptional cases, the examination board may stipulate that a module examination be taken as a cumulative examination comprising several examinations, each of which deals with a specific area of the material covered during the module.

(16) The attendance of courses may be made compulsory in all modules or parts of modules in which regular attendance and active participation are required for achievement of the learning objectives. Active participation can be both an examination requirement (for admission to the examination) and a component of the examination. This is generally the case with internships. The attendance of lectures cannot be made compulsory. For other courses, attendance shall only be compulsory if this is explicitly stipulated in the respective subject-specific appendix. Unless stipulated otherwise in the subject-specific appendix for a course with compulsory attendance, the compulsory attendance requirement shall be deemed fulfilled if a student has attended a course 80% of the time. Lecturers may offer alternative assessment options for excused absences above and beyond this, insofar as the nature of the course permits this. For this purpose, a student shall be considered excused if s/he provides proof of a reason beyond their control for their absence that is also accepted by the lecturer. If the lecturer determines that attendance has not been regular, the module shall be considered not attended and must be repeated.

Article 11

Module examinations: registration and withdrawal, deadlines

(1) Students must register with Student & Examination Administration for module examinations at least one (1) week before the examination date.

(2) Registration for certain module examinations may depend on requirements stipulated in the subject-specific appendix.

(3) Students are able to withdraw from examinations by contacting Student & Examination Administration up to one (1) week before the respective examination date.

(4) Registration and withdrawal procedures for module examinations within a degree programme deviating from paragraphs (1) and (3) may be provided in the subject-specific appendix. In addition, the examination board responsible for the individual module examinations may, in consultation with Student & Examination Administration, stipulate regulations for registration and withdrawal other than those set out in the examination regulations. These regulations shall be announced on the internet and/or noticeboard.

(5) Students who register for an examination but do not meet the admission requirements by the date of the examination shall be deemed not registered.

(6) The examiner must provide Student & Examination Administration with the examination achievements or, where applicable, information on non-fulfilment of the admission requirements for all registered students no later than four (4) weeks after the examination.

Article 12

Module examinations: assessment, grading scale

(1) The following marks shall be used to assess students' performance in examinations:

| | |
|-------------------|--|
| 1 (Very Good): | An excellent performance |
| 2 (Good): | A performance significantly exceeding the average requirements |
| 3 (Satisfactory): | A performance meeting the average requirements |
| 4 (Sufficient): | A performance still meeting the requirements despite shortcomings |
| 5 (Insufficient): | A performance no longer meeting the requirements due to significant shortcomings |

Marks may be increased or decreased by 0.3 for further differentiation, whereby the marks of 0.7, 4.3, 4.7 and 5.3 are inadmissible.

(2) The examiners appointed are responsible for awarding the marks for each module examination.

(3) For modules involving cumulative examinations pursuant to Article 10(15), the marks awarded for the individual examinations pursuant to paragraph (1) shall be averaged. This shall involve weighting the examinations completed for the different courses according to the credits allocated for the courses. The mean value shall be taken as the module mark, whereby this shall be rounded to one decimal place.

Article 13

Module examinations: success and failure

(1) An examination shall be deemed successfully completed and thus passed if at least the mark of "Sufficient" (less than or equal to a mark of 4.0) has been awarded.

(2) A module examination shall be deemed failed if at least a mark of "Insufficient" (5.0) has been awarded.

(3) A cumulative examination for a module shall be deemed passed if at least the mark of "Sufficient" has been awarded for all of the required examinations and all required study credits have been earned. The mark of "Insufficient" (5.0) shall be awarded for the cumulative examination otherwise.

(4) When a module examination is passed, the student shall be awarded all of the credits for the respective module pursuant to the appendix.

Article 14

Module examinations: repeating examinations

(1) Examinations that have already been passed cannot be repeated.

(2) If a student fails a module examination, Student & Examination Administration shall notify the student in writing accordingly and also indicate if and, where applicable, in what format and within which period the examination may be repeated. This notification shall be accompanied by information on the procedure to appeal the decision.

(3) A failed module examination can be repeated a total of two times.

(4) A failed module examination should be repeated on the next possible date (or, in the case of oral examinations, within the time window set). Students are able to withdraw from repeat examinations (see Article 11(3)).

(5) The format of the repeat examination does not need to be the same as the original examination. The examiner shall determine the format for the repeat examination.

(6) The mark awarded for a repeated final module examination shall be taken as the examination mark for the module.

(7) In the case of cumulative module examinations, only the examination components for which the mark of "Insufficient" (5.0) has been awarded may be repeated. The repeated cumulative examination components shall be deemed passed if the conditions detailed in Article 13(3) are met. Pursuant to Article 12(3), the mark for the repeated module examination shall be determined by taking the mark awarded for the repeated examination components into account.

(8) A module examination shall be deemed definitively failed if the mark of "Insufficient" (5.0) has been awarded for all of the repeat attempts permitted.

(9) The regulations for the repetition of module examinations for a degree programme may deviate from paragraphs (3) and (4) and instead be stipulated in the subject-specific appendix.

Article 15

Module examinations: absence, withdrawal, deception and breaches of the regulations

(1) An examination shall be deemed failed if a student misses it without a valid reason or if s/he withdraws from it without a valid reason after the examination has started.

(2) The student must inform the examination board in writing without delay via Student & Examination Administration of the valid reason for her/his failure to attend or withdrawal from an examination, providing credible proof. If the examination board accepts the reason provided, the examination shall be deemed not to have been taken. In case of illness, a medical certificate stating the grounds for the student being unable to take the examination must be submitted to Student & Examination Administration.

(3) If the student attempts to influence her/his examination result through deception or by using unauthorised aids, the examination in question shall be deemed failed. The use of electronic devices (e.g. smartphones or smartwatches) is not permitted in examinations. Taking out or using any unauthorised aids within the sense of Article 18 of the examination regulations is punishable with the awarding of a fail for the examination, unless this has been expressly permitted in advance by the person responsible for the module or the invigilator(s).

(4) If a student disrupts the orderly course of an examination, s/he may be excluded from the examination by the examiner following a warning. In this case, the examination in question shall be deemed failed.

(5) The student may request within four (4) weeks that a decision pursuant to paragraph (3) or (4) be reviewed by the examination board. The student must be informed immediately in writing of any decisions detrimental to her/him reached by the examination board, stating the reasons for this decision and informing on the appeal procedure. The student must be given the opportunity for a fair hearing before such a decision is reached.

Article 16

Master's dissertation: topic assignment

(1) The master's dissertation is the final piece of academic work that must be prepared during the master's degree programme. Students should demonstrate with this work that they are able to complete independent work on an important topic from their field of study within a set period of time and to present it in an appropriate format, taking good scientific practices into account. The master's dissertation may be written in German or English.

(2) The topic shall be assigned and the dissertation supervised by a professor or a habilitated member of the academic staff who works full-time at Heinrich Heine University Düsseldorf in the subject of the

master's degree to which these regulations apply. Exceptions to this stipulation may be made at the discretion of the examining board. The examination board is also responsible for appointing the supervisor.

(3) Students must apply to one of the supervisors approved by the examination board pursuant to paragraph (2) for the assignment of a topic for the master's dissertation. The requirements and deadlines for submission of the topic can be found in the subject-specific appendix.

(4) The proposed supervisor shall assign the topic for the master's dissertation and forward this to the examination board. Provided the requirements are met, the examination board shall appoint a second examiner and communicate the topic of the master's dissertation as well as the names of the examiners to Student & Examination Administration and the student. The preparation period shall begin on the date of this notification.

(5) Provided all requirements pursuant to the subject-specific appendix are met, a student may apply to the examination board for assignment of a topic for the master's dissertation and appointment of a supervisor even without her/his own proposals or the approval of a supervisor. In this case, the examination board shall assign the topic for the master's dissertation and appoint a supervisor within one (1) month.

(6) Student & Examination Administration shall make a record of the topic assigned for the master's dissertation and the start of the preparation period and make this accessible to the student.

(7) A student may only reject the topic assigned for the dissertation once and only within two (2) weeks of the start of the preparation period. In this case, a new topic shall be assigned pursuant to paragraph (4) or (5). Pursuant to Article 15(2), the topic for the dissertation may also be rejected at a later date for a valid reason.

(8) The preparation time, scope and submission deadline for the master's dissertation are stipulated in the subject-specific appendix.

(9) Upon submission of the master's dissertation, the student must confirm that s/he prepared the dissertation independently and did not use any sources and/or aids other than those specified.

Article 17

Master's dissertation: assessment and acceptance

(1) The master's dissertation must be submitted in an electronic format (as a PDF file) by the deadline stipulated, i.e. by the end of the preparation period at the latest. The PDF file must be submitted by uploading it to the student portal of Heinrich Heine University Düsseldorf (studierende.uni-duesseldorf.de). Student & Examination Administration shall record the date of submission. If the master's dissertation is not submitted on time, the mark of "Insufficient" (5.0) shall be awarded. At the request of the first examiner, the student shall submit two bound copies of the dissertation identical to the electronic version to the first examiner without delay.

(2) The master's dissertation shall be assessed by two examiners who are qualified to assign topics pursuant to Article 16(2). At least one of these persons must be a full-time member of the academic staff at Heinrich Heine University Düsseldorf. The first examiner is the supervisor for the master's dissertation. The examiners for the master's dissertation are appointed by the examination board.

(3) The first examiner shall assess the master's dissertation and provide a written justification for her/his assessment. The second examiner may agree with this assessment and the justification or provide a different assessment, which must then also be justified in writing. Marks pursuant to Article 12(1) shall be awarded for the assessments.

(4) The mark awarded for the master's dissertation is the arithmetic mean, rounded to one decimal place, of the marks awarded by the two examiners pursuant to paragraph (3), provided that these are both at least a mark of "Sufficient" (4.0) and do not differ by more than 2.0. If both examiners award the mark of "Insufficient" (5.0), then this mark shall also be awarded for the master's dissertation. In all other cases, the examination board shall appoint another person as an examiner pursuant to paragraph (2), who shall award a third mark for the master's dissertation and justify this in writing. The mark for the master's dissertation is then the arithmetic mean, rounded to one decimal place, of the better two of the three marks, provided that these better marks are both at least a mark of "Sufficient" (4.0). A mark of "Insufficient" (5.0) shall be awarded for the master's dissertation otherwise.

(5) The examination board must inform the student of the mark for her/his master's dissertation no later than six (6) weeks after submission or, if a third examiner is appointed, no later than eight (8) weeks after submission.

(6) A master's dissertation awarded the mark of "Sufficient" (4.0) or better shall be deemed accepted. All of the credits for the master's dissertation shall be awarded when the master's dissertation is deemed accepted (see subject-specific appendix).

(7) If a master's dissertation is deemed not accepted, the examination board must notify the student in writing and advise whether the master's dissertation may be repeated (cf. Article 18). The notification of non-acceptance of the master's dissertation shall be accompanied by information on the appeal procedure.

(8) Article 15 shall apply *mutatis mutandis* to the master's dissertation.

Article 18

Master's dissertation: repeating examinations

(1) A master's dissertation accepted pursuant to Article 17(6) cannot be repeated.

(2) A master's dissertation that has been awarded the mark of "Insufficient" pursuant to Article 17(7) or (8) and thus deemed to have not been accepted may be repeated once. A second repetition is not possible.

(3) The application for admission to repeat the master's dissertation and assignment of a topic (pursuant to Article 16) must be submitted no later than three (3) months of dispatch of the notification informing the student of non-acceptance of her/his master's dissertation.

(4) The topic for the repetition shall be assigned in accordance with Article 16.

Article 19

Additional modules

Students may take module examinations in more modules than prescribed in the subject-specific appendix for her/his degree programme or a closely related degree programme (additional modules) as part of their master's examination. Upon application by the student, the examination achievements for these modules may be included in the transcript of records, but shall not be taken into account in determination of the overall mark. The examination board may prohibit students from taking additional modules, in particular for capacity reasons.

Article 20

Viewing of examination files

(1) An appointment shall be offered for each examination within one (1) month of announcement of the examination results during which the student may view her/his examination paper.

(2) Upon application (to the member of teaching staff), the student shall be given the opportunity to make a copy of a corrected and marked written examination. This includes the questions.

(3) Upon completion of the master's examination, Student & Examination Administration shall, upon application by the student, permit her/him to view to her/his examination records and examination protocols relating to her/him. The student must apply in writing within one (1) month of issue of the transcript of records.

Article 21

Master's examination: assessment

(1) The master's examination shall be deemed passed if all credits have been earned in accordance with the subject-specific appendix.

(2) The overall mark for the master's examination shall be determined from the weighted average of the marks awarded for the module examinations and the mark awarded of the accepted master's dissertation. The weighting of the modules is specified in the subject-specific appendix.

(3) The overall mark for the passed master's examination shall be rounded to one decimal place.

(4) A mark description shall be assigned for a passed master's examination according to the following scale:

| | |
|--------------------------|--------------|
| Overall mark of 1.0–1.5: | Very Good |
| Overall mark of 1.6–2.5: | Good |
| Overall mark of 2.6–3.5: | Satisfactory |
| Overall mark of 3.6–4.0: | Sufficient |

(5) In addition, an ECTS grading scale shall be provided in the diploma supplement that advises on the statistical distribution of the marks awarded within the respective student group. The ECTS grading scale shall take the following format:

| Total number of graduates for the master's degree programme: | | |
|--|----------------|---------------------------|
| Mark interval | Proportion (%) | Cumulative proportion (%) |
| 1.0–1.2 | | |
| 1.3–1.6 | | |
| 1.7–1.9 | | |
| 2.0–2.2 | | |
| 2.3–2.6 | | |
| 2.7–2.9 | | |
| 3.0–3.2 | | |
| 3.3–3.6 | | |
| 3.7–4.0 | | |

The deadline for preparation of the ECTS grading scale is always 31 December of each year. The overall marks of the graduates of the corresponding degree programme who completed their studies in the five previous examination years form the calculation basis. An ECTS grading scale cannot be prepared if less than 50 students have completed the degree programme.

Article 22

Master's examination: failure

(1) The master's examination shall be deemed definitively failed if

- a repeated master's dissertation is not accepted (Article 17), or

- a module examination for which there is no possibility of compensation is failed definitively (Article 14(8)).

(2) The examination board shall notify the student in writing that the master's examination has been failed and inform of the appeal procedure.

Article 23

Master's examination: academic degree, transcript of records, degree certificate

(1) Upon successful completion of the master's examination, the Faculty of Mathematics and Natural Sciences at Heinrich Heine University Düsseldorf shall confer the academic degree of "Master of Science" ("MSc") in the respective subject.

(2) Once the student has passed the master's examination, s/he shall receive a transcript of records indicating her/his overall mark and the module examinations taken, together with the corresponding marks and credits awarded. In addition, the topic of the master's dissertation along with the mark and number of credits awarded for this shall be indicated. The transcript of records shall bear the date of the final examination and the signature of the chairperson of the examination board.

(3) Upon application by the student, the results of additional examination modules taken pursuant to Article 19 shall also be included in the transcript of records.

(4) A diploma supplement in German and English shall accompany the transcript of records that includes the qualification earned with this degree programme as well as the overall mark achieved (Article 21(3)), the mark description (Article 21(4)) and the ECTS grading scale (Article 21(5)).

(5) The student shall at the same time be issued with the master's degree certificate bearing the same date as the transcript of records. This shall certify awarding of the master's degree in accordance with paragraph (1).

(6) The master's degree certificate shall be signed by the Dean of the Faculty of Mathematics and Natural Sciences at Heinrich Heine University Düsseldorf and by the chairperson of the examination board, and bear the faculty seal.

(7) A student who has not yet passed or definitively failed the master's examination may, upon application, be issued with a written record of the credits earned as well as the module examinations taken together with their marks, the examination achievements still needed to pass the master's examination and an indication that the master's examination has not yet been passed or definitively failed.

Article 24

Master's examination: invalidity

(1) If a student engages in deception during an examination and this only comes to light after the transcript of records has been issued, the examination board may retroactively amend the marks awarded for the examinations in which the student engaged in deception and declare these examinations failed, either in whole or in part.

(2) If a student, without intending to deceive, does not actually meet the requirements for admission to an examination and this fact only comes to light after the results of the examination have been announced or the transcript of records has been issued, then this shortcoming shall be deemed remedied by the student successfully passing the examination.

(3) If a student intentionally wrongfully gains admission to an examination, the examination board shall decide on the legal repercussions, taking the Administrative Procedures Act for the federal state of

North Rhine-Westphalia dated 21 December 1976 (GV. NRW, p. 438) in its currently valid version into account.

(4) Prior to a decision by the examination board pursuant to paragraph (1) or (3), the student concerned must be given the opportunity to state her/his case.

(5) The incorrect transcript of records must be withdrawn and a new one issued as appropriate. The master's degree certificate must also be withdrawn together with the incorrect transcript of records.

Article 25

Interim arrangements

(1) These examination regulations shall apply to all students enrolled on the master's degree programmes of the Faculty of Mathematics and Natural Sciences at Heinrich Heine University Düsseldorf listed in the subject-specific appendix after the date on which these examination regulations enter into force.

(2) Students who were enrolled on one of the master's degree programmes listed in the subject-specific appendix prior to the date defined in paragraph (1) shall take the master's examination pursuant to the examination regulations in force at the time of their enrolment, unless they apply for the new examination regulations to be applied. In this case, they must apply to the examination board in writing via Student & Examination Administration for application of the new examination regulations at the latest when they register for the final module examination of the master's examination. This application is irrevocable.

Entry into force

These regulations shall enter into force on the day following their publication in the Official Bulletin of Heinrich Heine University Düsseldorf and apply for all students of the degree programmes detailed herein who have commenced their studies on or after the effective date indicated in the subject-specific appendix.

Issued based on the resolution of the Faculty Council of the Faculty of Mathematics and Natural Sciences at Heinrich Heine University Düsseldorf dated xx.xx.202x.

Düsseldorf, xx.xx.202x

The President
of Heinrich Heine University Düsseldorf

Anja Steinbeck
(Univ.-Prof. Dr. iur.)

**Subject-specific appendix to the examination regulations for the
Master of Science in Biochemistry International
at Heinrich Heine University Düsseldorf**

Regarding Article 3 Studies: programme structure

Regarding (1) Standard study period

The standard study period is two (2) semesters.

Regarding (3) Structure of the degree programme

The following table lists the modules that must be completed as part of the degree programme. The semester foreseen for completion and the credits that shall be awarded are indicated in each case. The marks are weighted according to the credits awarded for the marked module examinations for calculation of the overall mark.

| Module | Semester | Credits | Mark awarded? |
|-----------------------------|----------|----------|---------------|
| Compulsory elective modules | 1 | Min. 8 | Yes |
| Elective modules | 1 | Variable | Yes/No |
| Research internship | 1 | Max. 15 | No |
| Master's module | 2 | 30 | Yes |

(Compulsory) elective modules

Students pursuing a master's degree in biochemistry, biology or chemistry select compulsory elective modules and elective modules from the modules offered by the Faculty of Mathematics and Natural Sciences and the Faculty of Medicine according to the requirements set by the persons responsible for the modules. Insofar as a mark is awarded for the coursework for a module, this mark shall be taken into account in the overall mark, weighted according to the number of credits.

At least one compulsory elective module with at least 8 credits must be selected from one of the two compulsory elective areas for the master's degree in biochemistry.

Research internship

The research internship is a scientific course in a chemistry, biology or molecular medicine field for which a maximum of 15 credits are awarded. The research internship shall be supervised by an examiner from the Faculty of Mathematics and Natural Sciences or the Faculty of Medicine at Heinrich Heine University Düsseldorf, who has convinced herself/himself of the successful completion of the research internship based on a written or oral scientific report.

Master's module

The master's module comprises the master's dissertation (26 credits) and the master's seminar (4 credits). The topic explored in the master's dissertation and the findings shall be presented in the master's seminar and followed by a scientific discussion. The master's dissertation, presentation and report must be written in English.

Regarding Article 8(2) Minimum number of ECTS credits

In deviation from Article 8(2), at least 60 credits must be earned.

Regarding Article 16 Master's dissertation**Regarding (3) Application**

Students can only apply for admission to the master's module and assignment of a topic when they have earned at least 30 credits.

Regarding (9) Preparation time, scope and submission

The master's dissertation must be submitted no later than six (6) months after assignment of the topic. In individual cases, the examination board may extend the preparation time by up to four (4) weeks upon justified application. The application for an extension must be made at least two (2) weeks before the normal deadline.

The topic and assignment must be formulated in such a way that the master's dissertation can be written within a total workload of 780 hours (26 credits).

Regarding Article 17(3) Assessment of the master's dissertation

The mark awarded for the master's dissertation and master's presentation can be combined to determine a joint mark in the case of a joint assessment.

Regarding Article 25(1) Effective date of validity

The effective date of validity pursuant to Article 25(1) is 30 September 2015.