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***This translation is provided solely as a courtesy to international students and applicants. Reliance in law may only be placed upon the official German version of these Regulations.***

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**Inter-faculty regulations:**

As per the decision of the faculty council of the Faculty of Mathematics and Computer Science dated 07.03.2018, the Faculty of Physics dated 07.02.2018, the Faculty of Chemistry dated 07.02.2018, the Faculty for Geosciences and Geography dated 29.01.2018 and the Faculty of Biology and Psychology dated 31.01.2018 and as per an official statement by the Senate dated 16.05.2018, the Presidential Board of Georg-August-Universität Göttingen on 22.05.2018 approved the doctoral degree regulations of the mathematics-natural sciences graduate school of the Georg-August-Universität Göttingen – Georg-August University School of Science (GAUSS) – (§ 44 section 1 sentence 2 NHG in the version published on 26.02.2007 (Nds. GVBl. p. 69), last amended by Article 4 of the Act dated 15.06.2017 (Nds. GVBl. S. 172); §§ 9 section 3 sentence 1, 41 section 2 sentence 2, 37 section 1 sentence 3 No. 5 b) NHG).

**Doctoral degree regulations  
of the mathematics and natural sciences graduate school  
of the Georg-August-Universität Göttingen  
– Georg-August University School of Science (GAUSS) –  
RerNat-O**

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## **I. General**

### **§ 1 Purpose of the doctoral degree regulations; scope of validity**

(1) The doctoral degree regulations for the mathematics and natural sciences graduate school – Georg-August-University School of Science (GAUSS) – (RerNat-O) regulates the implementation of all doctoral processes of relevance to mathematics and natural sciences, including the award and the withdrawal of doctorates at Georg-August-Universität Göttingen.

(2) <sup>1</sup>The provisions of this regulation are binding for the structured doctoral degree programmes or doctoral studies (hereafter known jointly as programmes) belonging to the mathematics and natural sciences graduate school – Georg-August-University School of Science (GAUSS) – (hereafter: graduate school). <sup>2</sup>The specialist regulations belonging to a subject in a programme shall apply additionally. They are defined in the appendixes or, alternatively, in the supplementary regulations applicable to the programmes (in the following: programme regulations). <sup>3</sup>Contrary or deviating specialist regulations shall be void unless this regulation specifically permits deviations.

(3) Furthermore, RerNat-O provides for the award of the academic title of honorary doctor of natural sciences (Doctor rerum naturalium honoris causa) at Georg-August-Universität Göttingen.

(4) <sup>1</sup>This regulation controls the withdrawal of doctorates of a doctor of (natural) science" (Dr. rer. nat.) and "Doctor of Philosophy" (Ph.D.), as well as the honorary degree and the academic title of a doctor of (natural) science, which were awarded in accordance with this regulation or before this regulation came into force to the faculties involved at GAUSS. <sup>2</sup>Sentence 1 is not applicable for those doctorates which were awarded by the Faculty of Agricultural Sciences or by the Faculty of Forest Sciences and Forest Ecology.

## **§ 2 University degree**

(1) The Georg-August-Universität Göttingen, as a result of proper doctoral studies in accordance with the provisions of this regulation, awards the degree of doctor of (natural) science (Dr. rer. nat.).

(2) Upon the application of the doctoral candidate, the title of 'Doctor of Philosophy' (Ph.D.) can be awarded in place of the degree of doctor of natural science (Dr. rer. nat.). In these cases, the doctoral certificate and, if applicable, also the doctoral examination certificate shall carry the suffix 'Division of Mathematics and Natural Sciences' to denote the mathematics and natural sciences focus.

(3) The honorary degree of doctor of (natural) science (Dr. rer. nat. h. c.) can also be awarded following extraordinary doctoral studies.

## **§ 3 Responsibilities**

(1) The Management Board of the graduate school is responsible for all matters pertaining to the graduate school, provided that this regulation, the regulation of the graduate school (hereafter: GAUSS-O) or the specialist provisions applicable to a programme do not designate a different responsibility.

(2) <sup>1</sup>Insofar as a faculty shall be responsible for the management of a programme that is not among the mathematics and natural sciences faculties at the Georg-August-Universität Göttingen, the Management Board of the graduate school shall act in place of the Dean's Office or the faculty council. <sup>2</sup>The executive management (spokesperson) of the graduate school shall act in place of the

dean. <sup>3</sup>Insofar as several programmes have merged to form a separate academic institution, the Management Board of said institution shall act in place of the Dean's Office or the faculty council in the event that the examination committee shall not be defined as the responsible entity in accordance with the specialist provisions of the programme. The executive management (spokesperson) of the institution shall act in place of the dean. <sup>4</sup>Insofar as the examination committee shall be responsible in accordance with this regulation, but a body of this nature is not established as specified under the provisions of the GAUSS-O, the Dean's Office shall act in place of the examination committee and the dean shall act in place of the examination committee coordinator. The specialist regulations applicable to a programme may define provisions other than this.

(3) The examination committee in each programme is responsible for safeguarding the implementation of the examinations and for ensuring adherence to the provisions of this regulation and the programme regulations. This must be confirmed by the Management Board of the graduate school in the event of inter-faculty programmes and in programmes maintained by associated faculties.

(4) <sup>1</sup>The faculty council of the faculty offering the programme is responsible for introducing the specialist provisions of a programme. In the event that several faculties offer the programme together, the faculty council under whose auspices the programme is offered shall be responsible following confirmation by the faculty councils of the other faculties involved. <sup>2</sup>The Management Board of the graduate school must be informed, at the latest, before publication of the specialist provisions. <sup>3</sup>The specialist provisions of a programme may contain terms pertaining to failures and also supplementary provisions, in particular, additional qualifications for entry and the nature and scope of the examination prerequisites (study programme incl. teaching obligations).

## **II. As concerns procedure for doctoral studies**

### **§ 4 Qualifications for entry to doctoral programmes**

#### **Acceptance in a programme**

(1) <sup>1</sup>The precondition for the admission of an applicant as a doctoral candidate in a doctoral programme is the successful completion of a consecutive master degree programme in a relevant field of mathematics and natural sciences with a standard course length of at least one year and a total study time of at least four years, the successful completion of a degree course relevant to mathematics and natural sciences with a standard course length of at least eight semesters, or proof

of an equivalent degree at a German university or at a university in a country belonging to the Bologna signatory states. <sup>2</sup>Final examinations, which have been passed in a country outside the Bologna signatory states, require the determination of equivalence with the qualifications according to sentence 1, taking into account the proposals of the Central Office for Foreign Education (ZAB) at the secretarial office of the Standing Conference of the Ministers of Education and Cultural Affairs of the Federal States in the Federal Republic of Germany (KMK) for the recognition and evaluation of foreign educational certificates, which are located at the URL <http://anabin.kmk.org>. <sup>3</sup>The grades of the foreign degree certificates shall be converted to the German grading system. <sup>4</sup>In the event that sentences 2 and 3 should apply, the thesis of the course of study providing the qualification for entry must satisfy the scientific standards of the mathematics and natural sciences faculties at the University of Göttingen. <sup>5</sup>The examination board shall be responsible for the assessment of degree equivalence as specified in sentence 1.

(2) <sup>1</sup>Unlike in section 1, candidates shall also be qualified for entry insofar as they are enrolled in a master degree course in mathematics or natural sciences, have successfully completed therein a more than insubstantial amount of examination and study components and whose bachelor degree and also the examination prerequisites in the master degree course to date are outstanding. This shall be the case, in particular, if a grade average is demonstrated that is among the best ten percent of the accumulated grade average of any year in the respective degree programme. <sup>2</sup>Approval from the members of the faculty council holding doctorates in the faculty in which enrolment shall take place is required for acceptance to the programme. This shall apply accordingly to approval by the responsible examination committee in cases of an institution in accordance with § 3 section 2 sentence 3. <sup>3</sup>As concerns the specialist provisions of a programme that requires particular quality assurance procedures, the Management Board of the graduate school may specify a different procedure than that specified in sentences 1 and 2.

(3) <sup>1</sup>The members of the faculty council holding doctorates in the faculty in which enrolment shall take place may approve the equivalence of a degree in other degree programmes, provided that the applicant is able to prove prior education in a mathematics or natural sciences degree course deemed equivalent according to scientific standards. <sup>2</sup>The responsible examination committee shall decide on this recognition in the event of an institution as specified under § 3 section 2 sentence 3 or in the event that the faculty is not among the founding faculties at the graduate school.

(4) <sup>1</sup>Conditional entry can be granted in the event that individual qualifications for entry are not satisfied. <sup>2</sup>In this case, the as yet incomplete qualifications for entry in a scope of no more than 15 C must be completed retroactively within a period of two semesters following enrolment.

(5) Additional entrance requirement is at least one written declaration by an authorised examiner in the programme (first supervisor) that he or she will supervise the applicant in the case of admission to the programme as a doctoral candidate and can guarantee proper support (confirmation of supervision).

(6) Furthermore, eligibility for admission shall exist only if

- a) no agent was appointed for locating doctoral opportunities subject to a fee,
- b) in the context of the doctoral process and its preparation, neither fees have been paid, charged credits obtained nor services that are contrary to the meaning and purpose of an examination procedure have been claimed free-of-charge,
- c) the candidate remains eligible to the examination,
- d) there are no reasons that may give due cause for withdrawal of the doctoral degree,

and this is affirmed by the applicant in accordance with appendix 1.

(7) <sup>1</sup>Successful application for admission to a programme is confirmed in an online form provided by the graduate school, which, after printing, serves as a template for enrolment and as a supervision agreement, by a signature of the programme head as well as by the signature of the Dean or the Dean of Studies at the accepting faculty. <sup>2</sup>In the event that several programmes are merged to form one institution as specified under § 3 section 2 sentence 3, the provisions specified under appendix 11 shall be applied in place of sentence 1. <sup>3</sup>At the same time, the applicant will be given an overview of the performances to be provided (performance record), which is to be filled out over the course of the doctoral studies and must be submitted upon registration to the doctoral examination. <sup>4</sup>In the event that the programme is inter-faculty, the faculty at which enrolment takes place shall be defined as follows:

<sup>5</sup>The thesis advisory committee designated in each case shall rule unanimously on which faculty the doctoral candidate should be assigned to following a hearing with said doctoral candidate and taking into consideration the topical focus of the dissertation project. <sup>6</sup>Enrolment shall then take place at this faculty following approval by the member of the Dean's Office responsible in each case; the respective Dean's Office shall define responsibility therein. <sup>7</sup>In the event that a unanimous ruling should prove impossible or in the event that the faculty in question appeals the decision in a reasoned form, assignment shall take place in line with the faculty affiliation of the first supervisor and

authorised examiner.<sup>8</sup>In case of an institution as specified under § 3 section 2 sentence 3, enrolment shall be possible only at a mathematics and natural sciences faculty, unlike described in sentence 6. Unlike described in sentence 7, the Management Board of the institution in the sense of § 3 section 2 sentence 3 shall define assignment in the event that a unanimous ruling is not possible.

(8) Enrolment by, and acceptance of, a doctoral candidate in a programme and at a faculty must be kept on file in the examination management system of the programme together with the starting time of the doctoral studies and any supplementary provisions, if applicable. This shall also specify the members of the thesis advisory committee and shall be recorded in the electronic registry of the graduate school.

(9) <sup>1</sup>Applicants address their applications for acceptance in a programme to the responsible examination committee at least in text form. <sup>2</sup>Degree certificates as per sections 1 and 3, if required proof as per section 2, a confirmation of supervision as per section 5, and the declaration as per section 6, together with appendix 1, must be enclosed with the application. <sup>3</sup>The examination committee shall decide on the acceptance or rejection of the application. <sup>4</sup>The specialist provisions of each programme may define other details for the applications procedure and additional qualifications for entry into a programme.

(10) An entry regulation shall define in greater detail entry to a doctoral degree programme.

## **§ 5 Thesis Advisory Committee**

(1) <sup>1</sup>For each doctoral process, the relevant examination committee appoints a thesis advisory committee (TAC) at the latest two months after admission to the graduate school after consultation with the doctoral candidate. The committee comprises at least three members, including at least two authorised examiners, including the first supervisor holding an examination accreditation, as well as another person holding at least a doctorate. At least one of the members, including at least one of the members authorised to examine, may not be in any discretionary power relationship to either of the other members. <sup>2</sup>Two of the members authorised to examine are normally appointed as reviewers of the dissertation.

(2) <sup>1</sup>The thesis advisory committee supports and promotes the doctoral candidate in accordance with the provisions of a supervision agreement, from which a copy must be sent at the latest three



months after the start of the doctoral project to the office of the graduate school and must be kept there until the definitive completion of the doctoral process. <sup>2</sup>The doctoral candidate must report to the thesis advisory committee regularly, however, at least once a year, in writing and in the form of a timely meeting, which must be attended by at least two members of the thesis advisory committee who are not in a discretionary power relationship with each other, providing details about the status of the doctoral project and the examination prerequisites rendered so far. <sup>3</sup>The first report shall be submitted six months following enrolment. <sup>4</sup>The members of the thesis advisory committee always confirm by their signature on the performance record, which was handed over to the doctoral candidate at the time of admission to the graduate school, that the report has been made at least annually and that the meeting has taken place. <sup>5</sup>The doctoral candidate shall, in each case, organise the meetings of the thesis advisory committee.

(3) <sup>1</sup>Should there be an important reason, the examination committee responsible may appoint other suitable persons as supervisors or convene a new thesis advisory committee, subject to application by a member of the thesis advisory committee or the doctoral candidate. <sup>2</sup>An important reason shall be deemed to be in particular any breakdown in the relationship of trust, unless the doctoral candidate shall be responsible for this. <sup>3</sup>The programme head (spokesperson) or a member of the management board of the graduate school shall mediate in the event of conflicts between the supervisors and the doctoral candidate.

## **§ 6 Scope and nature of the doctoral studies; deception; termination for an important reason**

(1) <sup>1</sup>The doctoral candidates are required to complete their research over the course of their doctoral studies. <sup>2</sup>The preliminary topic and work schedule for the research must be agreed between the thesis advisory committee and the doctoral candidate before the start of the doctoral project. <sup>3</sup>Further, doctoral candidates must successfully complete examination prerequisites in a scope totalling at least 20 credits (hereafter C) in accordance with the programme specific regulations. <sup>4</sup>No more than 30 C may be demanded.

(2) <sup>1</sup>As part of their doctoral studies, the doctoral candidate must prove participation in at least one event on good scientific practice usually at the latest within one year after admission to the doctoral programme. <sup>2</sup> The programme specific regulations may contain more detailed regulations.

(3) In addition to the examination prerequisites which the doctoral students are required to complete, the doctoral students may also complete additional components of their choice.

(4) In the event that achievements as specified under section 1 sentence 3 are not provided for reasons for which the doctoral student must bear no responsibility, or if the provision of said achievements shall be associated with undue severity, the examination committee can waive the demand to provide proof of individual achievements after application by the doctoral student no later than at admission to the doctoral examination; a different responsibility may be defined in the programme specific regulations.

(5) <sup>1</sup>Examination prerequisites completed on the basis of an agreement between the University of Göttingen, the doctoral candidate and a different university shall be recognised without any assessment of equivalence. <sup>2</sup>Otherwise, examination prerequisites rendered at a university or outside a university are recognised, so long as no material difference to a performance required within the programme is determined. <sup>3</sup>The doctoral candidate is responsible for submission of the documents required for this recognition. <sup>4</sup>Examination prerequisites shall not be recognised in the event that they were completed in the degree course or in the consecutive degree courses whose completion provided the basis for entry into the doctoral degree programme and which were necessary in order to complete said degree programme or degree programmes. <sup>5</sup>The university is required to provide reasoning for any decision not to recognise examination prerequisites (reversal of the burden of proof as specified in the Lisbon Convention). <sup>6</sup>The examination committee decides on the transfer of credits.

(6) <sup>1</sup>In general, the doctoral studies last for three years. <sup>2</sup>The processing time can be extended twice by six months by the thesis advisory committee on the basis of an application to be justified in writing. <sup>3</sup>In justified exceptional cases, the processing time can be extended beyond that. The examination committee of the doctoral students' programme decides upon the extension on the basis of an application to be justified in writing, in accordance with the opinion of the thesis advisory committee. <sup>4</sup>Every approved extension must be communicated to the Dean's Office of the faculty and the office of the graduate school and must be kept on record. <sup>5</sup>Sentences 2 and 3 can be deviated from in the programme specific regulations.

(7) <sup>1</sup>Should the doctoral candidate undertake by means of deception or the use of unauthorised aids or by subsequent exertion of influence on a person involved in the examination to distort the results of an examination to his or her own benefit or to the benefit of a third party (hereafter in general:

deception), the examination prerequisites in question shall be assessed as 'failed'. <sup>2</sup>From the consequences mentioned in line 1 it can also be recognised whether the doctoral candidate carries any prohibited aids with himself or herself. <sup>3</sup>The examiner or adjudicator in question can exclude any doctoral candidate that grossly violates this regulation from a continuation of the examination prerequisites; in this case, the examination prerequisites in question shall be assessed as 'failed'. <sup>4</sup>In the event of serious cases, the examination committee is entitled to exclude the doctoral candidate from the completion of any further examination or degree prerequisites. <sup>5</sup>A decision may be made to refrain from imposing sanctions in less serious cases. <sup>6</sup>If there is suspicion of the use of prohibited aids, the doctoral candidate is obligated to assist in the clarification and return the aids; should this be refusal, the relevant study or examination prerequisites are assessed as 'failed'. <sup>7</sup>Before a decision is made under sentence 4, the doctoral candidate shall be heard.

(8) <sup>1</sup>The doctoral studies end with

- a) revocation or withdrawal of admission, acceptance of the doctoral candidate or admission to the programme, or
- b) cancellation or lapse of the status as doctoral candidate.

<sup>2</sup>Withdrawal, revocation or termination may take place for an important reason. <sup>3</sup>In general, an important reason is deemed prevalent if the doctoral student

- a) despite sufficient support, continuously proves to be unsuitable, in particular, if an extension of the processing time is not granted in accordance with section 5,
- b) fails repeatedly or to a significant extent in fulfilling the tasks with which he or she has been charged, in particular, if he or she repeatedly and despite caution violates his or her reporting duties,
- c) has breached the regulation to ensure good scientific practice,
- d) his or her acceptance as a doctoral candidate in the programme was acquired by means of deception as concerns prerequisites of the qualifications for entry, or
- e) if the relationship of trust with the doctoral student is finally and irretrievably breached for reasons for which the doctoral student must bear responsibility,

<sup>4</sup>The programme specific regulations may define other grounds for termination. <sup>5</sup>The doctoral studies further end by declaration of the doctoral candidate with validity of the exmatriculation.

## **§ 7 Doctoral examination**

(1) The degrees to be awarded under § 2 sections 1 and 2 are awarded on the basis of a successful doctoral examination.

(2) The doctoral examination includes a scientific thesis (dissertation) and an oral examination (disputation).

(3) The examination board shall suspend the doctoral process in the event that it becomes aware that proceedings against the doctoral candidate concerning a breach of good scientific practice or a judicial inquiry or criminal proceedings in connection with the doctoral studies are pending.

(4) <sup>1</sup>Should the doctoral candidate influence the results of the examination by means of deceit, in particular through the use of unauthorised aids in producing the dissertation or by retroactive exertion of influence on a person involved in the examination, the examination components in question shall be assessed as 'failed'. <sup>2</sup>Should the doctoral candidate grossly violate the regulations, the examination board may decide on termination of the oral examination; in this case the oral examination shall be assessed as 'failed'. <sup>3</sup>The examination committee is entitled, in serious cases, to exclude the doctoral candidate from the completion of any further examination components. Any breach of § 8 section 1 sentence 1 letter b) in particular shall be deemed a serious breach. <sup>4</sup>It might be possible to refrain from imposing sanctions in less serious cases. <sup>5</sup>Before a decision under sentence 3, the doctoral candidate should be heard.

### **III. Examination prerequisites, requirements and procedure**

#### **§ 8 Prerequisites for admission to the doctoral examination**

(1) <sup>1</sup>Admission to the doctoral examination must be refused in the event the doctoral candidate

- a) has applied at the same time to another faculty or university or has applied for admission, provided that this is not permitted as per section VI of this regulations;
- b) has not prepared parts of the dissertation by himself or herself, but has sought the help of a third person in a manner violating examination regulations and scientific integrity, which includes strict compliance with the quotation requirement, so that inclusion of external ideas in the dissertation is clearly marked, as well as the safeguarding of strict integrity with regard to contributions of other persons;

- c) uses the services of a paid agent for the purpose of obtaining information on doctoral opportunities;
- d) in connection with the doctoral process or its preparation, pays fees or renders paid performance or uses services, which contradict the meaning and purpose of an examination procedure; or
- e) satisfies prerequisites, because of which the doctoral examination could be declared invalid or the doctorate could be revoked.

<sup>2</sup>Admission to the doctoral examination can, at any time, be withdrawn or revoked in the event of cases covered under sentence 1 letters a) and c) to e). <sup>3</sup>In the event of sentences 1 letters b) to e), a new application for admission to the doctoral examination is not possible.

- (2) Admission to the doctoral examination has the minimum prerequisites that the doctoral candidate
- a) is enrolled as doctoral student at Georg-August-Universität Göttingen in accordance with the specifications defined in the statutory provisions since being accepted as PhD candidate,
  - b) has properly fulfilled the required education programme in accordance with the programme specific regulations and
  - c) has independently completed a written, scientific thesis (dissertation) and ensures in writing in accordance with appendix 1 that
    - ca) he or she has completed the dissertation independently and without unauthorised aids and
    - cb) has otherwise not applied for a corresponding doctorate and has therefore presented the submitted dissertation or parts thereof, if this was not permitted as per section VI.

(3) The programme specific regulations may define other preconditions for admission to the doctoral examination.

## **§ 9 Application for admission to the doctoral examination**

(1) Upon completion of the dissertation, a written application must be filed with the responsible examination committee for admission to the doctoral examination.

(2) The following should be enclosed with the application:

- a) at least three copies of the scientific thesis (dissertation) in a written form, one copy in a digital form in the format of a word processing programme generally deemed standard or as an unprotected (editable) PDF document and any published manuscripts by the applicant

connected to the dissertation. The doctoral candidate must bindingly confirm that the contents of the digital version are identical with the written version;

- b) specification of the academic title to be awarded in accordance with § 2;
- c) a curriculum vitae, which is written in German or English and also includes information on the scientific progress of the doctoral candidate;
- d) the filled and signed performance record in accordance with the requirements of the relevant programme,
- e) designation of the reviewers proposed by the doctoral candidate and the other members of the examination board as defined in § 11 section 1 to 3 and a proposed date for the oral examination as discussed with said persons. The examination committee shall decide upon the date for the oral examination in the event that proposing a date is not possible;
- f) the proof of proper enrolment.

(3) <sup>1</sup>After submission of the application and review of the formal prerequisites, the examination committee decides on the permission to take the doctoral examination. <sup>2</sup>Once all prerequisites have been satisfied, it shall thereupon open the examination process and shall appoint the examination board and its chairperson. <sup>3</sup>With the admission to the doctoral examination, the doctoral candidate acquires the rightful claim to a review of his or her dissertation.

(4) The applicant receives a written notice regarding the admission, and in the case of rejection also information on rights of legal recourse.

(5) <sup>1</sup>Withdrawal of a doctoral application is permitted for as long as the doctoral process has not been terminated by notice of rejection on the dissertation or the oral examination has commenced. <sup>2</sup>An attempt to take the doctoral examination does not count as 'taken' in case of a legal withdrawal.

## **§ 10 Thesis**

(1) <sup>1</sup>The focus of the dissertation must be in field of mathematics or natural science. <sup>2</sup>It must satisfy strict scientific standards, represent progress in science, and must be an independent achievement on the part of the doctoral candidate. <sup>3</sup>It must be a scientifically noteworthy, written work and must demonstrate that the doctoral student is equipped to solve scientific questions in an independent and methodically faultless manner and can present the results thereof in the form deemed standard

within the subject. <sup>4</sup>The doctoral candidate may include already published results in the dissertation; the source must be mentioned in the usual scientific manner of the field.

(2) The dissertation can be structured in monographic form with a detailed classification of the topic in the scientific context and a sufficient discussion.

(3) <sup>1</sup>Furthermore, a scientific manuscript or several scientific manuscripts, for which the doctoral candidate is at least co-author, can form parts of a dissertation. <sup>2</sup>In this case, a summarised presentation of the topics worked on, together with a detailed discussion part and a clear presentation of the candidate's own contributions to the manuscripts, must be presented. <sup>3</sup>Furthermore, one of the supervisors must confirm that these manuscripts make up the significant part of the scientific work. <sup>4</sup>This can be deviated from in the programme specific regulations.

(4) The dissertation may not have been or be used for any other doctoral or comparable process at a university in Germany or abroad, unless otherwise specified in these regulations.

(5) <sup>1</sup>The dissertation may be drafted in German or English. <sup>2</sup>A title page according to the template provided in appendix 2 and a brief curriculum vitae detailing the scientific education must be included.

(6) <sup>1</sup>A dissertation should be completed mainly in connection with a scientific institution associated with the responsible programme. <sup>2</sup>Any exceptions to this require prior consent from the responsible examination committee.

(7) The programme specific regulations may contain more detailed regulations.

## **§ 11 Examination board**

(1) <sup>1</sup>For each doctoral examination, the relevant examination committee appoints an examination board consisting of at least six members, including at least two reviewers accredited for examination and usually the members of the thesis advisory committee accredited for examination, as well as their chairperson. <sup>2</sup>Reviewers should not be in a dependent relationship with each other. <sup>3</sup>At least one reviewer must be a member of the thesis advisory committee; at least one reviewer must be a member of the professorial group of the Georg-August-Universität Göttingen.

(2) <sup>1</sup>The examination board must be comprised in a way that the reviewers and at least one other member are accredited for examination in the programme in which the doctoral studies are completed. <sup>2</sup>The other members of the examination board must at least be accredited for examination in another programme in the graduate school. Individual examination accreditation as specified under § 12 section 3 shall, in this respect, also be considered as an examination accreditation.

(3) Upon convening the examination board, it must be ensured that the research areas dealt with in the dissertation are represented.

(4) <sup>1</sup>Retired professors should not act as a reviewer or examiner in the doctoral process three years after the end of their tenure. <sup>2</sup>The faculty council at the faculty in which the doctoral candidate is enrolled shall rule on exceptions in this respect, decided by a simple majority of the members. <sup>3</sup>In the event of an institution as defined under § 3 section 2 sentence 3, the examination committee responsible in each case shall decide by majority vote of its members holding a doctorate. <sup>4</sup>Exceptions should be granted, in particular, if the professor continues to provide research or educational performance.

(5) If, in the course of the examination procedure, other reviewers are appointed, they shall become members of the examination commission as per the provisions of this regulation.

(6) Abstentions are not permitted in rulings by the examination board.

## **§ 12 Examination accreditation**

(1) All scientists holding a doctorate can be appointed as accredited examiners of a programme in the graduate school, provided they

1. are involved in duties relating to research or research and teaching at a university or a non-university research institution;
2. either hold the right to be an examiner in doctoral examinations in a mathematics and natural sciences research area or have, in another way, proven their suitability as accredited examiners. In particular, this proof shall require that the following has been completed in a field of mathematics and natural sciences
  - a) a habilitation or appointments procedure for professorship was successfully completed,



- b) a procedure equivalent to a habilitation or appointments procedure for professorship was completed or
  - c) at least three finished doctoral studies have been supervised independently and third-party funding has been acquired;
- and
3. proven scientific relevance to the main focus of the programme.

(2) The responsibility for appointments as accredited examiners in accordance with section 1 and for the revocation of the examination accreditation is incumbent upon

- a) the faculty council of the mathematics and natural sciences faculty supporting the respective programme in case of the doctoral programmes mathematics, geosciences/geography, biology and the doctoral degree programmes chemistry, mathematical sciences, geoscience, geography and physics,
- b) for all remaining programmes, the management board of the graduate school upon the recommendation of the programme head (spokesperson).

(3) <sup>1</sup>Deviating from sections 1 and 2, examination accreditation restricted to a certain doctoral process (individual examination accreditation) can be granted to a person holding a doctorate, provided their participation in the doctoral examination is necessary or advantageous. <sup>2</sup>The Management Board of the graduate school shall be responsible in this respect.

(4) Authorised examiners, who have left the institutions involved in GAUSS, lose their examination accreditation after three years, unless the competent authority as per section 2 reconfirms it.

### **§ 13 Assessment and acceptance or rejection of the dissertation**

(1) Each reviewer should create and recommend an autonomous and independent opinion about the dissertation within four weeks after the dissertation is submitted:

- a) to accept the dissertation,
- b) to reject the dissertation or
- c) to return the dissertation for revision, if he or she would recommend a rejection otherwise.

(2) <sup>1</sup>For revision, an appropriate deadline (final deadline) is to be set by the examination board. <sup>2</sup>If a dissertation returned for revision is not resubmitted within this deadline, it is regarded as rejected.

<sup>3</sup>Provided that the dissertation is submitted within the specified period, the procedure thereafter shall be determined on the basis of the sections hereafter.

(3) The university is entitled to use suitable software, in particular plagiarism detection software, to determine whether the dissertation submitted was completed independently and without unauthorised assistance and in particular to determine whether any text passages or other sources were incorporated without annotation.

(4) If acceptance of the dissertation is recommended, the review as described under section 1 should also propose a grade

- a) summa cum laude (excellent)
- b) magna cum laude (very good)
- c) cum laude (good)
- d) rite (satisfactory).

(5) <sup>1</sup>An additional reviewer must be appointed, if

- a) the recommendations of the reviewers regarding acceptance or rejection of the dissertation differ,
- b) the examination board considers an objection as specified under section 7 to be justified, or
- c) the examination board considers the additional appointment necessary in the event of differences in the grades proposed by the reviewers.

<sup>2</sup>The examination board is entitled to propose suitable persons to the examination committee. <sup>3</sup>Only after decision about the acceptance of the dissertation, a reviewer as per sentence 1 letters a) and b) becomes a member of the examination board, a reviewer as per sentence 1 letter c), with his or her appointment.

(6) <sup>1</sup>The precondition for awarding the distinction 'summa cum laude' is the submission of three reviews on the dissertation proposing said award, among them at least one review by an external scientist (external review). <sup>2</sup>An external opinion/review must be obtained, if so far only two reviewers have been appointed or an external review has still not been obtained, but only if the reviewers appointed so far unanimously recommend the distinction "summa cum laude". <sup>3</sup>Upon the recommendation of the thesis advisory committee, the external review can be obtained simultaneously to the reviews to be made in the examination board, if it seems probable that the distinction "summa cum laude" will be awarded. <sup>4</sup>The external scientist must hold qualifications as specified under § 12 section 1 and must have gained distinction through his or her own research

output in the research area of the dissertation. In the event that he or she is an accredited examiner, he or she does not have to be appointed a member of the examination board.<sup>5</sup>The examination committee is responsible for requesting the external review and approving the external scientist. The examination board can propose suitable persons to the examination committee.

(7) <sup>1</sup>Members of the doctoral programme with examination accreditation will be given the right to inspect the dissertation over the course of at least a one-week period, most commonly during the review period. <sup>2</sup>They are entitled to lodge an appeal with the examination board against the dissertation, which must be reasoned in writing.

(8) <sup>1</sup>The dissertation shall be deemed accepted once all reviewers have recommended acceptance of the dissertation and there are no objections pending as specified under section 7. <sup>2</sup>The dissertation shall be deemed rejected and the doctoral examination failed in the event that all reviewers recommend rejection of the dissertation. <sup>3</sup>Apart from that, on the basis of all existing reviews, and in the presence of the spokesperson of the examination committee, the examination board shall decide on the acceptance, need for revision, or rejection of the dissertation and failure in the doctoral examination. <sup>4</sup>The decision must be made within three months.

(9) <sup>1</sup>In the case of rejection of dissertation, reapplication for permission to take the doctoral examination is possible only once and not before the end of a year. <sup>2</sup>In this case, a new or considerably improved dissertation should be submitted. <sup>3</sup>In doing this, the unsuccessful attempt should be notified. <sup>4</sup>If this dissertation is also rejected, then the doctoral examination is definitively failed.

(10) <sup>1</sup>The decision is made at least in writing by the spokesperson of the examination committee. <sup>2</sup>Acceptance of the dissertation shall also be considered equivalent to admission to the oral examination. <sup>3</sup>In the event that the dissertation should be rejected on the first occasion, reference is made to the regulations concerning repetitions contained in section 9; notification shall be provided with instructions on the rights of legal recourse in the event of a final rejection.

(11) The programme specific regulations may contain more detailed regulations.

## **§ 14 Reference copy**

At least one copy of the dissertation submitted shall remain in the files with all reviews within the examination management system of the corresponding programme.

## **§ 15 Date of the oral examination**

<sup>1</sup>The spokesperson of the responsible examination committee shall set the date for the oral examination following the final decision on acceptance of the dissertation. This shall most commonly consider the proposal in accordance with § 9 section 2 letter e). The candidate shall be informed thereof with at least one week's notice. <sup>2</sup>The oral examination should normally take place not later than 6 weeks, in the case of § 13 section 5 sentence 1 letter c), normally not later than 10 weeks after the admission to the doctoral examination.

## **§ 16 Oral examination**

(1) <sup>1</sup>The oral exam takes place as a colloquium (oral defense or disputation) in German or in English. <sup>2</sup>It is conducted by the chairperson of the examination board. <sup>3</sup>At least two-thirds of the members of the examination board must be present, including at least two reviewers.

(2) <sup>1</sup>The oral examination can, especially with regard to the involvement of external members of the examination board, be conducted wholly or partly with the support by a system of picture and sound transmission, so long as the candidate consents to this in writing. <sup>2</sup>Members of the examination board involved accordingly shall be considered as present within the sense of section 1 sentence 3. <sup>3</sup>If more than one member of the examination board is involved with support by a system of picture and sound transmission, consent of the examination committee is required.

(3) The candidate and the members of the examination board are invited to the oral defence by the spokesperson of the responsible examination board, including the specifications of the date and place at least in text form.

(4) <sup>1</sup>The oral examination is generally open to the university public. <sup>2</sup>Invitations are issued by bulletin and electronically, for example via the internet. <sup>3</sup>Deviating from sentences 1 and 2, the candidate

may, in the event of an important reason, apply for a ruling that the university public be entirely or partially excluded. <sup>4</sup>Ruling thereon is in the responsibility of the examinations board. <sup>5</sup>Deviating from sentence 1, guests of the candidate can also attend the oral examination. This can be deviated from in the program specific regulations.

(4) The candidate should prove in the oral examination that he or she is familiar with the state of current research in the research area of the dissertation and that the candidate has fundamental specialised knowledge even beyond the specific research area contained in the dissertation and that the candidate is equipped to independently consider scientific problems and to present and defend them in argument.

(5) <sup>1</sup>During the oral examination, the candidate should, by means of a presentation lasting no more than 30 minutes, explain the objectives and results of his or her dissertation as a demonstration of the broader scientific context and subsequently answer relevant questions at the end of the presentation. <sup>2</sup>Initially, only members of the examination board shall be entitled to pose questions. <sup>3</sup>The chairperson of the examination board shall ensure that, afterwards, the remaining members of the audience have sufficient and appropriate opportunity to pose questions. <sup>4</sup>The candidate should furthermore face questions that refer to matters related to the scientific field in which the dissertation is produced and also a scope of themes and methodical questions referring to the research area as a whole and adjacent research areas in general.

(6) The oral defence shall last at least 60 and no more than 90 minutes.

(7) The programme specific regulations may contain more detailed regulations.

## IV. Assessment

### § 17 Grades and distinction

(1) <sup>1</sup>The examination board shall decide by a majority of three-quarters of members present whether the oral examination has been passed. This decision is to be made non-publicly immediately after the oral examination. <sup>2</sup>If the oral examination is passed, the examination board shall, considering received reviews of the dissertation and the performance in the oral examination, specify an overall grade for the doctoral examination. <sup>3</sup>Only grades specified in § 13 section 4 may be awarded; the examination board shall rule on the award of the grade 'summa cum laude' as specified under section 2. <sup>4</sup>If provided for in the programme specific regulations, individual grades may be awarded for the written thesis (dissertation) and the oral examination (disputation).

(2) <sup>1</sup>The overall grade 'summa cum laude' may be issued only if all reviews on the dissertation agree with the proposal 'summa cum laude' and the other members of the examination board in attendance unanimously consider the oral defence worthy of this distinction. <sup>2</sup>In this, at least three reviews on the dissertation must have been received, including the external review in accordance with § 13 section 6.

(3) <sup>1</sup>An overall grade shall be mentioned in the doctoral certificate only if it is 'summa cum laude'. <sup>2</sup>In addition, an examination report as specified in the template in appendix 4 shall be submitted upon application by the doctoral candidate and in all cases for doctoral degree programmes. This shall contain the overall grade and, in accordance with the programme specific regulations, also individual grades as described in sections 1 and 2.

(4) <sup>1</sup>Over the course of the oral examination, one member of the examination board or an expert observer holding a doctorate must keep a record, which must be signed by the present members of the examination board. <sup>2</sup>The minutes must detail the grades as specified under sections 1 and 2 and must have been submitted to the examination office by no later than one week before the graduation ceremony in accordance with § 20.

(5) <sup>1</sup>Following the oral examination, the chairperson of the examination board shall inform the candidate of the results of the doctoral examination, including the overall grade achieved as well as the individual grades, if required. <sup>2</sup>In the event of passing, the chairperson of the examinations board shall inform the candidate that the doctoral degree must not be used before completion of the

doctoral studies. <sup>3</sup>Upon application, the doctoral candidate receives a written certificate that the examination has been passed. This must also detail that the doctoral degree may not be used before completion of the doctoral studies. Upon application, the certificate also includes the overall grade achieved, as well as the individual grades received, if required.

### **§ 18 Failure, discontinuance, repeat of the oral examination**

(1) <sup>1</sup>Should the performance in the oral examination be insufficient, it shall be assessed as failed. <sup>2</sup>If the candidate fails to attend the examination or withdraws from the examination, then the examination is considered failed, unless there is good cause. <sup>3</sup>The important reason must be notified immediately at least in text form to the examination board and must be made plausible. <sup>4</sup>In the case of withdrawal or failure to attend due to illness, a medical certificate specifying the expected duration of the disease causing the inability to take the examination should be produced immediately, unless the illness is obvious. <sup>5</sup>If the reasons are accepted, a new examination date is scheduled.

(2) <sup>1</sup>A failed oral exam can be repeated within one year, but at the earliest after the expiry of three months. The candidate must apply for the re-examination and should submit a proposed date agreed upon with the members of the examination board. <sup>2</sup>Any further repetition shall not be permitted. Failed examinations in a comparable doctoral study programme at other universities shall be recognised. <sup>3</sup>If the oral examination has been irrevocably failed, the doctoral examination shall also be deemed irrevocably unsuccessful.

(3) <sup>1</sup>An attempt at repetition should be completed before the same examination board. <sup>2</sup>If necessary, the responsible examination committee shall appoint new examiners.

## § 19 Decision, objection

(1) <sup>1</sup>Rejections and other negative acts of administration that are ruled according to these regulations or other programme regulations must be reasoned in writing and provided with information on legal remedies and communicated to the doctoral candidate. <sup>2</sup>These decisions can be objected within a month after publication of the notice, as far as this notice concerns the review of an examination result.

(2) The objection must be lodged in writing or in transcript.

(3) The responsible examination committee decides on the appeal in consideration of the procedure under section 4, unless the appeal is sustained.

(4) <sup>1</sup>Insofar as the appeal refers to a specific examination assessment by a certain examiner, the responsible examination board forwards the appeal to this person for review. <sup>2</sup>If the examiner changes the assessment according to the appeal, the examination committee shall sustain the appeal. <sup>3</sup>Otherwise, it reviews the decision based on the statement by the examiner, especially based on whether

- a) the examination procedure has been properly carried out,
- b) the generally valid assessment principles have been followed,
- c) the examiner has not been influenced by irrelevant considerations.

<sup>4</sup>The same applies if the appeal is made against an assessment by several examiners. <sup>5</sup>In the event that there should be a violation in accordance with sentence 3, a further review on the dissertation shall be obtained accordingly or the oral examination will be repeated with an examiner as yet uninvolved in the procedure. <sup>6</sup>Reassessment must not lead to deterioration in the examination assessment.

(5) <sup>1</sup>If the objection is not sustained, a notice of rejection is issued. <sup>2</sup>This shall be issued by the spokesperson of the examination committee. <sup>3</sup>The notice of rejection should be reasoned, issued with instructions on rights of legal remedy, and delivered.



## **V. Following successful completion of the doctoral degree examination**

### **§ 20 Graduation ceremony**

<sup>1</sup>On two occasions in each semester, a dean of the mathematics natural and science faculties shall announce on a date jointly decided for the doctoral programmes in the mathematics and natural science the names of the doctoral candidates that have since passed the doctoral examination and shall, in the framework of a celebratory event, announce the results of their doctoral process.

<sup>2</sup>Reference must be made therein to the obligation to publish the dissertation and also to the regulations as concerns the award of the doctorate.

### **§ 21 Publication of the thesis**

(1) Doctoral candidates must publish their theses (dissertations).

(2) <sup>1</sup>Conditions imposed by the reviewers concerning changes in content must be considered during publication. <sup>2</sup>Ruling thereon is passed by the examinations board in the event of differences. <sup>3</sup>After the conditions are met, the reviewer must approve the final version for publication without delay by signing the revision certificate (appendix 3). <sup>4</sup>If she or he has not conducted the doctoral work, the examination committee must assign another person with the approval.

(3) For the publication, except for printing as an independent publication in the publishing trade in printed or electronic form, reproduction in the format DIN A 5 or publication on the document server of the Lower Saxon Regional and University Library of Göttingen (SUB) or in a comparable scientific information structure, shall suffice.

(4) The faculty council in the faculty in which enrolment took place may authorise additional forms of publication.

(5) <sup>1</sup>The doctoral candidate must submit a definite number of printed copies of his or her dissertation (obligatory copies) for the respective form of publication free of charge to the examination office of the programme as follows:

- a) three copies of the bookstore edition, if a commercial publisher undertakes distribution across the book trade and a minimum circulation of 100 copies is proven;

or

b) proof that the dissertation was published in a completely approved version on the document server of the SUB or in a comparative scientific information structure.

<sup>2</sup>If parts of the dissertation have already been published, this is referred to in the approved version, as far as possible by using the Digital Object Identifier System (DOI System).

(6) <sup>1</sup>The proof of publication must be received within a year after the oral examination is passed. <sup>2</sup>In the event that the doctoral candidate fails to meet this deadline, all rights acquired through the examination become void. <sup>3</sup>The responsible examination committee can extend the deadline for submission, but no longer than a further year. <sup>4</sup>This shall require a reasoned application filed by the doctoral candidate before expiry of the annual deadline.

(7) <sup>1</sup>The publication must be provided with a title page, whose front and rear side should be designed according to the template in appendix 2. <sup>2</sup>At the end of the dissertation, a short curriculum vitae that represents the scientific education of the doctoral candidate career must be printed. <sup>3</sup>This regulation may not apply to the copies of the work published for sale by booksellers.

(8) <sup>1</sup>Should there be an important reason and upon joint application of the doctoral student and his or her first supervisor or the person responsible as specified under section 2, publication may be managed initially so that only an abstract is published for a certain period and not the complete dissertation manuscript. <sup>2</sup>An important reason is present especially when

a) parts of the dissertation were accepted for publication in a journal or a publishing house and prior publication of these parts is inadmissible according to the underlying contract,

b) this is required for the protection of intellectual property, as otherwise the application for property rights would be in jeopardy, the publication depends on the consent of third parties or scientific data directly connected with the dissertation should first be published in another way.

<sup>3</sup>The period as per sentence 1 ends one year after the day of passing the oral examination. <sup>4</sup>The examination board will decide on whether there is any important reason. <sup>5</sup>The application should be made before the oral examination is scheduled. <sup>6</sup>An additional extension is possible once at the most for one more year. The examination committee decides on this upon application. The application for extension can be made only if the revision certificate is simultaneously presented as per section 2 sentence 3 and appendix 3. <sup>7</sup>The obligatory copies under section 5 sentence 1 must be submitted at the latest with the expiry of the time period specified in sentences 1 and 6.

(9) Reviewers who have rejected a dissertation shall not be, on their request, mentioned by name in the dissertation.

## **§ 22 Award of the doctorate**

(1) <sup>1</sup>Once the doctoral candidate has fulfilled the obligations as specified in this regulation and in particular has submitted the obligatory copies, the examination office shall complete the doctorate by awarding the doctoral certificate according to the templates contained in appendix 5. <sup>2</sup>An 'official translation' shall also be issued in English if the certificate is in German. If applicable, an examination record will also be issued in accordance with § 17 section 3 sentence 2 using the template contained in appendix 4. <sup>3</sup>The day of the passed oral examination is considered the date of doctoral graduation.

(2) Simultaneously with the doctoral certificate as per section 1 sentence 1, the "Official Translation" as per section 1 sentence 2 and, if required, the examination certificate as per section 1 sentence 3, the doctoral candidate can be provided with digital illustrations of these documents in text form. These always contain a password-protected reference to the retrieval of a scan of the signed original document from the university's server.

(3) <sup>1</sup>Contrary to section 1 line 1, the doctorate can be awarded before the mandatory copies under § 21 section 5 are submitted, if

a) instead of the mandatory copies, a publishing house contract with an accredited scientific publishing house is submitted and, moreover, declares in writing that the printing and submission of the mandatory copies are guaranteed within a maximum period of two years since the oral examination, or another important reason was proven as per § 21 section 8 sentence 2.

b) a publication has taken place as per § 21 section 8 sentence 1.

<sup>2</sup>The doctorate is awarded in this case under reservation of the fulfilment of obligations according to § 21 section 5. <sup>3</sup>If this obligation is violated, all rights acquired through the examination, especially the right to carry the doctoral degree, become void. <sup>4</sup>The doctoral certificate shall be returned immediately in this case.

(4) <sup>1</sup>The doctoral degree may not be used before the award of the PhD certificate. <sup>2</sup>The title "Dr. des." must not be used.

(5) Doctoral studies are complete upon award of the doctoral certificate.

### **§ 23 Inspection of the Examination Records**

<sup>1</sup>In the period between the conclusion of the oral examination and awarding the doctorate, or within four weeks after return or rejection of the dissertation or after failure of the oral examination, the doctoral candidate shall be entitled to inspect the written reviews and the minutes of the examination.

<sup>2</sup>Copies of the record content can also be issued, subject to payment of an administrative fee.

### **§ 24 Invalidity of the doctoral examination; withdrawal of the doctorate**

- (1) The doctoral examination can be declared void and the doctorate can be withdrawn,
- a) if it is subsequently ascertained that the doctorate was acquired through fraudulence, or if essential prerequisites for the admission to the doctoral examination were wrongly presumed to be fulfilled,
  - b) if it is subsequently ascertained that the holder of the doctoral degree did, due to grossly negligent or intentional conduct in violation of the obligation to uphold scientific integrity,
    - ba) proved unworthy of being awarded a doctoral degree, or
    - bb) prove unworthy of holding an academic degree due to his or her subsequent behaviour.

(2) In the event that there is a lawful conviction for a criminal offence in connection with the doctoral studies, the doctoral examination shall be declared void and the doctorate shall be withdrawn.

(3) <sup>1</sup>The faculty council of the faculty in which enrolment took place shall rule on decisions as specified under sections 1 and 2 by majority votes of its members holding a doctorate. <sup>2</sup>If scientific misconduct is suspected, the University Ombudsman's Committee first checks whether the initial suspicion of scientific misconduct presumably exists. <sup>3</sup>The notification is issued by the dean. <sup>4</sup>The notice must be sent to the recipient concerned.

## **VI. Honorary doctorate and double doctoral studies**

### **§ 25 Awarding the honorary doctorate**

(1) <sup>1</sup>The degree of an honorary doctor of natural science can be conferred as a rare distinction for outstanding scientific achievements or other excellent accomplishments to promote science. <sup>2</sup>This shall require a resolution passed by the faculty council responsible for the subject in question by means of a majority of three quarters of the members eligible to vote and three quarters of the members holding a doctorate eligible to vote. The decision has to be supported by the majority of the members holding a doctorate of the other faculty councils within the mathematics and natural science faculties. <sup>3</sup>Only members and persons belonging to the founding faculties of the graduate school for mathematics and natural sciences are authorised to make suggestions regarding persons to be honoured.

(2) <sup>1</sup>The honorary doctorate is awarded by the dean in the form of a degree certificate. <sup>2</sup>This degree certificate shall list the scientific merits that led to the award of the honorary doctorate.

(3) <sup>1</sup>For withdrawal, § 24 applies accordingly. <sup>2</sup>The decision is made solely by the relevant faculty for the corresponding subject.

### **§ 26 Prerequisites for a joint supervision procedure**

(1) A doctoral process carried out jointly with a foreign university or faculty sets the prerequisites that

1. an agreement on the cross-border supervision of this doctoral studies has been made with the foreign university or faculty or an individual cooperation contract for completion of a double doctoral degree has been concluded with the foreign university or faculty and
2. admission to the doctoral degree has been granted to the doctoral candidate at both the University of Göttingen and the foreign university or faculty.

(2) <sup>1</sup>The dissertation can be submitted at the University of Göttingen or the foreign university or faculty according to more detailed regulation in the agreement under section 1 No. 1. <sup>2</sup>A dissertation that was submitted at the foreign university or faculty before conclusion of the agreement in accordance with section 1 No. 1 and was accepted or rejected there, cannot be resubmitted at the University of Göttingen. <sup>3</sup>The agreement under section 1 No. 1 must ensure that a dissertation

submitted at the University of Göttingen and accepted or rejected there before conclusion of the agreement under section 1 No. 1 cannot be resubmitted at the foreign university or faculty.

(3) <sup>1</sup>During the execution of the doctoral process, the thesis supervision is provided by at least one accredited examiner at the University of Göttingen and one professor at the foreign university or faculty. <sup>2</sup>The execution of supervision is specified in the agreement under section 1 No. 1

(4) <sup>1</sup>If the dissertation is submitted at the University of Göttingen, then § 27 should be applied. <sup>2</sup>If the dissertation is submitted at the foreign university or faculty, then § 28 should be applied.

### **§ 27 Submission at the University of Göttingen**

(1) <sup>1</sup>Unlike in § 11 (regulation concerning the composition of the examination board), the Dean's Office at the faculty in the University of Göttingen at which the doctoral candidate is enrolled (faculty leading the doctorate), shall agree with the foreign university or faculty in appointing an examination board which shall comprise scientists from both universities. The details of this composition are provided for in the agreement as specified under § 26 section 1 No. 1. <sup>2</sup>Both academic advisers to the dissertation should be appointed as reviewers.

(2) <sup>1</sup>If the dissertation was accepted at the University of Göttingen, then it is transferred to the foreign university or faculty for approval on the continuation of the process. <sup>2</sup>If the foreign university or faculty issues the approval on continuation of the process, then an oral examination takes place at the faculty of the University of Göttingen executing the doctoral degree according to the provisions of §§ 15 to 18. This may differ from the provisions of §§ 15 to 17 in established exceptional cases in accordance with the agreement under § 26 section 1 No. 1.

(3) <sup>1</sup>If the dissertation is accepted by the University of Göttingen, but the approval for continuing the process is rejected by the foreign university or faculty, the joint procedure is terminated. <sup>2</sup>The doctoral process shall be continued in accordance with the general provisions of this regulation and on the basis of the program specific regulations, if applicable. <sup>3</sup>A new examination board is to be appointed for the examination according to § 11 (regulations for appointing the examination board).

## **§ 28 Submission at the foreign university or faculty**

(1) <sup>1</sup>If the dissertation is submitted at the foreign university or faculty, then the foreign university or faculty decides on its acceptance and/or continuation of the process after reviewing the dissertation. <sup>2</sup>If a positive ruling is issued, the faculty leading the doctoral process at the University of Göttingen shall decide in accordance with § 13 and after submission of all required reviews. <sup>3</sup>The dean announces the result to the foreign university or faculty. <sup>4</sup>Furthermore, the dean shall provide the names of all reviewers to be appointed to the examination board. This board shall be staffed by scientists from both universities. <sup>5</sup>The oral examination shall take place at the foreign university or faculty. <sup>6</sup>Deviating from sentences 2 and 3, the agreement as per § 26 section 1 No. 1 shall stipulate that a dissertation accepted in the course of the foreign university or faculty shall also be considered as accepted at the faculty of the University of Göttingen, provided that at least one accredited examiner and member of this faculty was involved as a reviewer in the procedure at the foreign university or faculty and has himself/herself recommended that this dissertation be accepted.

(2) <sup>1</sup>If the dissertation is rejected at the University of Göttingen, then the joint procedure is concluded. <sup>2</sup>The rejected dissertation may not be resubmitted at the University of Göttingen. <sup>3</sup>The decisions on the reassessment of the doctoral degree remain unaffected.

(3) <sup>1</sup>If the dissertation is rejected at the foreign university or faculty, then the joint procedure is concluded. <sup>2</sup>The thesis can be submitted at the University of Göttingen. <sup>3</sup>The doctoral process shall be continued in accordance with the general provisions of this regulation and on the basis of the specialised provisions of the subject programme when applicable. <sup>4</sup>A new examination board is to be appointed for the examination according to § 11 (regulations for appointing the examination board).

## **§ 29 Joint PhD certificate**

<sup>1</sup>Successful completion of the doctoral process in co-supervision with a foreign university or faculty is followed by the award of a joint doctoral certificate, signed by both universities which shows that it is a doctoral degree for academic performance awarded jointly by the concerned universities. <sup>2</sup>In the event that it is not possible to issue a joint doctoral certificate, the doctoral certificate of the University of Göttingen will be issued with the addendum that the doctoral degree was earned based on a joint doctoral process conducted with the foreign university or faculty.

## **VII. Final provisions**

### **§ 30 Entry into force; interim regulations**

(1) This regulation enters into force the day after its publication in the Official Announcements I of Georg-August-Universität Göttingen retroactively on 01.04.2018.

(2) At the same time, the doctoral degree regulations of the mathematics and natural sciences graduate school of the Georg-August-Universität Göttingen – Georg-August University School of Science (GAUSS) – (RerNatO) in the version published on 04.07.2012 (Official Announcements I No. 21/2012, p. 1176), last amended by decision of the presidential board on 24.10.2017 (Official Announcements I No. 54/2017, p. 1456), shall cease to apply.

(3) <sup>1</sup>Doctoral candidates who were admitted to a doctoral programme before this regulation came into effect, within its scope, are examined according to this regulation. <sup>2</sup>Deviating from sentence 1, upon application, which must be made within six months after this regulation came into effect, they are examined according to the regulation described in section 2. <sup>3</sup>Even if upon application in accordance with sentence 2 the regulation as per section 2 must be applied further, this is not applicable for module overviews and descriptions in the case of academic performance still to be rendered of this programme, unless the legitimate expectation of one of the doctoral candidates requires a deviating decision by the responsible examination committee. <sup>4</sup>Doctoral studies and doctoral examinations according to the regulation as per section 2 is carried out the latest in winter semester 2021/22. <sup>5</sup>For doctoral students of the closed doctoral degree programmes Chemistry and Physics, sentences 1 to 4 shall apply with the provision that the program specific regulations according to the regulation as per section 2 shall continue to apply.



**Appendix 1 (regarding § 4 section 6)**

**Declaration by the doctoral candidate  
at Georg-August-Universität Göttingen**

Name.....

(last name, first Name)

Address .....

(street, zip code, city)

I intend to write a doctoral thesis on the topic .....

at Georg-August-Universität Göttingen. I will be supervised by Prof.

.....

I hereby declare that:

1. the opportunity to work on the aforementioned doctoral thesis project was not arranged commercially. Especially, I did not engage any organization which searches for doctoral thesis supervisors or which will entirely or partly carry out my examination duties against payment;
2. I have only accepted and will only accept the assistance of third parties in so far as it is scientifically justifiable and acceptable in regards to the examination regulations. Especially, all parts of the dissertation will be written by myself; I have not accepted and will not accept impermissible help from other parties neither for money nor for free;
3. I will observe the Statute of the Georg-August-University Göttingen for ensuring good scientific practice;
4. I have not applied for corresponding doctoral degree procedures at any other university in Germany or abroad; the submitted doctoral thesis or parts thereof were not used in another doctoral degree procedure.

I am aware that incorrect information precludes the admission to doctoral studies resp. may later on lead to the discontinuation of the doctoral degree procedures or to the revocation of the doctoral degree.

(location)....., (date)..... ,(signature).....

**Appendix 2 Dissertation title page**

Front page

.....  
.....  
.....  
.....  
.....  
.....

(Title of the dissertation)

Dissertation  
for the award of the degree  
'Doctor rerum naturalium'

(alternatively: "Doctor of Philosophy" Ph.D. Division of Mathematics and Natural Sciences)

at the Georg-August-Universität Göttingen

within the doctoral programme/doctoral degree programme.....  
of the Georg-August University School of Science (GAUSS)

submitted by

.....

(Name)

from ..... (Place of birth)

Göttingen, (Date)

[Back](#)

Thesis advisory committee

.....  
(Name, department/work group, institution)

.....  
(Name, department/work group, institution)

.....  
(Name, department/work group, institution)

Members of the examination board:

Referee: .....  
(Name, department/work group, institution)

Co-referee: .....  
(Name, department/work group, institution)

if applicable 2nd Co-referee: .....  
(Name, department/work group, institution)

Other members of the Examination Board:

.....  
(Name, department/work group, institution)

.....  
(Name, department/work group, institution)

.....  
(Name, department/work group, institution)

.....  
(Name, department/work group, institution)

Day of the oral examination: .....

**Appendix 3**

**Revision Certificate**

Name of the referee/responsible person according to § 21, II, 4 RerNat-O:

.....

Department/group, institution

.....

The dissertation manuscript of Ms./Mr

.....

from.....

entitled: .....

has been submitted to me. I have no objections to the printing of this dissertation and confirm this in accordance with § 21, II RerNat-O by my signature below.

Göttingen, (date)..... (signature) .....

---

**Appendix 4 Examination certificate**

Georg-August-Universität Göttingen  
Mathematical and scientific graduate school  
– Georg-August University School of Science (GAUSS) –

Certificate of the doctoral examination in mathematics and natural sciences  
at the faculty.....

Mr / Ms ..... born on ..... in .....  
has passed the doctoral examination in the doctoral degree programme

.....  
in accordance with the doctoral degree regulations of .....  
with an overall grade of ..... on .....  
passed/ passed with distinction

Performances in the doctoral studies:

	Credits
1. ....	.....
2. ....	.....
3. ....	.....
4. ....	.....
5. ....	.....
6. ....	.....
7. ....	.....

Topic of the dissertation:

.....  
.....

*As specified by the programme:*

Grade of the dissertation: .....

Grade of the oral defense: .....

–

– Göttingen, ..... ..

Spokesperson of the Examination Committee / The Dean

## Appendix 5 Doctoral certificate

1. The successful doctoral candidate of a GAUSS programme receives precisely one certificate as specified according to the following template, irrespective of whether the title of a 'Dr. rer. nat.' or a 'Ph.D.' with the suffix 'Division of Mathematics and Natural Sciences' was acquired, whether the distinction 'summa cum laude' was awarded, and whether the doctoral studies were completed in one of the doctoral programmes of mathematics, geosciences/geography, biology, computer science and environmental informatics or one of the doctoral degree programmes of chemistry, mathematical sciences, geoscience, geography and physics (appendixes 5a-5d) or in other programmes (appendixes 5e-5h) or additionally within the framework of the International Max Planck Research School (IMPRS) (appendixes 5i-5l).
2. If the title of 'Dr. rer. nat.' is awarded, the certificate shall be in German. The certificate shall be in English if the title of 'Ph.D.' is awarded.
3. In the event that a German certificate is issued, the doctoral candidate shall furthermore receive an English translation of the certificate ('official translation').
4. If the doctorate was acquired as part of a joint doctoral process as per §§ 26 to 29, then, in the case of § 29 sentence 1, an individual certificate format with the foreign university or faculty is agreed upon, which can differ from the templates of this appendix. In the case of § 29 sentence 2, for certification, the decisive template as per No. 1 is used for the doctoral process in question. The certificate is provided with the addition that the doctorate was acquired on the basis of a joint doctoral studies procedure with the foreign university or faculty.

**Appendix 5a: Certificate template (Dr. rer. nat. for the programmes specified)**

Die Georg-August-Universität Göttingen  
unter der Präsidentin/dem Präsidenten  
Professorin/Professor Dr.

verleiht  
durch die Mathematisch-Naturwissenschaftlichen Fakultäten  
unter der Dekanin/dem Dekan der Fakultät für  
Professorin/Professor Dr.

Frau/Herrn

geboren am            in

den Grad einer Doktorin/eines Doktors der Naturwissenschaften (Dr.rer.nat.),

nachdem sie/er in ordnungsgemäßem Verfahren im Promotionsprogramm/Promotionsstudiengang  
„Mathematik/Physik/Chemie/Geowissenschaften/Geographie/Biologie/Psychologie/  
Informatik/Umweltinformatik“

durch die Dissertation

(„Thema“)

sowie durch die Disputation vom  
ihre/seine wissenschaftliche Befähigung erwiesen hat.

Göttingen, *(Datum der Ausstellung der Urkunde)*

(Siegel der Universität)

Die Dekanin/Der Dekan der Fakultät

**Appendix 5b: Certificate template (Dr. rer. nat.; distinction 'summa cum laude' for the  
programmes specified)**

Die Georg-August-Universität Göttingen  
unter der Präsidentin/dem Präsidenten  
Professorin/Professor Dr.

verleiht  
durch die Mathematisch-Naturwissenschaftlichen Fakultäten  
unter der Dekanin/dem Dekan der Fakultät für  
Professorin/Professor Dr.

Frau/Herrn

geboren am            in

den Grad einer Doktorin/eines Doktors der Naturwissenschaften (Dr.rer.nat.),

nachdem sie/er in ordnungsgemäßem Verfahren im Promotionsprogramm/Promotionsstudiengang  
„Mathematik/Physik/Chemie/Geowissenschaften/Geographie/Biologie/Psychologie/  
Informatik/Umweltinformatik“

durch die Dissertation

(„Thema “)

sowie durch die Disputation vom  
ihre/seine wissenschaftliche Befähigung erwiesen hat.

Als Auszeichnung für hervorragende Leistungen wird das Gesamtprädikat  
„summa cum laude“ vergeben.

Göttingen, *(Datum der Ausstellung der Urkunde)*

(Siegel der Universität)

Die Dekanin/Der Dekan der Fakultät



**Appendix 5c:  
Certificate template (Ph.D.; English-language for the programmes specified)**

The Georg-August-Universität Göttingen

awards

Ms./Mrs./Mr.

born on            in

the degree Doctor of Philosophy (Ph.D.)  
Division of Mathematics and Natural Sciences

under the President  
Professor

through the Faculties of Mathematics and Natural Sciences  
under the Dean of the Faculty of  
Professor

She/He proved her/his scientific qualifications  
according to the regulations of the doctoral programme/degree program

"Mathematics/Physics/Chemistry/Geoscience/Geography/Biology/Psychology/  
Computer Science/Environmental Informatics"

by completing her/his doctoral thesis (Dissertation)

"            "

and thesis defence (Disputation), dated

Göttingen, (date)

(Seal of the University)

Dean of the Faculty

**Appendix 5d:  
Certificate template (Ph.D; distinction 'summa cum laude'; English-language for the  
programmes specified)**

The Georg-August-Universität Göttingen

awards

Ms./Mrs./Mr.

born on            in

the degree Doctor of Philosophy (Ph.D.)  
Division of Mathematics and Natural Sciences

under the President  
Professor

through the Faculties of Mathematics and Natural Sciences  
under the Dean of the Faculty of  
Professor

She/He proved her/his scientific qualifications  
according to the regulations of the doctoral programme/degree program

"Mathematics/Physics/Chemistry/Geosciences/Geography/Biology/Psychology/  
Computer Science/Environmental Informatics"

by completing her/his doctoral thesis (Dissertation)

"            "

and thesis defence (Disputation), dated

In recognition of the excellent achievements of  
her/his doctoral studies she/he is awarded the overall grade  
"summa cum laude".

Göttingen, (date)

(Seal of the University)

Dean of the Faculty

**Appendix 5e: Certificate template (Dr. rer. nat.; all other programmes)**

Die Georg-August-Universität Göttingen  
unter der Präsidentin/dem Präsidenten  
Professorin/Professor Dr.

verleiht

durch die Mathematisch-Naturwissenschaftliche Graduiertenschule  
Georg-August University School of Science (GAUSS)  
unter der Sprecherin/dem Sprecher  
Professorin/Professor Dr.

Frau/Herrn

geboren am            in

den Grad einer Doktorin/eines Doktors der Naturwissenschaften (Dr. rer. nat.),

nachdem sie/er in ordnungsgemäßem Verfahren  
im GAUSS-Promotionsprogramm/Promotionsstudiengang „            “

durch die Dissertation

(„Thema“)

sowie durch die Disputation vom  
ihre/seine wissenschaftliche Befähigung erwiesen hat.

Göttingen, *(Datum der Ausstellung der Urkunde)*

(Siegel der Universität)

Die Sprecherin/Der Sprecher von GAUSS

**Appendix 5f:**

**Certificate template (Dr. rer. nat.; distinction "summa cum laude"; all other programmes)**

Die Georg-August-Universität Göttingen  
unter der Präsidentin/dem Präsidenten  
Professorin/Professor Dr.

verleiht  
durch die Mathematisch-Naturwissenschaftliche Graduiertenschule  
Georg-August University School of Science (GAUSS)  
unter der Sprecherin/dem Sprecher  
Professorin/Professor Dr.

Frau/Herrn

geboren am            in

den Grad einer Doktorin/eines Doktors der Naturwissenschaften (Dr. rer. nat.),

nachdem sie/er in ordnungsgemäßem Verfahren  
im GAUSS-Promotionsprogramm/Promotionsstudiengang „            “

durch die Dissertation

(„Thema“)

sowie durch die Disputation vom  
ihre/seine wissenschaftliche Befähigung erwiesen hat.

Als Auszeichnung für hervorragende Leistungen wird das Gesamtprädikat  
„summa cum laude“ vergeben.

Göttingen, *(Datum der Ausstellung der Urkunde)*

(Siegel der Universität)

Die Sprecherin/Der Sprecher von GAUSS

**Appendix 5g:  
Certificate template (Ph.D.; in English; all other programmes)**

The Georg-August-Universität Göttingen

awards

Ms./Mrs./Mr.

born on            in

the degree Doctor of Philosophy (Ph.D.)  
Division of Mathematics and Natural Sciences

under the President  
Professor

through the Georg-August University School of Science (GAUSS)  
under the Dean  
Professor

She/He proved her/his scientific qualifications  
according to the regulations of the  
doctoral programme/degree program "            "

by completing her/his doctoral thesis (Dissertation)

"            "

and thesis defence (Disputation), dated

Göttingen, (date)

(Seal of the University)

Dean of GAUSS

**Appendix 5h: Certificate template (Ph.D.; distinction "summa cum laude"; in English; all other programmes)**

The Georg-August-Universität Göttingen

awards

Ms./Mrs./Mr.

born on            in

the degree Doctor of Philosophy (Ph.D.)  
Division of Mathematics and Natural Sciences

under the President  
Professor

through the Georg-August University School of Science (GAUSS)  
under the Dean  
Professor

She/He proved her/his scientific qualifications  
according to the regulations of the  
doctoral programme/degree program "            "

by completing her/his doctoral thesis (Dissertation)

"            "

and thesis defence (Disputation), dated

In recognition of the excellent achievements of  
her/his doctoral studies she/he is awarded the overall grade  
"summa cum laude".

Göttingen, (date)

(Seal of the University)

Dean of GAUSS

**Appendix 5i:  
Certificate template (Dr. rer. nat. within the framework of an IMPRS)**

Die Georg-August-Universität Göttingen  
unter der Präsidentin/dem Präsidenten  
Professorin/Professor Dr.

verleiht  
durch die Mathematisch-Naturwissenschaftliche Graduiertenschule  
Georg-August University School of Science (GAUSS)  
unter der Sprecherin/dem Sprecher  
Professorin/Professor Dr.

Frau/Herrn

geboren am            in

den Grad einer Doktorin/eines Doktors der Naturwissenschaften (Dr. rer. nat.),

nachdem sie/er in ordnungsgemäßem Verfahren  
im GAUSS-Promotionsprogramm/Promotionsstudiengang „            “

durch die Dissertation

(„Thema“)

sowie durch die Disputation vom  
ihre/seine wissenschaftliche Befähigung erwiesen hat.

Sie/Er hat die Promotion im Rahmen der  
International Max Planck Research School  
„IMPRS for            “ durchgeführt.

Göttingen, *(Datum der Ausstellung der Urkunde)*

(Siegel der Universität)

Sprecherin/Sprecher von GAUSS

(Minerva Logo)

Sprecherin/Sprecher der IMPRS

**Appendix 5j: Certificate template (Dr. rer. nat. within the framework of an IMPRS; distinction 'summa cum laude')**

Die Georg-August-Universität Göttingen  
unter der Präsidentin/dem Präsidenten  
Professorin/Professor Dr.

verleiht  
durch die Mathematisch-Naturwissenschaftliche Graduiertenschule  
Georg-August University School of Science (GAUSS)  
unter der Sprecherin/dem Sprecher  
Professorin/Professor Dr.

Frau/Herrn

geboren am            in

den Grad einer Doktorin/eines Doktors der Naturwissenschaften (Dr. rer. nat.),

nachdem sie/er in ordnungsgemäßem Verfahren  
im GAUSS-Promotionsprogramm/Promotionsstudiengang „            “

durch die Dissertation

(„Thema“)

sowie durch die Disputation vom  
ihre/seine wissenschaftliche Befähigung erwiesen hat.

Als Auszeichnung für hervorragende Leistungen wird das Gesamtprädikat  
„summa cum laude“ vergeben.

Sie/Er hat die Promotion im Rahmen der  
International Max Planck Research School  
„ IMPRS for            “ durchgeführt.

Göttingen, *(Datum der Ausstellung der Urkunde)*

(Siegel der Universität)

Sprecherin/Sprecher von GAUSS

(Minerva Logo)

Sprecherin/Sprecher der IMPRS



**Appendix 5k**  
**Certificate template (Ph.D. within the framework of an IMPRS; English-language)**

The Georg-August-Universität Göttingen

awards

Ms./Mrs./Mr.

born on            in

the degree Doctor of Philosophy (Ph.D.)  
Division of Mathematics and Natural Sciences

under the President  
Professor

through the Georg-August University School of Science (GAUSS)  
under the Dean  
Professor

She/He proved her/his scientific qualifications  
according to the regulations of the  
doctoral programme/degree program "            "

by completing her/his doctoral thesis (Dissertation)

"            "

and thesis defence (Disputation), dated

She/He graduated from the International Max Planck Research School  
"IMPRS for            "

Göttingen, (date)

(Siegel der Universität)

Sprecherin/Sprecher von GAUSS

(Minerva Logo)

Sprecherin/Sprecher der IMPRS

**Appendix 5I: Sample degree certificate (Ph.D. within the framework of an IMPRS; distinction 'summa cum laude'; English-language)**

The Georg-August-Universität Göttingen

awards

Ms./Mrs./Mr.

born on            in

the degree Doctor of Philosophy (Ph.D.)  
Division of Mathematics and Natural Sciences

under the President  
Professor

through the Georg-August University School of Science (GAUSS)  
under the Dean  
Professor

She/He proved her/his scientific qualifications  
according to the regulations of the  
doctoral programme/degree program "            "

by completing her/his doctoral thesis (Dissertation)  
entitled  
"            "

and thesis defence (Disputation), dated

In recognition of the excellent achievements of  
her/his doctoral studies she/he is awarded the overall grade  
"summa cum laude".

She/He graduated from the International Max Planck Research School  
"IMPRS for            "

Göttingen, (date)

(Minerva Logo)

Dean of the IMPRS

(Seal of the University)

Dean of GAUSS

## Appendix 6

### a) Programme specific regulations for the doctoral degree programme "Mathematical Sciences"

#### A. Special responsibilities

An examination committee shall not be convened; the Dean's Office shall act in its place. Contrary to § 3 section 2 sentence 4, the tasks of the spokesperson of the examination committee shall be fulfilled as specified in this regulation by the Dean of Studies for mathematics.

#### B. Special terms

1. Parts or all of the doctoral degree programme "Mathematical Sciences" can be completed as part-time studies. In this respect students must prove by submission of suitable documents that on an average of the semester, they do not have more than 20 hours of time per week to engage in the research and their other commitments as specified in the supervision agreement. The deadline as defined under § 6 section 6 sentence 1 shall be extended by one semester for each two semesters of part-time courses, respectively. This shall apply accordingly in the event that part-time study lasted for one semester only. Documents as required under sentence 1 shall be deemed valid only when issued by third parties. This requirement of validation by documents as specified under sentence 1 may be waived insofar as it is considered unduly severe. The Dean's Office shall decide in this respect.

2. Contrary to § 16 section 1, it shall be deemed standard that the oral examination is conducted in English. An oral examination in German is possible insofar as the students have proven adequate German skills (on the level of DSH-2 or higher).

#### C. Doctoral studies

Within the framework of the doctoral studies, proof of examination prerequisites must be provided through the successful completion of the following modules in a scope equivalent to a total of at least 30 credits (C).

##### 1. Research Programme

P.Mat.7101	Scientific colloquia and seminars	(3 C, 2 WLH)
P.Mat.7102	Research activities at scientific colloquia and seminars	(3 C, 2 WLH)

##### 2. Study Programme

P.Mat.7201	Advanced studies in a field of research I	(6 C, 4 WLH)
P.Mat.7202	Advanced studies in a field of research II	(3 C, 2 WLH)
P.Mat.7203	Complementary studies	(3 C, 2 WLH)

### **3. Research Seminars**

- P.Mat.7301 Accompanying seminar: Introduction to research (3 C, 2 WLH)  
P.Mat.7302 Accompanying seminar: Scientific analysis of research questions (3 C, 2 WLH)  
P.Mat.7303 Accompanying seminar: Documentation of mathematical issues (3 C, 2 WLH)

### **4. Key competencies**

- P.Mat.7901 Key competencies in university teaching (3 C, 2 WLH)

The module P.Mat.7901 may be replaced with a module from the cross-faculty key competency modules by the Faculty for Mathematics and Computer Science, from the university's cross-faculty key competencies modules or a module in Teaching in Higher Education.

### **D. Other study programmes**

Upon mutual agreement of the doctoral candidates or the doctoral candidate and the thesis advisory committee and notwithstanding the provision concerning the transfer of study credits, the Dean's Office is entitled to resolve that, in place of the doctoral studies as specified under letter C., the curriculum of a doctoral programme of relevant subject matter (e.g. research training group) shall be completed successfully in a scope equivalent to at least 20 C. Acceptance to the corresponding degree programme must be proven without delay.

### **E. Module descriptions**

The module index will be published separately. It forms part of the present regulations insofar as the modules are listed in the overview as per Letter C (Doctoral Studies).

**b) Programme specific regulations for the doctoral programme in Mathematics**

**A. Special responsibilities**

Contrary to § 3 section 2 sentence 4, the dean of studies for mathematics is responsible for matters relating to the doctoral programme, provided that the dean is a member of the Institute for Computer Sciences.

**B. Doctoral studies**

At least 21 credits (abbreviated as C) must be acquired, divided as follows:

**1. Research programme**

Participation in at least one advanced or research course in mathematics (3 C).

Participation in at least one conference specific to the research (e.g., Annual Conference of the German Association of Mathematicians) in the form of a lecture or a poster presentation. (3 C)

**2. Doctoral degree programme**

Successful participation in at least one advanced event (e.g. intensive course) in the research area the dissertation covers. (6 C)

Successful participation in two additional advanced events. (at least 3 C each)

**3. Key qualifications**

Completion of programme elements designed to acquire key competencies of completion of tutorial duties in an exercise or a course in the Faculty of Mathematics and Computer Science. (at least 3 C)

## **Appendix 7 Programme specific regulations for the doctoral degree programme in "Physics"**

### **A. Special responsibilities**

An examination committee shall not be convened; the Dean's Office shall act in its place.

### **B. Special terms**

#### **1. Part-time course**

Parts or all of the doctoral degree programme in "Physics" can be completed as part-time studies. In this respect, students must prove by submission of suitable documents that on an average of the semester, they do not have more than 20 hours of time per week to engage in the research and their other commitments as specified in the supervision agreement. The deadline as defined under § 6 section 6 shall be extended by one semester for each two semesters of part-time courses, respectively. This shall apply accordingly in the event that part-time courses lasted one semester only. Documents as required under sentence 1 shall be deemed only such as are issued by third parties. This requirement of validation by documents as specified under sentence 1 may be waived insofar as it is considered unduly severe. The Dean's Office shall decide in this respect.

#### **2. Dissertation**

§ 10 section 5 sentence 1 notwithstanding, it is ruled that the dissertation shall be written in the English language. Alternatively, it is permitted to write the dissertation in the German language, provided the students can demonstrate sufficient German language skills (of level DSH-2 or higher).

#### **3. Form of the oral examination**

§ 16 section 1 sentence 1 notwithstanding, it is ruled that the oral defense shall be conducted in the English language. Alternatively, it is permitted to conduct the oral defense in the German language, provided the students can demonstrate sufficient German language skills (of level DSH-2 or higher).

### **C. Doctoral studies**

Over the course of the doctoral studies, a performance record must be provided through the successful completion of the following modules in a scope of at least 30 credits:

P.Phy.01	Thesis Advisory Committee Meeting	(4 C)
P.Phy.02	Scientific presentation and communication	(4 C)
P.Phy.03	Scientific Writing	(4 C)
P.Phy.04	Advanced scientific qualification in theory and practice	(3 C)
P.Phy.05	Additional scientific qualification in theory and practice	(3 C)
P.Phy.06	Tutorial teaching	(8 C)
P.Phy.07	Key competences	(4 C)

The thesis advisory committee may approve that other courses may be attended in place of the modules listed above, provided they are essentially equivalent to the aforementioned modules in terms of the competencies that are to be acquired.

### **D. Module descriptions**

The module index will be published separately. It forms part of the present regulations insofar as the modules are listed in the overview as per Letter C (Doctoral Studies).

## **Appendix 8**

### **a) Programme specific regulations for the doctoral degree programme in "Chemistry"**

#### **A. Special responsibilities**

An examination committee shall not be convened; the Dean's Office shall act in its place. Contrary to § 3 section 2 sentence 4, the tasks of the spokesperson of the examination committee shall be fulfilled as specified in this regulation by the Dean of Studies at the Faculty of Chemistry. In case of absence, he or she shall be represented by the Dean at the Faculty of Chemistry.

#### **B. Special terms**

##### **1. Dissertation**

Dissertations in accordance with § 10 section 3 are permitted only as part of the guideline of the Faculty of Chemistry on non-monographic dissertations.

##### **B. Examination board**

Deviating from § 11 section 1, the reviewer for the dissertation must be appointed from the members authorised to examine from the Faculty of Chemistry of the Georg-August-Universität Göttingen.

#### **C. Doctoral studies**

Over the course of the doctoral degree programme, proof of examination prerequisites must be completed in a scope of at least 30 credits (C) according to the following regulations:

##### **1. Specialist competency (15 C) \*)**

###### **a. Reflect on and present research**

At least one of the following modules with a rating of 6 credits must be successfully completed:

P.Che.1001 "Forschung reflektieren und präsentieren (lokal)" (6 C)

P.Che.1002 "Forschung reflektieren und präsentieren (national)" (7 C)

P.Che.1002 "Forschung reflektieren und präsentieren (international)" (9 C)

###### **b. Subject and methodological specialisation**

The following modules with a rating of at least 6 C must be successfully completed: Modules (also specialist didactics) from the master degree programme in chemistry and modules by the mathematics and natural sciences faculties (apart from psychology) from the master and doctoral degree programmes are all eligible for consideration, provided they were not completed as part of the master degree programme. For instance, the following modules can be completed:



P.Che.1311 Vibrational spectroscopy and intermolecular dynamics  
P.Che.1313 Electronic spectroscopy and reaction dynamics  
P.Che.1315 Chemical Dynamics at Surfaces  
P.Che.2404 Dynamics and Simulation  
M.Che.1214 NMR for structural chemistry and structural biology I 3 C / 3 WLH  
M.Che.1215 NMR für Strukturchemie und Strukturbiologie II 3 C / 3 WLH  
M.Che.1331 Kinetik und Dynamik 3 C / 3 WLH  
M.Che.2403 Theoretisch-Chemischer Schwerpunkt 6 C / 5 WLH  
M.Che.2503 Biomolekulare Chemie Praktikum 6 C / 6 WLH  
M.Che.2603 Praktikum Katalysechemie 6 C / 8 WLH  
M.Che.2703 Praktikum Makromolekulare Chemie 6 C / 8 WLH

The Dean of Studies respectively shall decide on the number of credits awarded based on the actual workload insofar as the courses on offer are not structured as modules.

\*) Specialist competency also means specialist didactics competency for doctoral programmes in didactic areas of chemistry.

## **2. Scientific teaching (9 C)**

The following module with a rating of 9 C must be successfully completed:

P.Che.1004 Scientific teaching 9 C

## **3. Key competencies (6 C)**

The following modules with a rating of at least 6 C must be successfully completed: Doctoral candidates can attend in particular modules listed in the university module catalogue of key competencies, the courses offered by Teaching in Higher Education at the University of Göttingen and designated courses by the Faculty of Chemistry. The Dean of Studies respectively shall decide on the number of credits awarded based on the actual workload insofar as the courses on offer are not structured as modules.

**4.** The Dean's Office may permit, following a statement by the thesis advisory committee, that other courses may be completed in place of the modules listed above, provided they are essentially equivalent to the aforementioned modules in terms of the competencies that are to be acquired.

## **D. Module descriptions**

The module index will be published separately. It forms part of the present regulations insofar as the modules are listed in the overview as per Letter C (Doctoral Studies).

**b) Programme specific regulations for the doctoral degree programme  
"Catalysis for Sustainable Synthesis" (CaSuS)**

**A. Special responsibilities**

The tasks of the examination committee as defined in this regulation shall be fulfilled by the programme committee. It has four members, of which three are from the professorial group from among the working group leads participating in the course of study and one is from the group of doctoral candidates. The members are appointed by the respective group representatives on the faculty council in the Faculty of Chemistry. The tenure is two years, while that of the member from the group of doctoral candidates is one year. The programme committee shall elect a chairperson as well as his or her deputy from the professorial group. The member from the group of doctoral candidates only has an advisory vote in the assessment and transfer of credits for study and examination components.

**B. Special terms**

**1. Admission to the doctoral examination**

Supplementary to § 8 sections 1 and 2, the prerequisite for admission to the doctoral examination is that at least one original paper with co-authorship by the doctoral candidate has been accepted for publication in a peer review academic journal. The programme committee decides on exceptions on the basis of a written application by the doctoral candidate.

**2. Form of dissertation**

§ 10 section 5 sentence 1 notwithstanding, it is ruled that the dissertation shall be written in the English language.

**3. Form of the oral examination**

§ 16 section 1 notwithstanding, it is ruled that the oral examination shall be conducted in the English language.

**C. Doctoral studies**

Over the course of the doctoral studies, performance records must be completed successfully in a scope of at least 22 credits (C) according to the following regulations:

**1. Compulsory modules**

The following compulsory modules with a rating of 19 C should be successfully completed:

P.Che.1601	Latest developments in catalysis research	(4 C/ 4 WLH)
P.Che.1602	Modern methods and practice in catalytic chemistry	(4 C/ 5 WLH)
P.Che.1603	Catalysis in the chemical context	(6 C/ 6 WLH)
P.Che.1604	Presentation and discussion of research results	(5 C/ 8 WLH)

## 2. Optional required modules

One module from the area of key competencies with a rating of at least 3 C should be successfully completed. One of the following modules offered by the Central Institution for Languages and Key Competencies (ZESS) is recommended; however it is also possible to take up other modules offered by ZESS without a separate application:

SK.AS.FK-3	Leadership Intercultural communication skills	skills: (3 C/ 2 WLH)
SK.FS.EN-IC-C1-1	Intercultural communication – English C1.1	(3 C/ 2 WLH)

## 3. Voluntary courses

Apart from the modules named in nos. 1 and 2, courses with an in-depth subject matter are offered; attendance is voluntary. In addition to that, doctoral candidates should participate in non-independent teaching.

4. The thesis advisory committee may approve that other courses may be completed in place of the modules listed above, provided they are essentially equivalent to the aforementioned modules in terms of the competencies that are to be acquired.

## D. Module descriptions

The module index will be published separately. It forms part of the present regulations insofar as the modules are listed in the overview as per Letter C (Doctoral Studies).

## **Appendix 9**

### **a) Programme specific regulations for the doctoral degree programme "Geography"**

#### **A. Special responsibilities**

In addition to §10 section 3. sentence 1, it shall be applicable that the doctoral candidate must be the lead author of at least one manuscript.

#### **B. Doctoral studies**

Over the course of the doctoral degree programme, proof of examination prerequisites must be provided in a scope equivalent with a total of at least 20 credits (C):

1. The following module with a rating of 5 C should be successfully completed.

P.Geg.1      Advanced Professional and Technical Skills (5 C, 2 WLH)

2. At least three of the following modules with a total rating of 15 C must be completed successfully:

P.Geg.2      Research (5 C, 2 WLH)

P.Geg.3      Scientific communication (5 C)

P.Geg.4      Scientific teaching (5 C)

P.Geg.5      Key qualifications (5 C, 2 WLH)

P.Geo.5      Scientific writing (5 C, 2 WLH)

The thesis advisory committee may approve that other courses may be completed in place of the modules listed above, provided they are essentially equivalent to the aforementioned modules in terms of the competencies that are to be acquired.

#### **C. Module descriptions**

The module index will be published separately. It forms part of the present regulations insofar as the modules are listed in the overview as per Letter B (Doctoral Studies).

**b) Programme specific regulations for the doctoral degree programme "Geoscience"**

**A. Special responsibilities**

In addition to §10 section 3. sentence 1, it shall be applicable that the doctoral candidate must be the lead author of at least one manuscript.

**B. Doctoral studies**

Over the course of the doctoral degree programme, proof of examination prerequisites must be provided in a scope equivalent with a total of at least 20 credits (C):

1. The following two modules with a rating of 10 C must be successfully completed:

P.Geo.1      Advanced Professional and Technical (5 C, 2 WLH)

P.Geo.2      Scientific communication (5 C, 1 WLH)

2. At least two of the following modules with a total rating of 10 C must be completed successfully:

P.Geo.3      Research (5 C, 2 WLH)

P.Geo.4      Scientific teaching (5 C)

P.Geo.5      Scientific writing (5 C, 2 WLH)

P.Geo.6      Key qualifications (5 C, 2 WLH)

The thesis advisory committee may approve that other courses may be completed in place of the modules listed above, provided they are essentially equivalent to the aforementioned modules in terms of the competencies that are to be acquired.

**C. Module descriptions**

The module index will be published separately. It forms part of the present regulations insofar as the modules are listed in the overview as per Letter B (Doctoral Studies).

**c) Programme specific regulations for the doctoral programme Geosciences/Geography**

Admission of doctoral candidates in this programme is suspended. The doctoral degree programmes as per letters a) and b) are especially available for the applicants.

**A. Proof of examination prerequisites**

At least 20 credits (C) must be acquired within the framework of the doctoral studies as specified in the provisions of the following regulations. Participation in the various events should take place following consultation with the thesis advisory committee.

Attendance of at least one specialist – where possible international – conference in the research area, including a lecture or poster, is mandatory.

**1. Research and study programme**

A total of 18 C must be acquired. The main subject and related research areas must be considered appropriately. Credits are awarded for the attendance of, that is successful participation in, the following as examples:

a.) Within the faculty / University of Göttingen

I. Master course (credits as specified in examination regulations)

II. Research course

III. Departmental course

IV. Institute colloquium

V. Special course offered by external lecturers

b.) External

VI. Workshop

VII. Summer School

VIII. Special course in the research area offered in other institutions

IX. Research course

X. Specialist conference in the research area with lecture or poster – when possible internationally (3 C)

XI. additional events, if required, on the advice of the thesis advisory committee.

**2. Key qualifications**

A total of 2 C must be acquired. Credits will be awarded for successful participation in university events (e.g. in ZESS – Central Institution for Languages and Key Competencies), faculty events and events at other institutions.

## **Appendix 10**

### **a) Programme specific regulations for the doctoral programme in “Biology”**

#### **Proof of examination prerequisites**

During the phase of doctoral studies, proof of examination prerequisites in a scope of at least 20 C should be completed in accordance with the following provisions; One credit is equivalent to a workload of approx. 30 hours, including time for preparation and follow-up.

#### **1. Participation in colloquia and active participation in courses (5 - 10 credits)**

Doctoral candidates are expected to take part each semester in one colloquium and one course (e.g., departmental or institute course). 0.5 credits per semester are awarded for colloquia. Attendance must be confirmed by submission of a performance record signed by the supervisor. 2 credits per semester are awarded for participation in a course; this stipulates that a lecture be presented, which must be confirmed by the professor responsible for the course or by the first supervisor.

#### **2. Active participation in teaching (5 - 10 credits)**

In principle, teaching duties in the faculty must be performed. Equivalent, individual proof of completion may be provided in the event that some teaching is provided outside of the faculty. Additionally, the examination board may issue general recognition of teaching events held regularly in other faculties. 1 credit is awarded per WLH for supervising students during courses or internships. 2 credits are awarded for supervision during lab rotations with a scope of at least 6 weeks and also for the supervision of bachelor theses. Furthermore, three credits can be awarded on one occasion for the supervision of a degree or a master thesis. Certification shall be issued by one of the supervisors.

#### **3. Active participation in specialist conferences (no more than 6 credits).**

3 credits will be awarded, provided there is active participation (this means poster presentation or lecture). The maximum number shall apply if several conferences are attended. Certification shall be issued by one of the supervisors.

#### **4. Other forms of acquiring key qualifications (no more than 3 credits)**

It is not possible to define generally applicable regulations for this area. In the event that regular events from the field of key qualifications are attended, the credits specified therein shall be awarded. The examination board shall issue an assessment in other cases.

**5.** The acquisition of credits in all of the areas specified under no. 1 to 3 must be verified.

**b) Programme specific regulations for the doctoral degree programme in "Behavior and cognition" (BeCog)**

**A. Special responsibilities**

The duties of the examination committee as defined in this regulation are discharged by the programme committee, convened in each case in accordance with the provisions of the regulation on assessment of particular suitability for the doctoral degree programme in behavior and cognition in its valid version.

**B. Special terms**

**1. Duration of doctoral studies**

Deviating from § 6 section 6 sentence 2, in justified exceptions, the processing time can be extended up to four times by six months each time. This is decided by the programme committee in accordance with the opinion of the thesis advisory committee on the basis of a written application by the doctoral candidate, which is to be justified.

**2. Form of the oral examination**

Contrary to § 16 section 1, the oral examination takes place in English or, on application of the candidate for examination, in German. The programme committee must be informed if an oral examination shall be conducted in German.

**3. Awarding of distinctions**

Individual grades shall at all times be issued for the dissertation and the oral examination (§ 17 section 1 sentence 4), listed separately on the examination record as specified under § 17 section 3 sentence 2.

**C. Doctoral studies**

Over the course of the doctoral degree programme, proof of examination must be provided through the successful completion of the following modules in a scope equivalent to a total of at least 20 credits (C):

- P.BeCog.1 Learn and reflect on research (4 C, 6 WLH)
- P.BeCog.2 Specialist and methodological bases (4 C, 6-8 WLH)
- P.BeCog.3 Scientific teaching (4 C, 4 WLH)
- P.BeCog.4 Scientific communication (4 C)
- P.BeCog.5 Key qualifications (4 C, 4-8 WLH)



**D. Module descriptions**

The module index will be published separately. It forms part of the present regulations insofar as the modules are listed in the overview as per Letter C (Doctoral Studies).

**c) Programme specific regulations for the doctoral degree programme in “Biological Diversity and Ecology”**

**A. Special responsibilities**

The duties of the examination committee as defined in this regulation are taken over by the programme committee, convened in each case in accordance with the provisions of the regulation on assessment of particular suitability for the doctoral degree programme in “Biological Diversity and Ecology” in its valid version.

**B. Special terms**

**1. Dissertation**

Contrary to § 10 section 5 sentence 1, it is ruled that the dissertation shall be written in English. Any exceptions must be brought before the programme committee in a reasoned application.

**2. Form of the oral examination**

§ 16 section 1 sentence 1 notwithstanding, it is ruled that the oral examination shall be conducted in English. The oral examination may be conducted in German in justified exceptions. The doctoral candidate shall in these cases bring the matter before the programme committee within the framework of a justified application.

**3. Gradings and distinctions**

Individual gradings shall at all times be issued for the dissertation and the oral examination (§ 17 section 1 sentence 4), listed separately on the examination record as specified under § 17 section 3 sentence 2.

**C. Doctoral studies**

Over the course of the doctoral degree programme, proof of examination prerequisites must be provided through the successful completion of the following modules in a scope equivalent to a total of at least 22 ECTS credits (C):

- P.Biodiv.01 Scientific project management (3 C, 2 WLH)
- P.Biodiv.02 Advanced scientific qualification in theory and practice (6 C, 4 WLH)
- P.Biodiv.03 Scientific teaching (3 C, 2 WLH)
- P.Biodiv.04 Scientific presentation and communication (4 C)
- P.Biodiv.05 Key competencies (6 C, 4 WLH)

The thesis advisory committee may approve that other courses may be attended in place of the modules listed above, provided they are essentially equivalent to the aforementioned modules in terms of the competencies that are to be acquired.

#### **D. Module descriptions**

The module index will be published separately. It forms part of the present regulations insofar as the modules are listed in the overview as per Letter C (Doctoral Studies).

## **Appendix 11: Programme specific regulations for the GGNB programmes**

### **A. Responsibilities; scope of application**

The Göttingen Graduate Centre for Neurosciences, Biophysics and Molecular Biosciences (GGNB) is an institution as defined under § 3 section 2 sentence 3. The following terms shall apply thereto. The *programme committee* shall act in place of the *examination committee* as defined under RerNatO; the regulations of RerNatO as concerns the examination committee shall apply accordingly.

The regulations hereafter shall apply to the following GGNB doctoral degree programmes:

- International doctoral degree programme "Molecular Biology"
- International doctoral degree programme "Neurosciences"
- Doctoral degree programme 'Biomolecules: Structure – Function – Dynamics'
- Doctoral degree programme 'Molecular Biology of Cells'
- Doctoral degree programme 'Genes and Development'
- Physics of Biological and Complex Systems
- Molecular Physiology of the Brain
- Doctoral degree programme 'Systems Neuroscience'
- Theoretical and Computational Neuroscience
- Sensory and Motor Neuroscience
- Doctoral degree programme 'Microbiology and Biochemistry'
- Emerging Infectious Diseases
- IRTG 2172 - Plant Responses To Eliminate Critical Threats (PRoTECT)
- Genome Science

### **B. Special terms**

#### **1. Qualifications for entry and selection procedure**

a. For doctoral degree programmes, the regulation concerning assessment of particular suitability shall be applicable to doctoral degree programmes at the Göttingen Graduate Centre for Neurosciences, Biophysics and Molecular Biosciences (GGNB), or a subject specific regulation of the degree programme in the latest applicable version.

b. The following shall apply to the other programmes as a supplement to § 4 section 1 and contrary to § 4 section 8:

**aa.** Applicants whose mother tongue is not English must demonstrate adequate English language skills. Adequate English language skills should be proven through minimum achievement in an internationally recognised or equivalent test:

- a) “Cambridge English: First” (FCE) with at least an A grade;
- b) “Cambridge English: Advanced” (CAE) with at least a C grade;
- c) “Cambridge English: Proficiency” (CPE) with at least “pass”;
- d) IELTS Academic ("International English Language Testing System"), at least volume 7;
- e) “Test of English as a Foreign Language”, internet-based test (TOEFL iBT): at least 95 points;
- f) “Test of English as a Foreign Language”, paper-based test (TOEFL PBT): at least 627 points;
- g) UNlcert: at least level III;
- h) “The Pearson Test of English Academic” (PTE Academic), at least 67 points.

The test must be successfully completed within the last two years before the application for admission is received. The obligation to such prove need not be met by applicants with at least two years spent studying or working abroad in an English-speaking country within the last three years before submitting the application for admission. The programme committee will decide on the recognition of other proof of adequate English skills.

**bb.** Other qualifications for entry shall be proof of outstanding study and examination achievements and the proof of particular suitability, ascertained in selection interviews. Outstanding study and examination achievements shall be in particular the performances attained by the applicants' graduate class in the previous studies.

**cc.** In the event of successful application, the applicant will be issued with a letter of admission in text form by the responsible programme spokesperson or a person authorised thereto by aforementioned spokesperson. This letter of admission shall contain assignment to a faculty and shall serve furthermore as a proof of entitlement to enrol.

## **2. Duration of the doctoral process:**

The research work should be completed within three years following admission to a programme with submission of the dissertation. In justified exceptions, the processing time can be extended twice by six months at a time. Deviating from § 6 section 6 sentences 2 and 3, this is decided by the relevant programme committee on the basis of a written application of the doctoral candidate, which is to be justified. An application beyond the period mentioned is decided by the relevant programme committee in agreement with the GGNB management board.

### **3. Form of the oral examination**

Contrary to § 16 section 1, the oral examination takes place in English or, on application of the candidate, in German. The programme committee must be informed if an oral examination shall be conducted in German.

### **C. Performance records/doctoral studies**

Performance record prerequisites in a scope totalling at least 20 credits (C) must be acquired over the course of the doctoral degree phase. It is at the discretion of the individual doctoral degree programmes within GGNB to raise the minimum scope of 20 C to no more than 30 C. One credit is equivalent with a workload of approx. 30 hours, including time for preparation and follow-up. Deviations shall be possible if a longer residence in a foreign laboratory or extensive field research in a foreign country is planned. Subject to consultation, additional, voluntary performances may be completed in addition to the minimum examination prerequisites. Credits can be acquired by

#### **1. Participation in special lectures, colloquia and courses (at least 5 C)**

A doctoral candidate must provide proof of participation in special lectures, colloquia and/or courses (e.g. departmental or institute courses) in a scope of at least 5 C.

**a.** 0.5 C shall be acquired through participation in seminars or colloquia in a scope of one WLH. Completion of said achievement must be confirmed by the supervisor.

**b.** by active participation in a seminar (completion of a separate achievement), the number of credits acquired shall be increased by one additional credit. A special achievement is recognised when a seminar lecture is held and assessed as passed. A doctoral candidate must, on at least one occasion in two semesters, report on the results of his or her research as part of a seminar. Completion of said achievement must be confirmed by submission of a certificate by the teacher responsible for the seminar.

#### **2. Participation in methods courses (at least 2 C)**

Over the course of the research project, doctoral candidates must successfully participate in methods courses offered by GGNB. 1 C will be awarded for a 2-3 day methodical course.

#### **3. Active participation in teaching (at least 4 C or at least 8 C if the doctoral candidate is enrolled at the Faculty of Physics or the Faculty of Chemistry)**

**a.** In order to acquire teaching and supervisory competencies, doctoral candidates must participate actively in non-independent teaching and supervision duties in a scope of at least 4 C over the course of the doctoral studies. Doctoral candidates acquire 1 C per WLH for the supervision of students in courses or internships, 2 C for the supervision of lab rotations with a scope of at least 6 weeks and at least 2 C for cooperation in the supervision of bachelor theses. 3 C shall be acquired for

cooperation in the supervision of Diplom (German university degree) or master theses. Completion of said achievement must be confirmed in a certificate issued by a supervisor.

**b.** Unlike under letter a., doctoral candidates enrolled in a doctoral degree programme offered by GGNB at the Faculty of Physics or the Faculty of Chemistry must provide performance records by participation in non-independent teaching in a scope of at least 8 C in accordance with the regulations defined hereafter:

**aa.** Credits shall be awarded in accordance with the workload defined in advance of the teaching event through supervision of exercises, courses or internships; the specified workload must be documented. Completion of said achievement must be confirmed by submission of a certificate by the teacher responsible for the teaching event.

**bb.** In the fulfilment of minimum requirements in a scope of 8 C, doctoral candidates

- i.** have to complete at least 6 C by supervision of exercises, courses or internships, including at least one exercise in the Bachelor or Master degree programme “Physics” in the Faculty of Physics, and
- ii.** may complete no more than 2 C by supervising a bachelor, Diplom (German university degree) or master thesis.

In the event of an interdisciplinary approach in the dissertation, the doctoral candidate may place an application that participation in teaching be completed in sections or at a different faculty other than the faculty at which the doctoral candidate is enrolled; the programme committee shall decide on the basis of a statement by the thesis advisory committee.

#### **4. Active participation in specialist conferences (at least 2 credits).**

2-3 C (depending on the duration of the conference) shall be awarded per specialist conference in the event of successful participation (e.g. poster presentation or lecture). Certification shall be issued by one of the supervisors.

#### **5. Acquisition of key qualifications (at least 1 C).**

An appropriate number of credits, depending on the duration of courses, will be awarded for successful participation in events offered by the university or the graduate centre, intended to acquire key competencies. In the event that modules in the field of key qualifications are attended, the credits specified therein shall be binding. The responsible programme committee shall issue an assessment in other cases.

#### **6. Participation in a seminar on safeguarding good scientific practice**

The performance records must include participation in a seminar on safeguarding good scientific practice in the scope of at least 0.5 C, which must be completed successfully at the latest within one year after the admission to GGNB.

## **7. Progress in the doctoral project**

A written report must be submitted to the thesis advisory committee and shortly thereafter an interview held at the start of the dissertation (no later than after 6 months) and then in intervals of no more than 12 months, intended to provide extensive information on the progress achieved within the doctoral project. The supervisor must confirm that these obligations have been met. Further, the doctoral candidate shall provide the thesis advisory committee with information during these meetings on examination prerequisites already fulfilled. The thesis advisory committee shall provide the doctoral candidate with advice as concerns the selection of teaching events and active participation in courses and specialist conferences. The doctoral candidate shall in each case organise the meetings of the thesis advisory committee.



## **Appendix 12: Programme specific regulations for the Program Computer Science (PCS)**

### **A. Special responsibilities**

(1) For the doctoral programme PCS, an examination committee is formed, which, in addition to the Dean of Studies for Computer Sciences, must include two members of the professorial group accredited for examination in the doctoral programme PCS, as well as a doctoral candidate.

(2) The respective group representatives in the faculty council of the Faculty of Mathematics and Computer Sciences shall appoint the members for two years respectively. The doctoral candidates shall be appointed for one year. A substitute for each member must also be appointed. One member of the professorial group should simultaneously belong to the management board of the Institute for Computer Sciences or the management board of the Centre for Applied Computer Sciences. These management boards can submit proposals to the faculty council for nominations. With regard to the doctoral candidate, the programme coordinator of the doctoral candidates can submit proposals to the faculty council for nominations.

(3) The examination committee selects a spokesperson, as well as a substitute spokesperson, from the professorial group (including the Dean of Studies).

### **B. Special terms**

The doctoral programme PCS can be completed fully or partially as a part-time study. The deadline as defined in § 6 section 6 sentence 1 shall be extended by one semester for each two semesters of part-time studies, respectively. This shall apply accordingly in the event that part-time studies lasted one semester only.

### **C. Qualifications for entry**

Applicants must prove performance from the following areas amounting to an overall of at least 120 credit points (Credits as per ECTS):

- practical Computer Sciences (especially operating systems, distributed systems, software technology, databases and information systems, Electronic data transmission)
- theoretical Computer Sciences (especially algorithms, theory of the logical concept, complexity theory, coding and cryptology, formal logic and semantics, computer algebra, artificial intelligence) as well as
- technical Computer Sciences (especially knowledge from the field of Hardware).

### **D. Performance records:**

At least 21 C must be acquired according to the provisions specified hereafter.

### **1. Research programme**

- Regular participation in the advanced or research course in the supervising specialist group (per individual lecture 3 C)
- Participation in at least one specialist conference in the form of a lecture or poster presentation (per participation 3 C)
- 

### **2. Degree programme (at least 3 C)**

Successful participation in at least one advanced event on the topic of dissertation (per participation the number of credits of the respective course).

### **3. Key qualifications (at least 9 C; of which at least 4 C for participation in non-independent teaching)**

Participation in the non-independent teaching may be in different forms. The opportunities for rendering performances are:

- Participation in the execution of events of Bachelor's and Master's degree in Computer Sciences in consultation with the supervisor(s)
  - In case of lectures, exercises, and internships, 1 C for every 30 working hours, in total, a maximum of 1 C per WLH of the respective lecture, exercise, or the internship
  - In case of seminar courses, 1 C per supervised topic, in total, a maximum of 1 C per WLH of the seminar course
- Co-supervision of project work (1 C per project work)
- Co-supervision of Bachelor thesis (2 C per Bachelor thesis)
- Co-supervision of Master thesis (3 C per Master thesis)

Also, credits can be acquired by participating in key competency courses. The number of credits acquired is based on the credits of the respective course or on the duration of the course (1 C for every 30 working hours). Possible key competency courses are:

- Summer Schools in consultation with the supervisor
- Rhetoric or similar courses in consultation with the supervisor
- Other courses in consultation with the supervisor, which serve to develop other key competencies

## **Appendix 13: Programme specific regulations for the Programme Environmental Informatics (PEI)**

The doctoral programme in environmental informatics at the Faculty for Mathematics and Computer Sciences has the internationalised name 'PhD Programme in Environmental Informatics' (hereafter: PEI).

### **A. Special responsibilities**

(1) For the doctoral programme PCS, an examination committee is formed, which, in addition to the Dean of Studies for Computer Sciences, must include two members of the professorial group accredited for examination in the doctoral programme PCS, as well as a doctoral candidate.

The respective group representatives in the faculty council of the Faculty of Mathematics and Computer Sciences shall appoint the members for two years respectively. The doctoral candidates shall be appointed for one year. A substitute for each member must also be appointed. One member of the professorial group should simultaneously belong to the management board of the Institute for Computer Sciences or the management board of the Centre for Applied Computer Sciences. These management boards can submit proposals to the faculty council for nominations. With regard to the doctoral candidate, the programme coordinator of the doctoral candidates can submit proposals to the faculty council for nominations.

(3) The examination committee selects a spokesperson, as well as a substitute spokesperson, from the professorial group (including the Dean of Studies).

### **B. Special terms**

The doctoral programme PEI can be completed fully or partially as a part-time study. The deadline as defined in § 6 section 6 sentence 1 shall be extended by one semester for each two semesters of part-time studies, respectively. This shall apply accordingly in the event that part-time studies lasted one semester only.

### **C. Qualifications for entry**

Applicants must prove at least an eight-semester study with the completion of a consecutive master course of study amounting to at least 240 C or with an equivalent degree in one of the following subject areas:

- a. computer sciences, environmental informatics, bioinformatics, geoinformatics, medical informatics, business informatics or a similar computer science related subject,
- b. a mathematics and natural sciences subject;

c. forestry or agricultural science or geography, each with a study focus biased toward computer science, or mathematics and natural science.

Included in the above mentioned course of study, proof of at least 30 C of examination prerequisites must be provided in the fields of mathematics/computer science. The examination board shall rule on the specialist equivalence of the previous degree course following a statement submitted by the main supervisor.

#### **D. Thesis advisory committee**

The thesis advisory committee includes at least two PEI-members accredited for examination, who are members of the group of university professors. One member of the thesis advisory committee must be a member of the Institute for Computer Science or must have a research focus within the field of scientific computing. One member of the thesis advisory committee shall have a research focus in the field of bioinformatics, geoinformatics, informatics of ecosystems, medical informatics or business informatics. A further member of the thesis advisory committee may have a research focus in an applications subject (e.g. biology, forestry and forest ecology, agricultural science). The examination committee shall decide on the relevance of the research focus.

#### **E. Performance records**

At least 21 C must be acquired according to the provisions specified hereafter:

##### **1. Research and study programme (at least 5 C)**

Research achievements can be provided in the following ways:

(a) participation in summer schools, workshops, conferences in the field of research of the dissertation in consultation with the main supervisor (1 C each), if required, connected with the candidate's own lecture or poster presentation (then 1C additionally). Thereby, participation in a subject-specific conference with own lecture or poster presentation is mandatory;

(b) active participation in research courses or colloquia in consultation with the main supervisor (2 C each)

(c) successful participation in special lectures in the field of research of the dissertation, or in method or programming courses (per participation the number of credits of the respective course is awarded). Successful participation in at least one such event is mandatory.

##### **2. Teaching achievements (at least 4 C)**

To acquire teaching and supervision competencies, successful participation in non-independent teaching and supervision activities during the doctoral studies must be carried out in consultation

with the main supervisor amounting to at least 4 C. The teaching duties should be related to computer science. Teaching achievements can be provided in the following ways:

(a) participation in the execution of events of the Bachelor's and Master's degree in consultation with the supervisor(s):

- in case of lectures, exercises, and internships, 1 C for every 30 working hours, in total, a maximum of 1 C per WLH of the respective event;

- in case of seminar courses 1 C per supervised topic, in total, a maximum of 1 C per WLH of the seminar course.

(b) co-supervision of project work, Bachelor and/or Master theses (1 C per project work, 2 C per Bachelor thesis, 3 C per Master thesis).

### **3. Acquisition of key competencies (at least 3 C).**

The number of credits acquired is based on the credits of the respective course or on the duration of the course (1 C for every 30 working hours). Possible key competency courses are:

(a) courses with topics outside the research field of the dissertation, which serve in the development of key competencies, in consultation with the supervisor,

(b) language or rhetoric course, or course for Scientific Writing in consultation with the supervisor,

(c) summer Schools outside the field of research of the dissertation in consultation with the supervisor,

(d) events for professional or leadership qualifications, e.g., industry field trips, in consultation with the supervisor.