

Please note: The German text of the Doctoral degree regulations is the exclusively legally binding version. The following English translation is merely provided for reference.

Doctoral degree regulations of the Faculty of Mathematics at Bielefeld University of 16 January 2024

Based on § 2 (4) and § 67 (3) of the Higher Education Act of the State of North Rhine-Westphalia (*Hochschulgesetz*; HG) of 16 September 2014 (GV. NRW. p. 547), last amended by Article 2 of the Act of 5 December 2023 (GV. NRW. p. 1278), the Faculty of Mathematics at Bielefeld University has issued the following doctoral degree regulations in accordance with § 1 sentence 3 of the general regulation of doctoral studies of Bielefeld University (*Rahmenpromotionsordnung*; RPO) of 1 June 2023 (Bielefeld University Gazette – Official Announcements – year 52 No. 7 p. 164):

§ 1 Scope of application (§ 1 RPO)

These doctoral degree regulations apply to all doctoral procedures performed at the Faculty of Mathematics of Bielefeld University (hereinafter referred to as the “Faculty of Mathematics”) and all doctoral degrees awarded by it.

§ 2 Right to award doctorates and doctoral degrees (§ 2 RPO)

(1) At the Faculty of Mathematics, the following doctoral degrees are conferred:

“Doktor*in der Mathematik” (Dr. math.) in the field of mathematics

“Doktor*in der Philosophie” (Dr phil.) in the field of didactics of mathematics

(2) According to § 18, the Faculty of Mathematics at Bielefeld University can also confer the degree of an honorary doctor (“Doktor ehrenhalber”, doctor honoris causa, Dr. h.c.) in recognition of exceptional academic achievements and accomplishments. The doctoral degrees to be conferred according to paragraph 1 then carry the additional specification “honoris causa” h.c.

§ 3 Purpose and forms of the doctorate (§ 3 RPO)

(1) The award of a doctorate is to evidence the ability to perform academic work independently in the area of mathematics or the didactics of mathematics, exceeding the general study objective as defined by § 58 (1) HG.

(2) The doctoral procedure comprises the production of an academically significant paper (doctoral thesis) and an oral exam (colloquium).

(3) Persons who have been accepted as doctoral students by the faculty in accordance with § 6 must enrol until the examinations have been completed and may remain enrolled as doctoral students at Bielefeld University until the doctoral procedure has been completed.

(4) Doctorates can be completed as a doctorate independent of a study programme or as a doctorate in the scope of a doctoral programme at the faculty. In the latter case, the Faculty of Mathematics is either responsible for or it participates in the doctoral programme. The details of a doctoral programme are regulated in the associated study regulations.

§ 4 Responsibilities (§ 4 RPO)

(1) There are two doctoral committees at the faculty: one for the doctorate in mathematics and another one for the doctorate in philosophy. They are responsible for organising the respective doctoral procedures. In particular, the relevant doctoral committee will decide on acceptance as a doctoral student. It may impose conditions in accordance with § 5 if necessary. It will appoint the reviewers for the doctorate, the members of the examination committee, and its chair in accordance with § 9. It will monitor the speedy progress of doctoral procedures and document the number of doctoral students at the faculty. It is also responsible in all cases that are specified elsewhere in these rules. The dean’s responsibility will not be affected in any other respect.

(2) The Faculty Conference will elect the members of the doctoral committees for the doctorate in mathematics and for the doctorate in philosophy. Each of the doctoral committees comprises

- the dean,
- four members of the group of university lecturers,
- a member with a doctorate from the group of academic staff who is an authorised examiner,
- one member from the group of students, and
- one member from the group of technical and administrative employees.

In the doctoral committee for the doctorate (Dr. phil.) two out of the four members from the group of university lecturers and the member from the group of academic staff have to represent the didactics of mathematics in research and teaching; the member from the group of students must be enrolled in a teacher training programme. The term of office of the members from the student group is one year, the term of office of the other members is two years each. Re-election is permitted. Regarding decisions relating to examination results, only those members of the doctoral committee who have a doctoral degree are entitled to vote (§ 65 (1) HG).

(3) The respective doctoral committee is chaired by the dean. They may transfer their chair to one of the members of the group of university lecturers at any time. The committee will have a quorum if at least five members are present, including the chair and one other member from the group of university lecturers. It will pass its resolutions by a simple majority. In the case of a tie, the chairperson has the casting vote.

(4) The doctoral committee may delegate conduct of its tasks to the chairperson. This does not apply in any cases involving unfavourable decisions relating to legal remedies.

(5) The doctoral committee is an authority within the meaning of administrative procedural law.

§ 5 Access requirements (§ 5 RPO)

- (1) Access to the doctoral procedure for Dr. math. and Dr. phil. requires the completion of
- a) relevant university studies in a standard period of study of at least eight semesters for which a degree other than "Bachelor" is conferred, or
 - b) relevant university studies in a general standard period of study of at least six semesters and appropriate subsequent studies in the doctoral subjects in preparation for the doctorate, or
 - c) a relevant Master course within the meaning of § 61 (2) sentence 2 HG.

Degrees in mathematics or in a subject related to mathematics are relevant degrees for a doctoral procedure in mathematics. The preparatory studies for the Dr. math. doctorate generally comprise 60 credit points in case b). Degrees from teaching degree programmes with a subject focus on mathematics are relevant for a Dr. phil. doctorate. If a candidate who meets the access requirements for a doctoral procedure for a Dr. math. degree aims for a Dr. phil. degree doctorate, preparatory studies in didactics of mathematics at a scope of 20 credit points will be required for the doctorate. The preparatory studies for the Dr. phil. doctorate in case b) generally comprise 60 credit points. Up to 40 credit points of these may be earned through practical elements (such as a successful teacher traineeship or professional activity in the teaching profession). Studies in preparation for the doctorate can be completed within the scope of a relevant Master course. The requirements in this respect must be included in the notice regarding acceptance as a doctoral student in accordance with § 6 (4). The conditions must be met by the time the doctoral procedure is commenced. If there is any doubt, the doctoral committee responsible in accordance with § 4 may decide on the relevance of the previous degree following an admission interview with the applicant. This also must consider the quality and feasibility of the intended doctoral project.

(2) The preparatory studies for the doctorate that are required for access to the doctorate will also be deemed completed upon successful completion of a relevant doctoral programme or other recognised programme of structured doctoral training.

- (3) Foreign degrees must be recognised by the relevant doctoral committee in accordance with § 63a HG. The following applies to evaluation of international qualifications apart from the rules of the Higher Education Act:
- the Convention on the Recognition of Qualifications concerning Higher Education in the European Region of 11 April 1997 (BGBl. 2007 II p. 712, et seq. – Lisbon Convention) and the implementing provisions issued in this regard, each as amended,
 - equivalence agreements of the Federal Republic of Germany with any other states, and
 - bilateral declarations of the Standing Conference of the Ministers of Education and Cultural Affairs/university rectors' conference.

The evaluation proposals of the secretary's office of the Standing Conference of the Ministers of Education and Cultural Affairs of the States – Central Office for Foreign Education – will be used for the evaluation.

(4) The doctoral student must submit evidence of adequate knowledge of English or German if the language in which they wish to complete their doctorate is not their educational or first language. The requirements regarding German and English language skills are set out in items 2 a. and b. of the Bielefeld University guidelines on language proficiency in German and English of 21 March 2023, as amended.

§ 6 Acceptance as a doctoral student (§ 6 RPO)

(1) Anyone who intends to write a doctoral thesis and meets the access requirements in accordance with § 5 has to apply for acceptance as a doctoral student at the competent doctoral committee of the faculty in time as provided for in § 4.

(2) By accepting a doctoral student, the faculty expresses its general willingness to evaluate a doctoral thesis about the proposed subject as an academic work and to supervise and support the doctoral student in the writing of their paper.

- (3) The following documents are to be enclosed with the application:
- evidence of meeting the access requirements in accordance with § 5,
 - a statement of the intended topic of the doctoral thesis and the supervisor as well as a declaration by the supervisor that they will take on supervision,
 - a CV detailing personal and professional development,
 - a declaration regarding any current or previous doctoral attempts, indicating the point of time, the subject, and the faculty/university department where the candidate applied to commence the doctoral procedure,
 - the language in which the doctoral thesis is to be written.
- (4) The competent doctoral committee of the faculty – as defined by § 4 – usually decides on the application within 2 months, and for doctoral programmes at the respective start date of the degree programme. Acceptance as a doctoral student will be denied
- if access requirements are not met,
 - if the proposed topic is not within the specific direction of the faculty, or if no supervisor can be identified who has the appropriate expertise to supervise the topic or language, or if supervision cannot be ensured for the duration of the doctoral procedure,
 - if none of the eligible supervisors regards the subject as meritable or appropriate to the applicant's previous education, or
 - if the provision of resources to conduct the proposed project is not assured.
- (5) Being accepted as a doctoral student does not imply a legal claim to commence the doctoral procedure.
- (6) The applicant is to be informed of the decision on acceptance or rejection as a doctoral student in writing. Reasons will be given for a rejection and the decision must be accompanied by an instruction on the legal right to appeal.
- (7) Acceptance as a doctoral student is initially limited to a period of up to 5 years; it can be extended by the responsible doctoral committee upon justified application by the doctoral student. The doctoral student must write a report on the status of the doctoral project, upon which the supervisor will submit a statement, in addition to the application.
- (8) Acceptance as a doctoral student may be revoked in particular if any reasons for a rejection of the acceptance as a doctoral student appear subsequently or if there is no prospect that the doctoral thesis can be successfully completed within an appropriate period of time, or if the supervision agreement in accordance with § 7 (3) is invalid or has been legally cancelled.

§ 7 Supervision (§ 7 RPO)

- (1) The doctoral committee appoints a supervisor with primary responsibility upon acceptance of a doctoral student. A second supervisor can be appointed in justified cases. The doctoral student has the right to make a proposal. The members of the group of university lecturers entitled to vote in accordance with the HG and members of the faculty co-opted under examination law or other habilitated members of the faculty entitled to vote in accordance with the HG may be proposed as supervisors. The doctoral student may also propose emeritus and retired university lecturers, Privatdozenten [senior lecturers], or honorary professors as supervisors in coordination with the responsible doctoral committee. Lecturers with a doctorate who have conducted independent research and teaching for at least four years, including two at Bielefeld University, may be proposed as main supervisors with the approval of the doctoral committee in exceptional cases. Supervisors from other faculties or universities with appropriate qualifications should also be appointed in the case of interdisciplinary or cross-faculty papers or cooperative doctoral projects. A supervisor appointed within the scope of a cooperative doctoral project with a university of applied sciences must be habilitated or have completed academic achievements that are equivalent to habilitation. This must be formally determined by the faculty. This determination will be valid for five years in each case. If a supervisor leaves the university or becomes emeritus or retired, they will retain the right to complete supervision of a doctorate that has been commenced and to be appointed as reviewer and to the examination committee in accordance with § 9 (2) with the consent of the doctoral student and the responsible doctoral committee; they will be considered a member of the faculty for this procedure.
- (2) In the case of death or serious illness of the supervisor or for any other good cause, the doctoral committee will strive to find a replacement supervisor.
- (3) A supervision agreement in accordance with the faculty's template will be entered into between the doctoral student and the supervisors. The supervision relationship established by the supervision agreement can only be terminated by the supervisors for good cause.

§ 8 Opening of the doctoral procedure (§ 8 RPO)

- (1) The application for opening of the doctoral procedure must be submitted to the faculty's doctoral committee responsible in accordance with § 4. The following documents have to be enclosed with the application:
- a) notice of acceptance as a doctoral student in accordance with § 6,
 - b) if applicable, evidence of studies in preparation for the doctorate and/or compliance with any further requirements,
 - c) a CV detailing personal and professional development,
 - d) if applicable, a list of academic publications and academic presentations,
 - e) five copies of the doctoral thesis and an electronic version,
 - f) in the case of an academic paper in which several works, including those already published in coordination with the supervisors, are incorporated with the participation of the doctoral student: A detailed synopsis, an appraisal of the individual contribution made, and the contributions of the other authors to the respective publications as well as a sworn statement regarding the student's own contribution in accordance with § 10 (2),
 - g) in the case of teamwork: a report jointly written by the persons involved regarding the collaboration on the doctoral thesis, indication of the individual authorship of the respective parts of the doctoral thesis, furthermore indication of names, academic titles, addresses of the persons involved in the group work as well as information on the question as to whether any persons and – if applicable – which persons have already applied for a doctoral procedure, or completed such a procedure, using parts of the submitted paper,
 - h) a declaration stating
 1. that the doctoral student is familiar with the applicable doctoral degree regulations of the faculty,
 2. that the doctoral student has prepared the doctoral thesis on their own (declaration of independence), has not adopted any text passages from any third parties or their own examination papers without marking such citations, and has indicated all tools and sources used by them in their work,
 3. that no third parties have directly nor indirectly received any monetary benefits from the doctoral student for mediation activities or for work related to the content of the submitted doctoral thesis,
 4. that the doctoral student has not yet submitted the doctoral thesis for examination for a public or other academic examination, and
 5. whether the doctoral student has submitted the same paper, a paper similar in essential parts or another paper as a doctoral thesis to another university and, if applicable, with which results.
 6. whether or not the doctoral student objects to the oral exam being held with public access in accordance with § 11 (5),
 - i) the information required by the Higher Education Statistics Act on stays abroad that are relevant for the doctorate.

(2) The application may be withdrawn. Withdrawal is excluded if an opinion has already been submitted to the competent body.

(3) The decision on opening of the doctoral procedure is taken by the competent doctoral committee in accordance with § 4. The doctoral student receives a written notice concerning the opening of the procedure.

§ 9 Examination committee (§ 9 RPO)

(1) The doctoral exam is assessed by an examination committee to be determined by the competent doctoral committee in accordance with § 4 when deciding on opening of the doctoral procedure. The members of the Faculty of Mathematics who are entitled to vote in accordance with the HG and any co-opted members under examination law must have a majority on the examination committee. Co-opted members of the faculty under the examination regulations will be considered members of the faculty with voting rights in doctoral procedures.

(2) The doctoral committee will appoint the members of the examination committee. The examination committee generally comprises two, or in accordance with § 10 (8) sentence 2 or § 10 (9) sentence 3, three appointed reviewers, as well as at least two further examiners for the oral exam. At least one of these must belong to the group of university lecturers. Members of the group of university lecturers and habilitated researchers generally can be reviewers. The main supervisor should be appointed as a reviewer. One of the reviewers must not be the supervisor or co-author of a thesis in accordance with § 10 (2) at the same time. The examination committee will be chaired by an authorised member of the doctoral examination committee appointed by the doctoral committee responsible in accordance with § 4. This person must be a member of the group of university lecturers in the Faculty of Mathematics. Supervisors and reviewers must not be chairpersons of the examination committee. For interdisciplinary or cross-faculty doctoral projects, it is to be ensured that the composition of the examination committee is interdisciplinary or cross-faculty and that the reviewers are appointed accordingly. If a person appointed within the scope of a cooperative doctoral project with a university of applied sciences is to be appointed as a reviewer, § 7 (1) sentences 8 to 10 will apply accordingly. When working towards the degree Dr. phil., at least half of the examination committee must represent the didactics of mathematics in research and teaching.

(3) The examination committee is meeting in non-public sessions. Its decisions are to be documented in a record. The examination committee will decide in an open vote by a simple majority; if the vote ends in a tie, the chairperson has the casting vote. Abstentions are not permitted.

(4) The professors' rights to participate in a doctoral procedure are not affected by receiving emeritus status nor by retirement. If the supervisor has left the university and continues to supervise the doctorate in accordance with § 7 (1) sentence 10, they may also be appointed as a reviewer and will continue to be a member of the faculty.

§ 10 Doctoral thesis (§ 10 RPO)

(1) The doctoral exam comprises an independent and methodologically flawless academic paper written in an appropriate presentation, through which the doctoral student makes their own contribution to research, which expands the boundaries of knowledge, and which stands up to peer review (doctoral thesis). The thesis can be submitted either as a classic monograph (individual work), as a monograph with already published parts according to paragraph 2, or as teamwork in accordance with paragraph 3.

(2) An academic treatise in which several works, including previously published works with the participation of the doctoral student, are incorporated can also be submitted as a possible form of monograph upon coordination with the supervisors. Such work must have been written under the common academic question of the paper; it must be preceded by a detailed synopsis summarising the most important findings from the publications in the context of the academic literature on the topic, as well as an assessment of the individual contribution and the contribution of the other authors to the respective publications. In the case of co-authorships, the doctoral student's share must be clearly identified, and a sworn statement must be made regarding their personal contribution. The doctoral student must also inform all authors about the use of the work within the scope of a doctoral thesis as well as about their statement on their personal contribution and must ensure that no copyrights are infringed by use of the work, also with regard to the publication of the doctoral thesis. Supervisors may be co-authors; § 9 (2) sentence 5 must be observed. The submitted paper must have the overall academic status of an individual thesis.

(3) A doctoral thesis prepared jointly with others (teamwork) may also be submitted as a doctoral thesis if that form of work is appropriate to the topic for methodological and practical reasons. The academic relevance of a team project should clearly exceed that of an individual project. A joint report on the progress of the cooperation must be submitted with the paper. It must be possible to clearly distinguish the individual academic achievements. They must meet the requirements for an independent examination result in accordance with paragraph 1.

(4) The doctoral thesis usually must be written in German or English. The doctoral thesis must contain a title page, a table of contents, an abstract, and a bibliography.

(5) Each reviewer has to submit an opinion, including reasons, in written and electronic forms to the competent doctoral committee in accordance with § 4, usually within two months of their appointment as reviewer.

(6) The reviewers examine in detail and independently from each other whether the submitted doctoral thesis can be accepted toward the doctoral exam results, whether it has to be rejected or returned for revision. They will assess the academic performance of a paper to be accepted in their written opinions and award the following grades:

- a) very good work (magna cum laude)
- b) good work (cum laude)
- c) sufficient work (rite).

A paper to be rejected will be evaluated as "failed (non rite)". In the case of extraordinary academic achievement, the distinction "outstanding work (summa cum laude)" may be awarded. The assessment criteria to be observed for awarding of distinctions will be passed by the doctoral committee responsible in accordance with § 4.

(7) The chair of the examination committee will record the receipt of the opinions. If all available opinions recommend the grade "Outstanding (summa cum laude)", but the prerequisite for the award of the grade "Outstanding (summa cum laude)" in accordance with paragraph 9 sentence 3 is not yet met, the doctoral committee responsible in accordance with § 4 must appoint another reviewer without undue delay. The additional opinion should be available within two months of being requested. Once all opinions have been received, the doctoral thesis will be provided for inspection together with the opinions and the annexes in accordance with § 8 (1) d), f), and g). The chair of the doctoral committee will inform the doctoral student, the members of the group of university lecturers, the members of the doctoral committee responsible in accordance with § 4, the examination committee, and the members of the faculty who have completed their doctorate of this provision for inspection. The members of the doctoral committee responsible in accordance with § 4 and the examination committee as well as the doctoral members of the Faculty of Mathematics, and in the case of interdisciplinary doctorates, the doctoral members of the other faculty or faculties of Bielefeld University who provide the reviewers, have the right to inspect the thesis for a period of two weeks and to appeal the recommendation of acceptance, rejection, or evaluation of the doctoral thesis in writing. Objection must be announced in writing within the fourteen-day display period and must be submitted to the dean's office within a further fourteen days with a written justification. The doctoral student then has the right to inspect the opinions and any objections and to submit a technical statement at the

scope of an opinion within fourteen days after the end of the period of provision for inspection or after receipt of the written objection. If a technical statement is received, the doctoral thesis and its annexes in accordance with § 8 (1) d), f) and g), the opinions, any objections, and the technical statement will be made available for inspection again for a period of fourteen days.

(8) The following will apply if no objection has been lodged in time in accordance with paragraph 7: If the opinions unanimously recommend acceptance of the doctoral thesis, it will be accepted; if the opinions unanimously recommend rejection of the doctoral thesis, it will be rejected; and if the opinions unanimously recommend that the doctoral thesis be returned for revision, the doctoral thesis will be returned for revision in accordance with paragraph 10. If an objection has been submitted in time in accordance with paragraph 7 or if the opinions differ in their recommendation for acceptance, rejection, or revision of the doctoral thesis or, in the case of a recommendation for acceptance, if they differ by more than two grade levels, the doctoral committee competent in accordance with § 4 will appoint another reviewer without undue delay after hearing the doctoral student in accordance with § 9. The additional opinion should be available within two months of being requested. The additional reviewer will become a member of the examination committee. The additional opinion must be provided for inspection with the doctoral thesis for a period of one week within the meaning of paragraph 7; no further objections or technical statements will be permitted. The examination committee will decide in accordance with § 9 (3) on whether the doctoral thesis is accepted or rejected, or whether it is returned for revision in accordance with paragraph 10; the decision will be taken under consideration of the recommendations of all opinions.

The examination committee will decide on whether the doctoral thesis is accepted, rejected, or returned for revision in accordance with paragraph 10 in accordance with § 9 (3) under consideration of the recommendations of all opinions.

(9) If the doctoral thesis is accepted, the examination committee will determine a grade in accordance with paragraph 6 sentence 2 based on the opinions and the objections and statements. If the evaluation proposals are inconsistent, a decision will be made by vote in accordance with § 9 (3) sentences 3 and 4. At least three opinions must be available, at least one of which must not have been written by a member of Bielefeld University, and all opinions available must agree that the doctoral thesis is “outstanding (summa cum laude)” in order to award the distinction “outstanding (summa cum laude)”.

(10) The examination committee may return the doctoral thesis to the doctoral student once with conditions. In this case, the doctoral committee will set a reasonable deadline of generally no more than six months. A revised version of the doctoral thesis must be submitted within that period. The doctoral thesis will be treated as rejected if the candidate fails to meet this deadline without cause. The doctoral procedure will be suspended until this revised version is submitted on time. The doctoral procedure will be reinstated starting with paragraph 5 if the revised version is submitted in time.

(11) Rejection of the doctoral thesis and the reasons for it must be communicated to the doctoral student in writing without undue delay, with instructions on the legal right to appeal. The doctorate will be deemed failed if the doctoral thesis is rejected.

§ 11 Oral exam results (§ 11 RPO)

(1) If the doctoral thesis has been finally accepted, the oral exam will take the form of a colloquium lasting 60 minutes as a rule. The oral exam will be held in German or in English. The oral exam may be conducted with the aid of audiovisual transmission technology authorised by the rectorate in justified cases and in agreement with the chair of the examination committee. Further details are stipulated in § 11 (2) sentences 2 and 3 RPO.

(2) The oral exam will take place no later than eight weeks after acceptance of the doctoral thesis. A longer deadline can only be permitted with the agreement of the doctoral student. The oral exam must be announced to the faculty in time.

(3) The colloquium allows the doctoral student to evidence, face to face with the members of the examination committee, their thorough independent engagement with major subjects of the area of expertise and their knowledge of the latest research. This is usually done by presenting the most important results of the doctoral thesis in an approximately 20-minute presentation by the doctoral student, followed by an academic discussion. The colloquium will be chaired by the chair of the examination committee. The chair may also allow the persons present to ask the doctoral student questions about the doctoral thesis and presentation after the chairperson has given the floor.

(4) A record of the essential aspects and results of the oral exam is to be kept.

(5) The oral exam is open to the public, provided that the doctoral student has not objected to this at the beginning of the doctoral procedure (in accordance with § 8 (1) h) no. 6). The public is to be excluded from the assessment discussions and announcement of the exam result.

(6) The examination committee decides in a non-public session following the oral exam whether the oral exam has been passed; it evaluates the oral exam in accordance with § 10 (6) sentence 2. If the evaluation proposals are inconsistent, a decision will be made by vote in accordance with § 9 (3) sentences 3 and 4. In the case of a tie, the chairperson has the casting vote.

(7) Upon application, a failed oral exam can be repeated once within 12 months, but no earlier than after two months. In case of a repeated failure, the attempt to obtain the doctoral degree is finally considered to have failed. The doctoral student receives a corresponding notice with instruction on the legal right to appeal from the faculty's doctoral committee responsible in accordance with § 4.

§ 12 Overall grade of the doctorate (§ 12 RPO)

(1) The overall examination is passed if the doctoral thesis is accepted, and the oral exam is passed.

(2) Following a successful oral exam, the examination committee determines the overall grade. The overall grade is based on the following grading scheme:

- a) very good (magna cum laude)
- b) good (cum laude)
- c) sufficient (rite).

The overall grade "outstanding (summa cum laude)" will be awarded only in the case of extraordinary academic achievements.

(3) The overall grade results from the grades of the doctoral thesis and the oral exam results. The doctoral thesis will be weighted more than the oral exam. If the evaluation proposals are inconsistent, a decision will be made by vote in accordance with § 9 (3) sentences 3 and 4.

(4) The overall grade "outstanding (summa cum laude)" will only be awarded if the doctoral thesis and the oral exam have both been graded "outstanding (summa cum laude)".

(5) The result of the examination procedure will be communicated to the doctoral student by the chairperson of the examination committee at once after the oral exam.

§ 13 Completion of the doctorate and certificate (§ 13 RPO)

(1) Following the decision of the examination committee, the dean issues a preliminary certificate concerning the passing of the examination to the person concerned. This certificate includes the title and evaluation of the doctoral thesis, the assessment of the oral exam result, as well as the overall grade. The doctoral student is being informed in an accompanying letter that they are not permitted to use the academic degree of a doctor or a similar designation until the doctoral degree certificate has been issued.

(2) In issuing the doctoral degree certificate, the dean confers the doctorate. This doctoral degree certificate contains the doctoral degree received. The enclosed doctoral examination certificate includes the title of the doctoral thesis, its evaluation, and the evaluation of the oral exam as well as the overall grade of the doctorate. The date of the oral exam will be given as the date of the doctorate. The doctoral degree certificate and doctoral examination certificate are to be signed by the dean of the faculty and applied with that faculty's seal. Both graduation documents are issued in English upon request.

(3) The doctoral degree certificate and the doctoral examination certificate are not to be handed over until publication of the doctoral thesis has been ensured in accordance with § 14 or a publication contract has been concluded with a publisher.

§ 14 Publication of the doctoral thesis (§ 14 RPO)

(1) The doctoral student is obligated to make the doctoral thesis accessible to the academic public in an appropriate manner through reproduction and distribution. This obligation represents a unit within the meaning of an academic achievement.

(2) Depending on type, the doctoral thesis must be marked as "doctoral thesis for the award of the academic degree of Doctor of Mathematics or Doctor of Philosophy of the Faculty of Mathematics at Bielefeld University" on the title page or in the synopsis.

(3) If a reviewer imposes any requirements to the version for publication, this must be approved by the chair of the examination committee before publication after endorsement by the reviewer. The doctoral student has the right to implement recommendations of the examination committee and to make further editorial changes before publication of the doctoral thesis, provided that these do not significantly change the academic core of the doctoral thesis and the changes are approved by the chairperson of the examination committee.

(4) The doctoral thesis is made available to the academic public in an appropriate manner if, in addition to the copies required for the examination procedure, the candidate delivers a copy of the version of the doctoral thesis disseminated by a) to d), which must be printed on age-resistant wood- and acid-free paper and bound in a durable manner, to the faculty free of charge and also ensures its dissemination by:

Either

- a) submission of an electronic version, the data format and data carrier of which must be agreed with the University Library, or
- b) proof of distribution (1) in book trade by a commercial publisher via a print process with a first print run or (2) by using a print-on-demand process with guaranteed availability for at least five years, or (3) via an electronic version (e-book) or
- c) delivery of a further four copies, each in book or photo print, or
- d) proof of publication in a journal.

In cases a) to d), two copies printed on age-resistant wood- and acid-free paper and bound in a durable binding must be submitted to the faculty free of charge for storage in the Bielefeld University Library. The obligation to publish is deemed to have been met in such cases when the required copies of the doctoral thesis have been submitted and a contract with an editor or a publisher has been concluded stating that the doctoral thesis will be published. In cases a) and c), the candidate will transfer the right to produce and distribute further copies of their doctoral thesis or to make it available in data networks within the scope of the statutory tasks of the university libraries to the university.

In cases a) and c), the doctoral committee may also consider the obligation to publish to have been met if the doctoral thesis is made accessible to the public with a delay due to a blocking notice resulting from a patent application procedure. The prerequisite for this is that the doctoral student must have completely met the respective submission requirements, the date on which the publication will take place at the latest must be evident from the blocking notice, and it must be possible to perform publication through the University Library without any further action by the doctoral student or a third party. A blocking notice may be requested for a maximum period of two years.

§ 15 Fraud, invalidity of doctoral exam results, and withdrawal of the doctoral degree (§ 15 RPO)

(1) After having heard the doctoral student, the doctoral committee competent in accordance with § 4 can declare the doctoral exam results void if it is established before the conferral of the doctorate that the doctoral student has committed academic fraud in their doctoral exam results or that any essential requirements of the doctoral procedure have been misrepresented.

(2) The doctoral degree can be withdrawn if

- a) it is found out subsequently that it was obtained through academic fraud in the doctoral exam results or through fraudulent misrepresentation of essential requirements for the doctoral procedure;
- b) the person holding the doctoral degree has been convicted of a deliberate criminal act misusing their doctoral degree when preparing or committing this criminal act.

(3) If any requirements for access to the doctorate were not met without the doctoral student's intention to deceive and if this fact emerges only after issuing the certificate, this impediment will be remedied by virtue of having passed the doctoral exam.

(4) The Faculty Conference decides on the withdrawal by a majority of its members holding a doctorate after the dean has heard the person concerned.

§ 16 Inspection (§ 16 RPO)

The doctoral student has the right to inspect the doctoral documents within one year of completing the doctoral procedure.

§ 17 Legal remedy against decisions made in the doctoral procedure (§ 17 RPO)

(1) The doctoral student may file legal remedy against any unfavourable notices issued based on these rules in writing with the competent body in accordance with § 4 within one month. The competent body in accordance with § 4 (4), (5) decides on the legal remedy, if necessary, after hearing the examination committee.

(2) An objection and objection procedure will be subject to the provisions stipulated in the Rules of the Administrative Courts (*Verwaltungsgerichtsordnung*)

§ 18 Honorary doctorate (§ 18 RPO)

(1) The Faculty of Mathematics may award the degree of an honorary doctor in accordance with § 2 (2), in recognition of exceptional academic achievements or other exceptional merits in their areas of expertise.

(2) Under consideration of the submitted statements, the Faculty Conference decides on the application for conferral of the honorary doctorate submitted by at least two faculty members with a doctoral degree with voting

rights under the HG; the decision requires a majority of three quarters of votes of those members who have a doctoral degree and voting rights.

(3) The dean confers the honorary doctorate by issuing a certificate signed by the dean, recognising the academic achievements of the honoured person.

§ 19 Joint doctorate with other universities (§ 19 RPO)

(1) The Faculty of Mathematics will also award the degree of Doctor of Mathematics or Doctor of Philosophy in cooperation with a foreign partner university or faculty. It will also participate in awarding of a corresponding academic degree by the foreign partner university or faculty.

(2) Implementation of the doctoral procedure in accordance with paragraph 1 requires an agreement with a foreign partner university or faculty in which both universities or faculties undertake to facilitate a joint doctorate and to regulate the details of the cooperation.

(3) Proof of the academic qualification required for the doctorate must be rendered by the applicant in the form of the doctoral exam results. These comprise an academic paper (doctoral thesis) and an oral exam.

(4) The provisions of the RPO and of §§ 3 to 16 will apply to the doctoral procedure in accordance with paragraph 1 sentence 1, unless otherwise specified below. The provisions of the agreement in accordance with paragraph 2 will apply to the cooperation in accordance with paragraph 1 sentence 2.

(5) § 5 applies with the proviso that the applicant is also authorised to do a doctorate at the partner university or faculty.

(6) § 6 (1) applies with the proviso that the application must also include:

- a) a declaration from the partner university or faculty that access to the doctoral procedure is approved,
- b) if applicable, proof of completing a study programme at the partner university or faculty in accordance with paragraph 7.

(7) The doctoral student must be enrolled as a regular or doctoral student at the partner university or faculty for at least one semester while working on their thesis. Students who have already completed a study programme of a corresponding duration at the partner university or faculty may be exempted from this requirement.

(8) The doctoral thesis must be written in German or English or in a language specified in the partnership agreement. A summary in the respective other language must be added. As a rule, the supervisors of the doctoral thesis are an authorised examiner of the Faculty of Mathematics in accordance with § 7 (1) and an authorised member of the partner university or faculty.

(9) As a rule, the doctoral thesis will be assessed by one authorised examiner of the Faculty of Mathematics in accordance with § 9 (2) and one reviewer appointed by the partner university or faculty each. Paragraph 8 sentence 1 applies accordingly to the language of the opinions and the oral exam.

(10) The provisions of § 9 apply to the examination committee in the case of a doctoral procedure in accordance with paragraph 1 sentence 1, with the proviso that at least one of the examiners may belong to the partner university or faculty.

(11) The provisions of § 11 apply accordingly to the oral exam. Different details of the procedure, form, and duration of the oral exam may be stipulated in the agreement with the partner university or faculty if the doctoral committee agrees to these deviations.

(12) § 13 applies to completion of the doctoral procedure, with the proviso that the cross-border doctoral procedure must be referred to in the doctoral degree certificate and in the doctoral examination certificate. An accompanying letter will inform the doctoral student that the title must only be used either in the form awarded by the Faculty of Mathematics or in the form awarded by the partner university or partner faculty. Certification may take place either

- a) in a joint final document signed and sealed by the dean of the faculty and the responsible representative of the partner university or partner faculty, or
- b) in separate final documents in the respective national languages. The dean of the faculty will sign and seal the certificates for the Faculty of Mathematics. The partner university or faculty will prepare its final documents in accordance with its own rules and, if necessary, arranges for the state certification of the jointly supervised doctorate.

(13) Paragraphs 1 to 11 equally apply to doctoral procedures with another German university authorised to award doctorate. Paragraph 12 applies accordingly to that degree, with the exception of the two languages on the certificate.

§ 20 Withdrawal from the oral exam; disadvantage compensation (§ 20 RPO)

The regulations on withdrawal and the regulations on disadvantage compensation in the Examination Regulations Framework of Bielefeld University of 18 December 2020 (Bielefeld University Gazette – Official Announcements – Year 49 No. 16 p. 256), amended by rules of 30 November 2023 (Bielefeld University Gazette – Official Announcements – Year 52 No. 15 p. 283) as amended apply accordingly to the withdrawal from the oral exam and the application of any disadvantage compensation.

§ 21 Scope of application and transitional provisions (§ 21 RPO)

(1) These doctoral degree regulations will apply to all doctoral students who submit an application for opening of the doctoral procedure after these rules enter into effect in accordance with § 22.

(2) Doctoral students who have submitted an application to start the doctoral procedure before these rules enter into effect will complete their doctoral procedure in accordance with the doctoral degree regulations of 2 March 2020 (Bielefeld University Gazette – Official Announcements – year 49 No. 2 p. 56).

§ 22 Entering into effect

(1) These doctoral degree regulations enter into effect on the day following their publication in the Bielefeld University Gazette – Official Announcements.

(2) At the same time, the doctoral degree regulations of the Faculty of Mathematics of 2 March 2020 (Bielefeld University Gazette – Official Announcements – year 49 No. 2 p. 56) will cease to apply, notwithstanding the provision in § 21 (2).

No complaints

Claims from violation of any procedural or formal rules of the HG NRW or the university's regulatory or other autonomous law by these rules can only be asserted within one year of their publication, except if

- a) the rules have not been duly published,
- b) the rectorate has previously objected to the decision of the body adopting the rules,
- c) the university has been notified of the formal or procedural defect in advance and the violated legal provision and the fact giving rise to the defect have been designated in the course of this, or
- d) the legal consequence of the exclusion of complaint was not referred to in the public announcement of the rules.

The supervisory authorisations under § 76 HG will not be affected by this.

Issued based on the resolution of the Faculty Conference of the Faculty of Mathematics of Bielefeld University of 30 November 2023.

Bielefeld, 16 January 2024

The rector
of Bielefeld University
University Professor Dr Angelika Epple