

Bei der vorliegenden Übersetzung handelt es sich um eine nichtamtliche Lesefassung der Besonderen Bestimmungen für Promotionen des Fachbereichs Mathematik und Naturwissenschaften der Universität Kassel zu den Allgemeinen Bestimmungen für Promotionen an der Universität Kassel (AB-PromO) vom 14. Juli 2021.

Maßgeblich und rechtlich verbindlich ist nur der im Mitteilungsblatt der Universität Kassel veröffentlichte Text.

*The translations do not have any legal binding effects, the official versions in German are published in Mitteilungsblatt der Universität Kassel.*

## **Special Provisions for the Faculty of Mathematics and Natural Sciences at the University of Kassel related to the General Provisions for Doctoral Degrees at the University of Kassel (AB-PromO) dated 7 February 2024**

### **§ 1 Scope of application**

According to Section 24 of the AB-PromO, the Faculty of Mathematics and Natural Sciences at the University of Kassel is issuing the following Special Provisions to complement the General Provisions for Doctoral Degrees at the University of Kassel (AB-PromO), both in their latest version.

### **§ 2 Doctoral degrees, doctoral degree subjects**

According to Section 1 Para. 3 of the AB-PromO, the Faculty of Mathematics and Natural Sciences awards these academic doctoral degrees following the completion of a proper doctoral procedure:

- Doctor of Sciences (Dr. rer. nat.) in the doctoral degree subjects of mathematics, biology, chemistry, nanostructure sciences and physics;
- Doctor of Sciences (Dr. rer. nat.) or a Doctor of philosophy (Dr. phil.) in the doctoral degree subjects of didactics of mathematics, biology, chemistry, physics or history, geography and science education. The Dr. rer. nat. degree is normally awarded if the conditions in Section 4 (1) have been fulfilled, while the Dr. phil. degree is normally awarded in the other cases. On request, the doctoral examination committee can decide on any deviations from this rule.

### **§ 3 Doctoral examination committee**

According to Section 2 Para. 1 of the AB-PromO, the Faculty of Mathematics and Natural Sciences must form a doctoral examination committee for the doctoral degrees that it awards.

### **§ 4 Acceptance requirements**

- (1) According to Section 3 Para. 1 of the AB-PromO, the crucial precondition for acceptance as a doctoral candidate is the completion of a relevant academic degree in the subjects of mathematics, biology, chemistry, nanostructure sciences and physics or related subjects, or a teaching degree for grammar schools in one of the aforementioned subjects.
- (2) The doctoral examination committee must complete an eligibility assessment procedure on the basis of the written application documents. It can decide that the assessment of eligibility may only take place after the fulfilment of certain imposed conditions (attending units of instruction, completing coursework and examination work). Candidates with a degree in line with Section 3 Para. 2 of the AB-PromO are accepted as doctoral candidates after successfully passing an assessment of eligibility. The assessment of eligibility takes place for the relevant subject according to the examination regulations. The doctoral examination committee may ask the supervisor for a specialist recommendation about imposing possible conditions. The doctoral examination committee must determine and communicate the type and scope of the coursework and examination work that needs to be completed. The doctoral examination committee makes the final assessment of eligibility after the (digital) presentation of the graded examination work.

- (4) The grade “good” is set as the minimum grade in the university degree for acceptance as a doctoral candidate for the doctoral degree subjects in the Faculty of Mathematics and Natural Sciences. The doctoral examination committee may deviate from this in well-founded exceptional cases and issue certain imposed conditions to balance out grades. Subsequent exams can be set in modules that are relevant to the doctoral degree, which were previously assessed as “adequate” or “satisfactory”, and they must be passed with at least the grade “good”. It is not possible to repeat the examinations. Acceptance is withdrawn if the candidate does not pass.

### **§ 5 A cumulative thesis**

- (1) The thesis may also be written in a cumulative format as an alternative to a monograph. A cumulative thesis involves at least two articles that have undergone an assessment procedure (peer review) for internationally conspicuous specialist journals and have then been verifiably accepted for publication or have already been published. Only experimental, empirical or theoretical original work is relevant here, not, however, review articles.

Two publications must have been written as the lead author in the subject of biology. No more than one publication may have been written with shared lead authorship. Alternatively, the shared lead authorship may be replaced by two articles where the doctoral candidate is the second author.

Three publications must have been written as the lead author in the subject of chemistry. No more than two publications may have been written with shared lead authorship.

A cumulative thesis may be written in the subject of physics in well-founded cases (for example, as part of a doctoral programme or as part of international collaborations); this must normally involve at least three publications as the lead author.

Evidence of two articles where the doctoral candidate has a substantial authorship must be proven in the subject of mathematics.

- (2) The published articles must be related in terms of their content/subject matter and should be brought together in a thesis with consistent language. In addition to having a common title, a joint introduction to outline the current state of research, transitional passages between the publications that have been introduced and their classification in the development of research are necessary – together with a common, coherent bibliography. Other material, which goes beyond the published articles, should be presented in line with one (or several) publication(s) and attached as one (or several) separate chapter(s). It should be noted that the doctoral candidate must resolve any copyright issues with the publishing houses.
- (3) When including published articles or those accepted for publication, which are written by several authors, a statement (Annex 1) about the personal share of the writings must be attached to the thesis. The co-authors must confirm the details specified there. If this is not possible in an individual case, the doctoral examination committee must decide what is to be done.
- (4) No more than one examiner may be a co-author of one or several of the publications. In these cases, a third examiner must be appointed. In their written appraisal of a cumulative thesis, the examiners must demonstrate whether the shares written by the doctoral candidate are equivalent to the type and scope of a monograph thesis and consider this assessment when awarding their grade.

### **§ 6 Studies supporting the doctoral degree**

- (1) Doctoral candidates at the Faculty of Mathematics and Natural Sciences may complete studies to support their doctoral degree in line with Section 20 of the AB-PromO in the form of further training related to their research work in the relevant doctoral degree subject amounting to between 15 and 30 credits.
- (2) The content of the studies to support the doctoral degree must be set with the responsible supervisor.

### **§ 7 Taking effect**

- (1) The Special Provisions of the Faculty of Mathematics and Natural Sciences take effect on the day after their publication in the Official Gazette of the University of Kassel.
- (2) The Special Provisions of the Faculty of Mathematics and Natural Sciences dated 1 November 2018 cease to be in force after 31 December 2031.

Kassel, 7 February 2024

The Dean of the Faculty of Mathematics and Natural Sciences

**Annex 1:**

University of Kassel, Faculty 10  
Statement about the cumulative thesis in the doctoral degree subjects in  
mathematics, biology, chemistry, nanostructure sciences and physics

Statement about my personal share in the published academic writings or those envisaged for publication within my thesis according to Section 5 of the Special Provisions for Faculty 10 related to the General Provisions for Doctoral Degrees at the University of Kassel (AB-PromO) dated 14 July 2021

To be completed by the candidate:

1. Surname, first name  
Institute, (if necessary, external body)  
  
Subject of the thesis
2. Numbered list of the writings presented (title, authors, where and when published or submitted):
  - 1.
  - 2.
  - etc.
3. Statement about your personal share in these writings:  
Explanation: State which work you performed in these writings (personal authorship in the relevant text and e.g. your personal share in developing the concept, literature research, method development, design of experiments, data collection, data analysis, results of discussions, preparing the manuscript, programming, argumentation) and to what degree (e.g. completely, predominantly, for the most part, in part) you were involved in this.
  - re. no. 1
  - re. no. 2
  - etc.
4. Addresses (e-mail or fax) of the relevant co-
  - authors: re. no. 1
  - re. no. 2
  - etc.

Date, signature of the applicant

The details in paragraph 3 must be confirmed by the co-authors in writing.

I confirm the statement provided by Mr/Ms ..... in paragraph 3:

1.  
Name: Signature:.....
2.  
Name: Signature:.....
- etc.