

# Guidelines

for the implementation of the curriculum for the **Doctoral Programmes** "Advanced Biorefineries: Chemistry and Materials", "AgriGenomics", "Biomaterials and Biointerfaces", "Bioprocess Engineering", "Build like Nature: Resilient Buildings, Materials and Society", "Hazards and Risks in Alpine Regions under Global Change", "Human River Systems in the 21<sup>st</sup> Century", "Social Ecology" and "Transitions to Sustainability" which came into force on 1 October 2021.

## § 2

Admission requirements for the Doctoral Programmes "Advanced Biorefineries: Chemistry and Materials", "AgriGenomics", "Biomaterials and Biointerfaces", "Bioprocess Engineering", "Build like Nature: Resilient Buildings, Materials and Society", "Hazards and Risks in Alpine Regions under Global Change", "Human River Systems in the 21<sup>st</sup> Century", "Social Ecology" and "Transitions to Sustainability" are 300 ECTS credits in one or more regular study programmes, with at least an MSc degree or equivalent degree being required and the topic of the dissertation project having to be related to one of the BOKU fields of competence. Another requirement is the admission to a BOKU Doctoral School by the BOKU Doctoral School coordinator. At the time of admission, a supplementary programme-specific dissertation agreement must be concluded between the supervisor, the doctoral student, and the coordinator of the BOKU Doctoral School and submitted to DocService. This supplementary dissertation agreement regulates the minimum amount of ECTS credits and lists the programme-specific compulsory courses of the BOKU Doctoral School.

In the absence of full equivalence, admission may be granted subject to conditions of examinations up to a maximum of 60 ECTS credits.

## § 3 (3)

The Doctoral Programme is to be understood as a project (= planned project) and to be presented publicly. The legal certainty for all parties involved is guaranteed by the registration of the doctoral project.

This registration is carried out in the form of an agreement between the supervisor and the doctoral candidate using a form provided by study services and submitted to the dean of studies for approval. The enrollment must include the following information listed in the curriculum:

- Dissertation topic (joint proposal by the student's supervisor and the student; the language of the dissertation must be German or English).
- Academic degree to be awarded on the basis of the subject specialisation after a successful doctoral examination.
- Naming a supervisor with a relevant major authorisation to teach. The supervisor must be a faculty member of the BOKU Doctoral School.

This agreement must be accompanied by an exposé (approx. 5 pages) approved by the supervisor with the following content:

- Working title of the dissertation project and description of content, research objective, research question and hypotheses, theory, general overview of the state of knowledge, presentation of the planned methods, important literature.
- Time and work plan
- Supervisory team:  
The supervisory team must consist of at least 3 persons. In addition to the supervisor, the supervisory team must include at least one faculty member of the BOKU Doctoral School with a major teaching authorisation. At least one member of the supervisory team must not be a member of the University of Natural Resources and Life Sciences or the Faculty of the BOKU Doctoral School. At least 3 members of the supervisory team must have a relevant doctorate; they accompany the progress of the doctoral candidate. The supervisory team must be informed in writing once a year by the doctoral candidate about the progress of the work. The doctoral candidate presents the results of their work conducted so far at an annual meeting with at least two members of the supervisory team. Minutes must be taken of the meeting, signed by all persons present, and submitted to DocService by the doctoral candidate. The supervisor must receive a copy.
- Resource plan that regulates the use of the infrastructure, material, possibly the salary, as well as everything else necessary for the implementation of the dissertation project. The resource plan must be confirmed by the institute/department and department head.
- Proposal for doctoral courses (see § 5 para. 1) to be selected in agreement with the supervisor.

The dissertation project, in particular the topic, the list of courses and the supervisor can be rejected by the dean of studies within four months after receipt by study services by means of a notice, otherwise the project is deemed to have been accepted.

A change of the supervisor or the topic is possible. The new supervisor must be a member of the faculty of the BOKU Doctoral School. The dissertation project must be re-registered and a statement from the previous supervisor must be obtained. This statement must be made within 6 weeks. The appointment of the new supervisor is made by notice from the dean of studies within four months.

A form for the registration of the doctoral project is available in the BOKU network.

### **§ 5 (1) and (3)**

The scientific courses (LV) of the first part of the doctoral examination must be applied for by the doctoral candidate with the consent of the supervisor when registering the dissertation project and must be assessed by the programme supervisor and prescribed by the dean of studies by notice before the completion of the course. The examinations may only be taken once a valid notice obtains.

In justified cases, the course list can be changed up to the submission of the dissertation, but no examinations on changed subjects may be taken before the approval of the dean of studies has been obtained.

A stepwise application (= partial determination) of the course up to the minimum amount of ECTS credits prescribed in the supplementary programme-specific dissertation agreement of the BOKU Doctoral School is possible. The selection of more ECTS credits is permissible, but also mandatory after being prescribed.

The following rules must be observed when selecting a course:

- The compulsory courses listed in the supplementary programme-specific dissertation agreement must be completed.
- The other courses to be taken must be related to the dissertation topic.
- The courses can be selected from the courses offered at all Austrian and foreign universities, provided that a record of achievement can be issued for them. Outside BOKU, it must be checked beforehand whether such a record of achievement (with assessment, extent and date of ECTS credits) can actually be issued (e.g. admission requirements, place restrictions).
- No courses from Bachelor's degree programmes
- If a course is not assigned to a specific degree programme, it can be selected.
- No courses from Universities of Applied Sciences
- In addition to the compulsory courses, a maximum of 4 ECTS credits with the supervisor
- No additional seminars for doctoral candidates
- No language lectures, no specialist language, no excursions, no "instructions for scientific work", "Privatissima" or similar.
- Courses for the acquisition of soft skills can be credited with a maximum of 6 ECTS credits.

In the case of courses at universities or post-secondary educational institutions outside BOKU, the dean of studies will check whether the specified ECTS credits can correspond to the amount of work (25 hours per 1 ECTS point).

Doctoral students whose supervisor is not a member of BOKU (i.e. persons who have not acquired a major teaching authorisation at BOKU and who are not in an employment relationship with BOKU) must complete courses of at least 10 ECTS credits at BOKU.

The following applies to a subsequent exchange of courses:

- It must be justified in a comprehensible way (e.g. course is no longer offered, the direction of the dissertation project has changed in such a way that another course is more closely related to the dissertation topic, an unforeseeable well-suited course is offered once by a visiting professor or a newly appointed professor).

- No negative record of achievement has as yet been issued for the course to be exchanged.
- The course to be exchanged has not yet been completed.

#### Creditability of publications for examinations:

Non-university research achievements, in particular publications, shall upon application by the student be recognised by decree as examinations for courses included in the approved individual study plan, on the basis of equivalence. The extent of such recognitions may not exceed 5 ECTS credits, and the underlying publications may not be part of a cumulative dissertation. The equivalence of a publication with the course must be confirmed by the course lecturer.

#### **§ 6 (1)**

With the consent of the supervisor, it is permissible to submit several already published works that have a subject-related connection ("cumulative dissertation") and fulfil the following requirements as a dissertation instead of a paper dedicated to a specific topic ("monograph"). In this case, a summary of the papers ("framework paper") shall be appended to the papers, which shall also explain the relation of the papers to a specific scientific topic, the method as well as the scientific and, if applicable, practical relevance. The examination of the facts as to whether a monograph or a cumulative dissertation has been submitted is the responsibility of the dean of studies.

#### Provisions concerning the monograph:

A monograph is a comprehensive, complete treatise on a single subject. A monograph comprises an introduction with a problem statement, a derivation of research questions or hypotheses, a presentation of the theoretical and methodological framework, a results section, a discussion and conclusions, a summary and a bibliography and/or list of sources. A monograph may not be composed of chapters that each have the character of an independent journal article.

#### Provisions for the cumulative dissertation for students starting their studies up to and including the summer semester 2021:

The minimum requirement for a cumulative dissertation consists of at least one publication as first author and one further publication as first author or "equally contributing author" in journals listed in the "Web of Science" or "SCImago", as well as a framework paper.

Of the papers, at least one must be at the "accepted for publication" stage, the second may be at the "accepted with minor revision" stage.

#### Provisions for the cumulative dissertation for students starting their studies in the winter semester 2021/22:

Cumulative dissertations must correspond in their entirety to a monograph in terms of their scientific contribution. The publications must have a subject-related context and be linked by an overarching question that corresponds to the topic of the dissertation.

The minimum requirement for a cumulative dissertation consists of at least two publications as first author in journals listed in the "Web of Science" or "SCImago", as well as a framework paper. Both papers must be at the "accepted for publication" stage. An "equal contribution" is permissible for one of the two papers.

The framework paper serves to present the scientific questions dealt with in context, to document the methods used and/or the data basis in detail, if applicable, and to classify the presented publications in the topics. It may also contain unpublished data. All publications that are part of the dissertation must be listed in a "Declaration of authorship" with the author's name, title, information on the status of the work and information on the doctoral candidate's own contribution.

Whether these prerequisites of a cumulative dissertation are fulfilled is to be assessed by the assessors; a corresponding statement must be included in the assessments.

A total of two stiff-bound copies with names on the spine and one digital version must be handed in to Study Services. One bound copy each is forwarded to the National Library and to the University Library (cf. Study Services website).

A hold on the dissertation can be set up for up to five years by the doctoral candidate upon application with justification to Study Services by means of a form. The library will be informed of this and it will lead to a block on viewing and borrowing.

#### **§ 6 (5)**

Along with the submission of the dissertation, the doctoral candidate shall indicate a preferred date for the second part of the doctoral examination. In doing so, it must be ensured that the dean of studies has sufficient time to 1. obtain the assessments and 2. put together a defensio commission. The student is entitled to propose assessors.

#### **§ 6 (6)**

Neither the supervisor nor co-authors of the publications contained in the cumulative dissertation may be appointed as assessors. The assessors may, however, be part of the supervisory team. At least one assessor must not be a member of BOKU.

#### **§ 7 (1)**

If the dissertation is assessed positively (written report with proposed grade, for which the assessors have a maximum of two months), the dean of studies defines the date and the defensio commission for the second part of the doctoral examination, taking into account the stated wishes of the student. The assessments are available to the entire defensio committee and the dissertation candidate one week before the defensio date.

#### **§ 7 (2)**

The second part of the doctoral examination is conducted in the form of a dissertation defence (defensio) and must be conducted in English.

The defensio commission shall consist of at least two members with a major teaching authorisation or equivalent qualification and a chairperson with a major teaching authorisation. The dissertation candidate has the right to propose members of the defensio commission. The supervisor may not be a member of the defensio commission, but may be called upon by the defensio commission as a source of information. At least one member of the defensio commission must not be a member of the University of Natural Resources and Life Sciences or the Faculty of the BOKU Doctoral School.

The defensio is open to the public and a public audience is welcome. It is permissible to restrict access to a number of persons appropriate to the spatial conditions, if necessary.

As a general rule, the duration should not exceed 90 minutes and consists of a:

- Presentation of the dissertation: approx. 30 minutes and
- Defence of the dissertation

Each member of the defensio commission must be present during the entire time. All members of a defensio commission are entitled to pose questions to the dissertation candidate. When all questions from the defensio commission have been answered, questions from the entire auditorium can also be asked in the further course within the time allowed.

In this way, the examination regulations, which are required in every curriculum, are not listed as a separate paragraph, but are composed of paragraphs 3 to 7 and are explained by these guidelines.

### **§ 7 (3)**

The final evaluation of the defensio is carried out by the defensio commission and takes into account the following aspects, which are listed in an evaluation sheet:

- Presentation skills
- Ability to explain one's own work
- Existing expertise in the core field
- Existing expertise in related fields
- Answering the questions
- Argumentation during the discussion
- Discussion of comments and criticisms of the expert reports

### **§ 7 (4)**

The overall assessment consists of the grading of the defensio (25%), the grading of the dissertation (50%), as well as the first part of the doctoral examination (25%), with all parts having to be completed positively.

### **§ 7 (5)**

The overall assessment of the doctoral examination must state "passed" if each part (see § 7 para. 4 has been positively assessed, otherwise it must state "not passed".

After the overall result has been announced, the completed evaluation form is forwarded to study services.

## § 8

The English denominations of the Doctoral Programmes in BOKU Doctoral Schools are:

- Doctoral Programme of Natural Resources and Life Sciences: Doctoral Studies of Natural Resources and Life Sciences
- Doctoral Programme of Social and Economic Sciences: Doctoral Studies of Social and Economic Sciences

A translation of the academic degrees is not permitted.

These guidelines take effect as of 1 October 2021.