

**University of Natural Resources and Life Sciences, Vienna**  
**Curriculum for the Doctoral programme “International Graduate School in  
Bionanotechnology (IGS-BioNanoTech)”**  
(As of October 01, 2016)

The University of Natural Resources and Life Sciences Vienna (BOKU Vienna) enacts according to § 54 Universities Act 2002 the following curriculum for the Doctoral programme “International Graduate School in Bionanotechnology (IGS-BioNanoTech)”:

**§ 1. Objective of the doctoral programme**

The Doctoral programme “International Graduate School in Bionanotechnology (IGS-BioNanoTech)” is a joint study programme of the Nanyang Technological University and the University of Natural Resources and Life Sciences, Vienna and is supposed to prepare for independent scientific work and training of young scientists working in the field of bionanotechnology.

**§ 2. Admission requirements for the doctorate degree**

(1) Admission requirements for the Doctoral programme “International Graduate School in Bionanotechnology (IGS-BioNanoTech)” include:

- a.) a diploma or Master’s degree programme at BOKU or an individual diploma or Master’s degree with a specialization at BOKU or
- b.) a degree from an accredited Austrian or international university that is equivalent to the degrees listed under item a) or
- c.) a degree from an accredited degree programme at an Austrian Fachhochschule (university of applied sciences).
- d.) For the Doctoral programme “International Graduate School in Bionanotechnology (IGS-BioNanoTech)” confirmation of credits earned in natural sciences (12 ECTS), social and economic sciences (12 ECTS) as well as technical (12 ECTS) subjects must be presented.
- e.) admission to the “International Graduate School in Bionanotechnology (IGS-BioNanoTech)”

(2) If equivalence is given except for individual additions the Rectorate is allowed to require certain examinations that will have to be taken in addition to the viva voce examination in the course of studies to be granted equivalence.

(3) Admission according to section 1 item b) students with post-graduate degrees awarded by an international institution must furthermore present proof of admission to doctoral studies by the issuing country, which doubles as proof of general university entrance qualifications.

(4) The admission is granted by the Rector of the University of Natural Resources and Life Sciences, Vienna.

**§ 3. Duration and structure**

(1) The Doctoral programme “International Graduate School in Bionanotechnology (IGS-BioNanoTech)” comprises a minimum of 180 ECTS, including at least 20 ECTS doctoral courses and at least 160 ECTS for the dissertation.

(2) Admission granted according to § 2 section 1 item c.) stipulates additions to the programme congruent with legal requirements.

(3) Upon successful admission to the doctoral programme the candidate is to officially register in the degree programme at the Study Services within one year. To register a doctoral project, the following items must be presented:

- Dissertation topic,
- Naming advisor with full teaching authorization (*venia docendi*) or equivalent qualifications
- Submission of work plan approved by main advisor with
  - team of advisors (including at least one instructor with full teaching authorization or equivalent qualifications)
  - timetable
  - resource plan
- Proposal for doctoral courses.

(4) When a research topic requires additional physical and financial resources provided by BOKU departments, it is only acceptable if the head of the department was informed prior about the intended project and has not rejected it within one month due to interference with lectures and research, or insufficient resources.

(5) The doctoral project will be deemed to have been accepted after approval by the Dean of Studies.

(6) A new advisor or topic may be chosen at any time prior to submission of the dissertation. In such a case the project must be re-registered and a statement by the former advisor must be submitted. The statement must be submitted within six weeks. If the coursework is changed the partial agreement has to be adapted accordingly.

#### **§ 4. Viva voce examination**

The viva voce is a comprehensive examination conducted in two parts. The first part is comprised of course examinations; the second part is to be conducted as a *defensio* before the examination board.

#### **§ 5. First part of the viva voce examination**

(1) For the first part of the viva voce of the Doctoral programme “International Graduate School in Bionanotechnology (IGS-BioNanoTech)” candidates are required to take course examinations amounting to at least 20 ECTS. These courses are to be relevant to the dissertation topic.

(2) Students admitted according to § 2 section 1 item c.) are required to take additional examinations (examinations of courses pertaining to the programme of study); they are not part of the viva voce. The number and subject areas of the courses for university of applied sciences degree holders are specified in the doctoral programme regulations for each university of applied sciences programme.

(3) Courses are to be officially approved by the Dean of Studies upon consulting with the advisory team. The candidate may submit his or her own proposal. Courses can be applied in several stages (= partial selection). More than 20 ECTS can be chosen; however, the selected coursework is binding.

(4) Candidates may attend additional courses and take examinations in addition to courses stipulated in § 5 sections 1 to 3.

(5) Research conducted outside of the university including relevant scientific publications is accredited according to § 78 section 3 of the Universities Act 2002

## **§ 6. Dissertation**

(1) The dissertation shall demonstrate the candidate's ability to independently select a scientific problem for investigation and to deal with it competently. Several scientific publications that pertain to the same topic are also accepted as dissertation.

(2) The topic of the dissertation suggested by the candidate has to pertain to a scientific discipline according to the programme of the International Graduate School that is taught at the University of Natural Resources and Life Sciences Vienna by a university instructor with *venia docendi*. The student may also select a topic from proposals of his/her advisor.

(3) The same topic may also be prepared and researched by several students if their individual input can be assessed.

(4) The completed dissertation is to be submitted to the Dean of Studies for evaluation.

(5) The Dean of Studies is to present the dissertation to two university instructors according to § 31 sections 5 and 6 of the Statutes, Study Regulations, who must grade the dissertation within a maximum of two months. Reviewers must not belong to BOKU or NTU, or be co-authors of publications relevant to the thesis. Both reviewers are to pertain to the scientific discipline of the dissertation or at least to a related field.

(6) In their report, aside from honoring the work, the reviewers are to state whether they judge the dissertation as satisfactory or unsatisfactory. They may furthermore propose a grade according to § 73 section 1 of the Universities Act 2002.

(7) If one or both reviewers evaluate the dissertation as unsatisfactory, the Dean of Studies is to consult with a third reviewer who has to pertain at least to a related scientific discipline. He or she is to review the dissertation within a maximum of two months.

## **§ 7. Second part of the viva voce examination**

(1) Registration for the second part of the viva voce examination requires compliance with admission requirements, passing of all examinations pertaining to the first part of the viva voce (courses according to § 5) and an assessment of the dissertation as satisfactory. If three reviewers have been consulted (§ 6 section 8), at least two of them need to evaluate the dissertation as satisfactory.

(2) The second part of the viva voce is a *defensio* conducted before the entire examination board in accordance with regulations on public examinations.

(3) The final assessment of the *defensio* is performed by the examination board and the following points, which are listed on an assessment form, are taken into account:

- Presentation skills
- Ability to explain one's own work
- Existing core subject knowledge
- Existing knowledge in associated subject areas
- Responses to the questions
- Argumentation in the discussion
- Discussion about the references and critical points of the assessment

(4) The dissertation is graded by absolute majority reached by members of the examination board for the second part of the viva voce.

(5) The examination board is responsible for determining the overall grade of the doctoral degree. The overall grade is composed of the grades awarded for the two examination subjects and the grade of the dissertation as well as the first part of the viva voce. The first and second part of the viva voce each account for 25 percent of the grade and the dissertation for the remaining 50 percent.

The candidate earns a distinction only when one of the two viva voce grades and the dissertation grade amount to a maximum of 2.0 and the grade average is lower than or equal to 1.5.

The overall assessment of the viva voce is given a 'pass' grade if every part (first and second part of the viva voce, dissertation) has been positively assessed; otherwise a 'fail' grade is awarded.

### **§ 8. Academic degree**

Graduates of the Doctoral programme “International Graduate School in Bionanotechnology (IGS-BioNanoTech)” are conferred the academic degree PhD (“Doctor of Philosophy equivalent to Doctor rerum naturalium technicarum – Dr.nat.techn.”) as a **joint degree** with the Nanyang Technological University (NTU), Singapore.

This curriculum enters into effect on 1 October 2016.