

Subject-Specific Examination and Study Regulations for the Master's Programme Food Quality and Safety

(version date: 5 June 2020)

Article 13 para 1 sentence 2 in conjunction with Article 58 para 1 sentence 1 and Article 61 para 2 sentence 1 of the Bavarian Higher Education Act (*BayHSchG*) forms the framework for the following regulations issued by the University of Bayreuth.

Contents

- § 1 Aim of the full-time degree programme and structure
- § 2 General Examination & Study Regulations
- § 3 Components of the programme of study
- § 4 Admission to the programme
- § 5 Forms of examination and master's thesis
- § 6 Effective date

Annex 1: Modules, credit points, and examinations

Annex 2: Aptitude assessment process

§ 1

Aim of the full-time degree programme and structure

- (1) ¹The master's programme Food Quality and Safety provides the candidate with the following skills:
- an in-depth subject-specific and methodological understanding of the natural sciences, economics, and law;
 - the ability to use this knowledge to solve complex interdisciplinary problems in the field of food quality and safety using an integrative, interdisciplinary approach;
 - the ability to carry out independent scientific work in the above-mentioned field.
- ²The master's programme Food Quality and Safety, including all examinations, is conducted in English.
- (2) ¹New students may begin the programme in the winter semester or the summer semester.
²The master's programme is to be completed as a full-time degree programme.

§ 2

General Examination & Study Regulations

¹Studying in framework of the master's programme is governed by the general examination and study regulations for bachelor's and master's programmes offered by the Faculty of Life Sciences: Food, Nutrition and Health at the University of Bayreuth (APSO-LEG). ²Supplementary provisions for studying in framework of the master's programme are given in the present regulations.

§ 3

Components of the programme of study

- (1) The master's programme Food Quality and Safety is divided into modules and consists of the module areas and modules listed in Annex 1.
- (2) ¹One required component is completion of an internship totalling three months in duration in a career-relevant field, generally not at the University. ²The time frame for carrying out the internship, generally to be scheduled during the semester break, is geared towards the requirements of the hosting institution and is to be organised by the student independently. ³The relevant hosting institution is to provide certification of the type of internship and its duration. ⁴A detailed 10-page internship report about the internship activity is to be prepared.

§ 4

Admission to the programme

- (1) Admission requirements for study are:
1. a degree from a higher education institution (or completed degree programme) with a grade of "gut" ["good"] (2,5) or better in Biology or Biochemistry awarded by the University of Bayreuth, or an equivalent degree, and
 2. evidence of having passed the aptitude assessment process described in Annex 2;
 3. proof of German language skills at level A1 or higher of the Common European Framework of Reference for Languages for applicants who did not earn their higher education entrance qualification in German. applicants who are unable to provide proof of these skills will be enrolled on the condition that they submit the proof by the end of the second semester of study at latest;
 4. proof of English skills at level C1 or better of the Common European Framework of Reference for Languages for applicants who neither earned their higher education entrance qualification nor their school-leaving qualification in English.
- (2) ¹The degrees may not differ substantially in terms of the required competences (learning outcomes) from the qualifications referred to in paragraph 1 No. 1. ²If there are substantial compensable differences, applicants may be admitted subject to the proviso that, in addition to the assessment components to be completed in the master's programme, they also successfully complete coursework and examinations in the amount of up to 15 credit points from the bachelor's programme by the end of the second semester of study at latest; otherwise, the prerequisites for admission to the programme are deemed not to have been fulfilled. ³In such cases, the relevant examination and study regulations for the bachelor's programmes at the University of Bayreuth given in para 1 number 1(as amended) shall apply.
- (3) Decisions such as those described in para 2 are made by the board of examiners.
- (4) ¹If the bachelor's certificate or equivalent diploma has not yet been issued, a confirmation of all individual grades and examinations for courses completed up to the date of registration must be submitted. ²Such coursework must amount to at least 135 ECTS points and correspond to a final grade of "gut" (2,5) or better.

³Applicants who fulfil the requirements of sentence 2 are to be enrolled on the condition that they submit the relevant degree certificate with a grade of "gut" ["good"] by the end of the first semester of study.

§ 5

Forms of examination and master's thesis

¹In the master's programme Food Quality and Safety, examinations are conducted in the form of portfolio assessments, written examinations, presentations, minutes, reports, and term papers.

²The possible forms of examination in the modules are given in Annex 1.

§ 6

Effective date

¹These regulations go into effect on 06 June 2020. ²They shall be valid for those students enrolling in this programme for the first time in Winter Semester 2020/21 or later.

Annex 1: Modules, Credit Points, and Examinations

The following overview lists the module areas, the corresponding modules, and the associated module examinations:

The modules include the following forms of instruction: Lectures, seminars, tutorials, practical courses

(Module) Area Modules	Credit points	Examination
A Biology and Biochemistry of Food		
Food Microbiology	6	Portfolio: Written examination, minutes, presentation
Food Metabolome and Toxicology	6	Portfolio: Written examination, minutes, presentation
Crop Plant and Farm Animal Biology	7	Portfolio: Written examination, minutes, presentation
Total (Module) Area A	19	
B Human Biology		
Nutrition Physiology and Immunology	6	Portfolio: Written examination, minutes, presentation
Total (Module) Area B	6	
C Food Chemistry		
Chemical Food Analysis	6	Portfolio: Written examination, minutes, presentation
Total (Module) Area C	6	
D Data Science/ Information Technology/ Statistics		
Data Analysis and Statistics	6	Written examination
Total (Module) Area D	6	
E Law		
Introduction to Law and Food Law	5	Written examination/term paper
Food Safety and Risk Management Law	5	Written examination/term paper
Food Trade Law	4	Written examination/term paper
Food Quality and Food Authenticity Law	4	Written examination/term paper
Total (Module) Area E	18	

F Management		
Food Quality Management	5	Written examination
Food Supply Chain Management	5	Written examination
Total (Module) Area F	10	
Multidisciplinary Training	10	Report/presentation
Mandatory Internship	15	Internship report
Master's Thesis	30	
Total	120	

Annex 2: Aptitude assessment process

Legal basis: Art. 43 para 5 sentence 2 BayHSchG

1. Purpose of the aptitude assessment process

¹The purpose of this procedure is to determine whether, in addition to the knowledge proven by earning his or her initial degree, the applicant demonstrates a particular suitability for the highly interdisciplinary master's programme Food Quality and Safety. ² Aptitude parameters are as follows:

- a) A firm understanding of scientific topics from the initial degree programme in biology, biochemistry (and comparable subjects) relevant to understanding and analysing food quality and safety problems.
- b) the distinct ability to acquire knowledge that is foreign from the perspective of the initial degree programme yet essential for food quality and safety.

2. Board responsible for the aptitude assessment process

¹A committee is responsible for preparing and conducting the aptitude assessment process.

²The committee consists of the board of examiners according to § 2 of the general examination and study regulations for the bachelor's and master's programmes offered by the Faculty of Life Sciences: Food, Nutrition and Health (APSO-LEG) as well as up to four members from among the professors (Art. 2 para. 1 sentence 1 no. 1 Bavarian University Personnel Act) and other full-time academic staff members who are entitled to administer examinations and are involved in this programme of study. ³The representatives are appointed by the Faculty Council of the Faculty of Life Sciences: Food, Nutrition and Health for a period of four years; re-election is possible.

3. Process for determining aptitude

3.1 ¹The aptitude assessment process is administered twice annually, in the summer and winter semesters. ²The application for admission to the aptitude procedure must be submitted online to the University of Bayreuth. ³The online application for admission must be submitted to the University of Bayreuth electronically for the following winter semester by 01 July and for summer semester by 15 January (deadline). ³Documents described in 3.2 may be submitted for winter semester by 15 August and for summer semester by 15 February.

- 3.2 The following are to be enclosed with the completed application as described in number 3.1 sentence 2:
- 3.2.1 ¹A written rationale of up to two pages in the English language explaining the applicant's choice of the master's programme Food Quality and Safety in which the applicant explains the specific talents that make him or her particularly suitable for the programme of study. ²For example, the specific motivation may be borne out by participation in professional training relating to the programme of study, internships, stays abroad, or subject-related supplementary courses taken during one's bachelor's studies beyond the required courses. ³If applicable, evidence is to be provided.
- 3.2.2 A statement that the cover letter containing the applicant's motivation for choosing the programme of study was written independently, without the help of others, and that any thoughts taken from other sources were identified as such.
- 3.2.3 ¹The certificate of the relevant initial degree (e.g. bachelor's degree certificate) as well as a confirmation with individual grades of the examinations and coursework completed during the programme of study. ²If the initial degree certificate or equivalent degree certificate has not yet been issued, a confirmation of all individual grades and examinations for courses completed up to the date of late submission must be presented. ³Such credit for examinations and coursework must amount to a total of at least 135 ECTS points. ⁴The relevant degree certificate is to be submitted by the end of the first semester of study. ⁵Upon request, the board of examiners can extend the submission deadline for the relevant degree certificates to up to the end of the second semester, as long as the reasons for the extension are beyond the student's control. ⁶This is especially the case if the student has already completed all examinations, but the grades have not yet been disclosed or the certificate has not yet been issued.
- 3.2.4 A list of modules from the applicant's relevant initial degree programme for which evidence of completion cannot yet be submitted.
- 3.2.5 A CV as supplementary information to serve as a basis for the interview (see 5.2).
- 3.2.6 If available, evidence of the following:
- a) special qualifications (e.g. awards such as scholarships or prizes, vocational training relevant to the programme of study, internships, visits abroad) or
 - b) interdisciplinary study skills
- 3.2.7 if applicable, a request for accommodating disadvantages/disabilities as described in § 12 of the APSO- LEG

4. Admission to the aptitude assessment process

- 4.1 Admission to the assessment process requires that the documents listed in number 3.2 be submitted on time and in the required form.
- 4.2 The aptitude assessment process (number 5) is to be administered to those applicants who fulfil the requirements.
- 4.3 Applicants who are not admitted are to be sent a notice of denial with a rationale and information on their right to appeal; number 6.1 applies *mutatis mutandis*.

5. Overview of the aptitude assessment process

- 5.1 ¹On the basis of the application documents submitted, the committee examines whether the applicant is suitable for the master's programme Food Quality and Safety with respect to his or her proven qualifications and the specific talents and abilities described (first stage of the aptitude assessment process). ²The assessment is carried out on a scale of 0 to 75, where 0 is the worst score and 75 is the best score. ³The points are assigned by the committee on the basis of the following criteria:

- 5.1.1 Written rationale (according to 3.2.1) as well as special qualifications and interdisciplinary study skills (according to 3.2.6)

¹The written statement of the applicant's reasons for the application will be assessed by two members of the committee on a scale of 0 to 25 points. ²The members of the committee will evaluate the following three criteria independently of one another and will score them. ³The number of points is calculated as the sum of the individual assessments divided by two and rounded to the nearest whole number value. ⁴The content of the written statement is to be assessed in view of the maximum points given in parentheses on the basis of the following criteria:

- a) Verbal skills (5 points)
- b) Ability to demonstrate special aptitude and interdisciplinary study skills (10 points):

The applicant convincingly justifies his or her particular suitability for the interdisciplinary course of studies on the basis of arguments as well as previous qualifications and study skills.

c) Special qualifications (10 points):

The applicant has relevant qualifications that go beyond the skills and qualifications earned over the course of the initial degree programme, e.g. accolades such as scholarships or prizes, internships, stays abroad (cf. 3.2.6 item a).

5.1.2 The subject-specific assessment components in the relevant initial degree or the components completed to date (according to 3.2.3 and 3.2.4)

¹The curricular analysis is based on competencies, not carried out via a schematic comparison of the modules. ²It is based on the following elementary subject groups:

- Scientific foundations in mathematics and data analysis, experimental physics and chemistry (general chemistry, organic chemistry, physical chemistry, analytical chemistry),
- human biology, animal physiology, plant physiology, genetics, cell biology, microbiology, ecology, biochemistry, bioinformatics.

³The examinations and coursework relevant for the master's programme Food Quality and Safety from the initial degree programme or the assessment components completed to date as per § 4 shall be included in the evaluation with up to 50 points. ⁴Assessment of competences shall be based on the relevance to the above-mentioned curricular contents of the corresponding bachelor's degree programmes at the University of Bayreuth and the academic performance, taking into account the recognisable range of achievements.

5.1.3 The total number of points awarded to the candidate for the first stage of the aptitude assessment process is the sum of the individual assessments made under 5.1.1 and 5.1.2.

5.1.4 Applicants who received 55 points or more in the first stage of the aptitude assessment process are sent confirmation of having passed the aptitude assessment process.

5.1.5 ¹Candidates who have scored less than 35 points in the first stage of the aptitude assessment process will not proceed to the next stage of the process according to no. 5.2. ²They shall be sent a notice of denial with a rationale and information concerning their right to appeal; 6.1 applies *mutatis mutandis*.

5.2 ¹The remaining applicants with scores of at least 35 up to 54 points will be invited to an interview (second stage of the aptitude assessment process). ²In the second stage of the aptitude assessment process, the qualification acquired in the initial degree programme and the result of the selection procedure are evaluated. ³The date and time of the interview will be announced at least one week in advance.

5.2.1 ¹The selection interview must be conducted individually for each applicant. ²The interview is to last between 15 and 30 minutes for each applicant and should demonstrate whether it is to be expected that the aim of the programme of study can be achieved given the applicant's previous education. ³During the interview, the student's scientific understanding and interest in learning about content from other relevant subject areas will be examined with regard to the requirements of the degree programme. ⁴The content of the interview covers the following main topics:

- a) A particular willingness to succeed, which leads to the expectation that the performance level of the previous degree will be significantly exceeded in general or with regard to the chosen subject area (max. 5 points):
 - Is there evidence of rapid, determined progress in the applicant's studies?
 - Is there a specific aptitude for a subject that can be studied in the degree programme, documented by additional modules or non-university activities (e.g. membership or activity in relevant organisations) in this field?
 - Does the CV demonstrate a particular determination (e.g. relevant additional internships, relationship between previous employment and the programme of study)?
- b) Ability to analyse fundamental legal and economic issues relating to food quality and safety in an appropriate manner (max. 10 points).
- c) Personal impression of suitability (after interview) (max. 10 points):
For example, this may be based on the applicant's ability to convincingly provide statements by means of arguments and meaningful examples and his or her ability to answer questions appropriately.

⁵The interview shall be conducted by at least two members of the committee who come from different subject areas relevant to the programme of study and are thus able to assess the applicant's interdisciplinary skills. ⁶Each member is to assign a grade for the interview on a scale of 0 to 25. ⁷The total score of the interview is the sum of the two partial results, where 0 is the worst and 50 the best score possible.

5.2.2 ¹The overall assessment of the second stage of the aptitude assessment process is made up of the score for the interview and the previous studies as described in 5.1.2. ²Applicants who received 60 points or more in the second stage of aptitude assessment process will be sent a confirmation of having passed the aptitude assessment process. ³Applicants below 60 points are not suitable for the master's programme Food Quality and Safety.

5.2.3 ¹A written record shall be made of the interview by a minute taker, indicating the date, duration, location, name of committee members involved, the name of the applicant, the assessment of the committee members involved, and the overall outcome. ²The record must show the topics of the interview with the applicant and the rationale for the assessment. ³The reasons and topics may be listed in note form. ⁴The record sheet is to be signed by the committee members.

6. Notification of the outcome

6.1 ¹The applicant will be informed of the outcome of the aptitude assessment process. ²A notice of rejection must be accompanied by a rationale and information on the applicant's right to appeal. ³As part of its supervisory duties in accordance with Article 20 para 3 sentence 1 *BayHSchG*, the chair of examiners, on behalf of the University Governing Board, shall check a random sample of 10% of denials of admission.

6.2 Admission based on the aptitude assessment process for the master's programme Food Quality and Safety shall remain valid for future applications to this programme of study as long as the content and goals of the programme do not change so significantly that aptitude for this programme can no longer be demonstrated by having undergone the aptitude assessment process at an earlier date.

7. Repeating the process

Applicants who did not provide evidence of aptitude for the master's programme Food Quality and Safety may register for the aptitude assessment process one more time.

Issued on the basis of a decision of the Senate of the University of Bayreuth (via circular), with the approval of the Bavarian State Ministry of Science and Art dated 29 April 2020, the urgent decision of the University of Bayreuth's University Governing Board dated 2 June 2020 and the approval of the President of the University of Bayreuth, granted on 3 June 2020, Ref. A 3307/10 - I/1a.

Bayreuth, 5 June 2020

[university seal]

President of the University of Bayreuth,

[signature]

Prof. Dr. Stefan Leible

These regulations were enacted at the University on 5 June 2020.

This was announced on 5 June 2020 by posting a notice at the university. The date of the announcement is 5 June 2020.

Bayreuth, 5 June 2020 [university seal]

President of the University of Bayreuth

[signature]

Prof. Dr. Stefan Leible