The officially published GERMAN text alone has binding force

Academic and Examination Regulations for the Master's Degree Program Nutrition and Biomedicine at the Technical University of Munich

dated 12 December 2024

In accordance with Art. 9 Sentence 1 and 2 in conjunction with Art. 80(1) Sentence 1, Art. 84(2) Sentence 1 and Art. 90(1) Sentence 2 of the Bavarian Higher Education Innovation Act [Hochschulinnovationsgesetzes (BayHIG)] the Technical University of Munich issues the following Regulations:

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- (1) ¹The Examination and Academic Regulations for the Master's Degree Program Nutrition and Biomedicine (FPSO) complement the General Academic and Examination Regulations for Bachelor's and Master's programs at the Technical University of Munich (APSO) dated 18 March 2011 as amended. ²The APSO has precedence.
- (2) ¹Upon successful completion of the Master's examination the degree "Master of Science" ("M.Sc.") is awarded. ²The academic title may also be used with the name of the university "(TUM)".

§ 35 Commencement of Study, Standard Duration of Study, ECTS

- (1) The Master's Degree Program Nutrition and Biomedicine at the Technical University of Munich commences, as a rule, in the winter semester.
- (2) ¹The number of classes in required and elective subjects needed to obtain the master's degree is 90 credits (57 - 76 weekly hours per semester) spread over three semesters. ²Students will have a maximum of six months (30 credits) to complete their master's thesis in accordance with § 46. ³The number of coursework units and examinations in required and elective subjects to be completed in the Master's Degree Program Nutrition and Biomedicine according to Appendix 1 is a minimum of 120 credits. ⁴The standard duration of study for the master's program is a total of four semesters.

§ 36 Eligibility Requirements

- (1) Eligibility for the Master's Degree Program Nutrition and Biomedicine is demonstrated by:
 - 1. A qualified bachelor's degree obtained after a program of at least six semesters from a domestic or foreign institution of higher education, or at least an equivalent degree in the fields of Nutritional Sciences or a comparable Natural Sciences degree with a focus on Life Sciences,
 - 2. Adequate knowledge of the English language; students whose native language or language of instruction is not English must demonstrate proficiency through an acknowledged language test such as the Test of English as a Foreign Language (TOEFL) (with a minimum of 88 points), the International English Language Testing System (IELTS) (with a minimum of 6.5 points), or the Cambridge Main Suite of English Examinations; if, in the undergraduate program, 30 credits were obtained for examinations administered in English-language examination modules, adequate proficiency in the English language is deemed proven.
 - 3. Passing the aptitude assessment
 - a) in accordance with Appendix 2 a, provided that applicants have obtained their undergraduate degree or equivalent qualification within the meaning of Art. 90 (1) Sentence 1 BayHIG within the area of applicability of the Convention on the Recognition of Qualifications concerning Higher Education in the European Region (Lisbon Convention) or
 - b) in accordance with Appendix 2 b, provided that applicants have obtained their undergraduate degree or equivalent degree within the meaning of Art. 90(1) Sentence 1 BayHIG outside the area of applicability of the Lisbon Convention.

- (2) A degree is considered to be qualified within the meaning of 1(1) if there are no significant differences with regard to the competencies (learning outcomes) acquired in the designated bachelor's degree program at TUM.
- (3) ¹For determining a qualified degree in accordance with § 36(2), required modules of the TUM Bachelor's Degree Program Nutritional Sciences will be considered. ²As an exception, for applicants who have acquired their undergraduate degree or equivalent degree within the meaning of Art. 90(1) Sentence 1 BayHIG outside the area of applicability of the Lisbon Convention, the result of the TUM Test Nutrition and Biomedicine according to Appendix 3 will be used to determine aptitude according to (2); those who have achieved at least 40 points in the test will be assessed in the aptitude process according to Appendix 2b.
- (4) ¹As an exception to § 36(1)1, students enrolled in a bachelor's program specified in § 36(1)1 may be admitted to the master's program in justified cases. ²An application to the master's program by students enrolled in a bachelor's program may only be submitted if it can be verified that, in the case of a six-semester bachelor's program, module examinations amounting to at least 120 credits; in the case of a seven-semester bachelor's program, module examinations amounting to at least 150 credits; and, in the case of an eight-semester bachelor's program, module examinations amounting to at least 180 credits have been completed at the time of submission of the application. ³Verification of the awarding of the bachelor's degree must be provided within one year of commencement of the master's program.

§ 37 Modular Structure, Module Examination, Courses, Language of Instruction

- (1) ¹General provisions concerning modules and courses are set forth in §§ 6 and 8 of the APSO. ²For any changes to the stipulated module provisions § 12(8) of the APSO applies.
- (2) The curriculum listing the required and elective modules is included in Appendix 1.
- (3) ¹As a rule, the language of instruction in the Master's Degree Program Nutrition and Biomedicine is English. ²Elective mdules may be taught in either German or English.

§ 38 Examination Deadlines, Academic Progress Checks, Failure to Meet Deadlines

- (1) Examination deadlines, progress monitoring, and failure to meet deadlines are governed by § 10 of the APSO.
- (2) ¹The module examination of the module "Basics Nutrition and Food" listed in Appendix 1 must be successfully completed by the end of the second semester. ²In addition, at least one of the module examinations of the modules "Energy Balance Regulation", "Disease Pathologies and Nutrition" or "Research Methods" listed in Appendix 1 must be successfully completed by the end of the second semester. ³In the event of failure to comply with this deadline § 10(5) of the APSO applies.

§ 39 Examination Board

In accordance with § 29 of the APSO, the board responsible for all decisions concerning examination matters is the Master's Examination Board Nutritional Sciences at the TUM School of Life Sciences.

Recognition of Periods of Study, Coursework and Examination Results

The recognition of periods of study, coursework and examination results is governed by § 16 of the APSO.

§ 41 Continuous Assessment Procedure, Types of Assessment

- (1) ¹In addition to written and oral examinations, types of assessment in accordance with § 12 and § 13 of the APSO may include (but are not limited to) laboratory assignments, exercises (tests, where applicable), reports, project work, presentations, learning portfolios, research papers, or parcours examinations. ²Details of each module examination and the competencies to be assessed in each examination are set out in the module descriptions. ³Where the topic permits, the examination can be held either as an individual or group examination; § 18(2) Sentences 2 and 3 of the APSO apply accordingly.
 - a) ¹A written examination is a supervised examination, in which students are expected to demonstrate, within a limited amount of time and using predefined methods and resources, their ability to identify problems, find solution strategies and, if required, implement them. ²The duration of written examinations is regulated in § 12(7) of the APSO.
 - b) ¹Depending on the discipline, **laboratory assignments** may include experiments, measurements, field work, field exercises, etc., with the goal of students conducting such work, evaluating results, and gaining knowledge. ²These may consist of, for example, process descriptions and the underlying theoretical principles including studying the relevant literature; preparation and practical implementation; calculations, if required, and documentation, evaluation, and interpretation of the results in the context of the knowledge to be gained. ³Laboratory assignments may be complemented by presentations designed to demonstrate a student's communication competency in presenting scholarly work to an audience.
 - c) ¹**Practical credit requirements** involve students completing assigned tasks (for example, solving mathematical problems, writing computer programs, preparing models, preparing designs) using theoretical knowledge to solve application-oriented problems. ²Exercises are designed to assess a student's factual and detailed knowledge and its application. ³Practical credit requirements may be administered in writing, orally, or electronically. ⁴They may be in the form of homework assignments, practice sheets, programming exercises, (e-)tests, design tasks, posters, tasks assigned within a university internship program, etc.
 - d) ¹A report is a written record and summary of a learning process for the purpose of presenting the acquired knowledge in a structured way and analyzing the results in the context of a module. ²Students are expected to demonstrate that they have understood all essential aspects and are able to present them in writing. ³Reports may include excursion reports, internship reports, work reports, etc. ⁴The written report may be complemented by a presentation for the purpose of assessing the student's communication competency in presenting scholarly work to an audience.
 - e) ¹Project work is designed to reach, in several phases (initiation, problem definition, role assignment, idea generation, criteria development, decision, implementation, presentation, written evaluation), the defined objective of a project assignment within a given period of time and using suitable instruments. ²In addition, project work may include a presentation or a subject-specific discussion in order to assess a student's communication competency in presenting scholarly work to an audience. ³It may also encompass design sketches, drawings, plans, models, objects, simulations or documentation.
 - f) ¹A research paper is a written assignment in which students work independently on solving complex scholarly or scholarly/application-oriented problems, using the scientific methods of the related discipline. ²Students are expected to demonstrate that they are able to solve problems corresponding to the learning results of the module in question in compliance with

the guidelines for scholarly work – from analysis and conception to implementation. ³Research papers, differing in their requirement standards, may take the form of a conceptual framework/theory paper, abstract, term paper, seminar paper, etc. ⁴The research paper may be complemented by a presentation and/or a colloquium for the purpose of assessing the student's communication competency in presenting scholarly work to an audience.

- g) ¹A presentation is a systematic and structured oral performance supported by suitable audiovisual equipment (such as projector, slides, posters, videos) for the purpose of demonstrating and summarizing specific issues or results and paring complex problems down to their essential core. ²For the presentation, the student is expected to demonstrate that he or she is capable of preparing a certain topic within a given time frame in such a way as to present or report it in a clear and comprehensible manner to an audience. ³In addition, the student is expected to demonstrate that he or she is able to respond competently to any questions, suggestions, or discussions brought by the audience and relating to his or her subject area. ⁴The presentation may be complemented by a brief written precis.
- h) ¹An **oral examination** is a timed, graded discussion on relevant topics and specific questions to be answered. ²In oral examinations students are expected to demonstrate that they have understood the central concepts of the subject matter covered by the exam and are able to apply them to specific problems. ³The duration of the examination is regulated in § 13(2) of the APSO.
- i) ¹A learning portfolio is a collection of completed work compiled by the student according to predefined criteria that exhibits the student's progress and achievements in defined content areas at a given time. ²Students are required to explain why they chose the work they have and its relevance for their learning progress and the achievement of the defined learning outcomes. ³With the learning portfolio, students are expected to demonstrate that they have taken active responsibility for their learning process. ⁴Depending on the module description, types of independent study assessment in a learning portfolio may include, in particular, application-oriented assignments, web pages, weblogs, bibliographies, analyses, conceptual framework/theory papers, as well as the graphic representation of facts or problems. ⁵A subject-specific final oral discussion for the purpose of reflection and based on the content of the learning portfolio may also take place.
- j) ¹The **parcours examination** is made up of several components. ²Unlike a module examination component, parcours exam components are administered in sequence and completed in a specific time frame and location. ³Parcours components entail various types of examination, which together evaluate the competency profile of the module as a whole. ⁴Possible types of examination in parcours components may include those listed in g) and h) in combination with a practical requirement. ⁵The total duration of the parcours examination with all its components is indicated in the module catalog.
- (2) ¹As a rule, module examinations are taken concurrently with the program. ²The type and duration of module examinations is stipulated in Appendix 1. ³For any changes to the stipulated module provisions § 12(8) of the APSO applies. ⁴The assessment of the module examination is governed by § 17 of the APSO. ⁵The grade weights of module examination components correspond to the weighting factors assigned to them in Appendix 1.
- (3) Where Appendix 1 provides that a module examination is either in written or oral form, the examiner will inform the students officially and in appropriate form, no later than the first day of classes, of the type of examination to be held.

§ 42 Admission to and Registration for the Master's Examination

(1) Students who are enrolled in the Master's Degree Program Nutrition and Biomedicine are deemed admitted to the module examinations of the master's examination.

(2) ¹Registration requirements for required and elective module examinations are stipulated in § 15(1) of the APSO. ²Registration requirements for repeat examinations are stipulated in § 15(2) of the APSO.

§ 43 Scope of the Master's Examination

- (1) The master's examination consists of:
 - 1. Examinations in the corresponding modules according to § 43(2),
 - 2. The Master's Thesis module according to § 46,
 - 3. The coursework listed in § 45.
- (2) ¹The module examinations are listed in Appendix 1. ²Students must complete 60 credits in the required modules and at least 30 credits in the elective modules. ³The selection of modules must comply with § 8(2) of the APSO.

§ 44 Repeat Examinations, Failed Examinations

- (1) The repetition of examinations is governed by § 24 of the APSO.
- (2) Failure of examinations is governed by § 23 of the APSO.

§ 45 Coursework (Pass/Fail Credit Requirements)

In addition to the examinations listed in § 43(1), verification of the successful completion of coursework in the modules in accordance with Appendix 1 must be provided.

§ 45 a Multiple Choice Tests

The conduct of multiple choice tests is governed by § 12 a of the APSO.

§ 46 Master's Thesis

- (1) As part of the master's examination, each student must write a master's thesis according to § 18 of the APSO.
- (2) ¹Completion of the Master's Thesis module, as a rule, is the final examination requirement. ²Upon request students may be granted early approval to commence work on the master's thesis if the objective of the thesis in the sense of § 18(2) APSO can be fulfilled under consideration of the progression of studies to date.
- (3) ¹The period between topic assignment and submission of the completed thesis must not exceed six months. ²The thesis is considered presented and not passed if the student fails to submit it on time without valid reasons as specified in § 10(7) of the APSO. ³30 credits are awarded for the Master's Thesis module. ⁴The master's thesis must be written in English.

- (4) ¹The completion of the master's thesis module involves a research paper and a presentation on the contents. ²The presentation does not affect the grading.
- (5) ¹If the Master's Thesis module was not graded as at least "sufficient" (4.0), it may be repeated once with a new topic. ²Students must renew their application to set the topic of the Master's Thesis module within six weeks of receipt of the grade.

§ 47 Passing and Assessment of the Master's Examination

- (1) The master's examination is deemed passed when all examinations required for the master's examination in accordance with § 43(1) have been passed and a plus credits account of at least 120 credits has been achieved.
- (2) ¹The module grade will be determined according to § 17 of the APSO. ²The overall grade for the master's examination will be calculated as the weighted grade average of the modules according to § 43(2) and the Master's Thesis module. ³The grade weights of the individual modules correspond to the credits assigned to each module. ⁴The overall assessment is expressed by the designation according to § 17 of the APSO.

§ 48 Degree Certificate, Diploma, Diploma Supplement

If the master's examination was passed, a degree certificate, a diploma, and a diploma supplement including a transcript of records are to be issued in compliance with § 25(1) and § 26 of the APSO.

§ 49 Entry into Force

- (1) ¹These regulations will enter into force on 1 January 2025. ²They apply to all students who commence their studies at the Technical University of Munich as of the winter semester 2025/2026.
- (2) ¹At the same time, the regulations for the Master's Degree Nutrition and Biomedicine at the Technical University of Munich dated 20 August 2015, most recently amended by the regulations dated 8 December 2022, cease to apply, unless the provision in § 49(1) Sentence 2 of these regulations apply. ²Students who commenced their studies at the Technical University of Munich prior to the winter semester 2025/2026 are to complete their studies in accordance with the regulations named in § 49(2) Sentence 1.

Appendix 1: Examination Modules*

A: Required Modules

No.	Module Name	Type of Instruction	Sem.	SWS	Credits	Type of Examination	Duration of Examinat ion	Weighting	Language Instructior
WZ3201	Basics Nutrition and Food	VO	1.	4	3	Written exam (SL)	120 min		English
WZ3210	Disease Pathologies and Nutrition	VO + SE	1.	4 + 2	8	Written exam + presentation (SL)	120 min + 40 – 60 min		English
LS40012	Energy Balance Regulation	VO + SE	1.	2 + 2	5	Written exam	120 min		English
WZ3225	Research Methods	VO	1.	3	5	Written exam	120 min		English
WZ3205	Integrated Lab course	UE	1.+ 2. ¹⁾	4 + 4	10	Lab assignment			English
WZ3204	Recent Topics	VO	1.+ 2. ¹⁾	2 + 2	6	Research paper			English
WZ3235	Advanced Metabolism	VO	2.	3	5	Written exam	120 min		English
WZ3226	Basics in Computational Biology	VO + UE	2.	1 + 2	5	Written exam	90 min		English
LS40013	Food and Health	VO + SE	2.	4 + 2	8	Written exam	120 min		English
WZ3207	Nutrition and Microbe- Host Interactions	VO + SE	2.	2 + 2	5	Written exam	90 min		English
	Total				60 credits				
LS40027	Master's Thesis		4.		30	Research paper (incl. presentation)			English

B: Elective Modules

In electives area B, a minimum of **30 credits** must be earned from the following list.

Of these, 10 credits must be earned within the scope of a Research Internship. A maximum of 15 credits can be earned within the scope of Research Internships.

Examinations in elective modules taken at other universities as part of a master's degree program (e.g. semester abroad) may be credited and considered as electives in the Master's examination in accordance with Appendix 1, even if there is no corresponding module in the module catalog of the Technical University of Munich, if they meet the requirements of the Master's degree program in Nutrition and Biomedicine. The Examination Board decides on the recognition of credits.

The Examination Board regularly updates the elective modules course catalog and publishes the official catalog no later than the start of semester in TUMonline. Elective modules in German may also be selected.

No.	Module Name	Type of Instruction	Sem.	SWS	Credits	Type of Examination	Duration of Examinat ion	Weighting	Language Instructior
WZ3061	Applied Food Law	VO	1 4. ¹⁾ WiSe, SoSe	2 + 2	5	Oral exam	20 min		English
LS40014	Basics of Metabolomics	VO + PJ	1 4. SoSe	1 + 2	5	Project work			English
WZ3223	Design and Analysis of Experiments	VO + UE	1 4. SoSe	2 + 2	5	Oral exam	30 min		English
LS40015	Experimental Immunology and Pathology	UE	1 4. WiSe	5	5	Lab assignment			English
WZ3231	Food Design and Food Industry	VO	1 4. WiSe	4	5	Written exam	120 min		English
LS40016	Health Behaviour and Health Promotion	VO + SE	1 4. WiSe	2 + 1	5	Oral exam + Research paper (SL)	30 min		English
WZ3230	Mitochondrial Biology	VO + SE	1 4. SoSe	2 + 2	5	Oral exam	20 min		English
WZ3232	Molecular Oncology	VO	14., ¹⁾ WiSe, SoSe	2	5	Written exam + Report (SL)	60- 90 min		English
LS20011	Research Internship Internal (10 CP)	FO	3.	12	10	Report			English
LS20012	Research Internship Internal (5 CP)	FO	3.	6	5	Report			English
LS20013	Research Internship External (10 CP)	FO	3.		10	Report			English
LS20014	Research Internship External (5 CP)	FO	3.		5	Report			English

WZ1676	Sustainable Land Use and Nutrition	VO	1 4. SoSe	4	5	Written exam + Presentation	90 min + 10 – 15 min	4 : 6	English
WZ3239	The Theoretical and Practical Basics of Systematic Energy Balance Regulation	VO + SE	1 4. WiSe	2 + 2	5	Oral exam	20 min		English

Explanation:

Sem. = semester; SWS = Semesterwochenstunden/weekly hours per semester; WiSe = wintersemester; SoSe = summersemester;

VO = Vorlesung/lecture; UE = Übung/exercise; VI = Vorlesung mit integrierter Übung/lecture with exercise; PR = Praktikum/practical course; SE = seminar;

FO = Forschungspraktikum/research internship; SL = Studienleistung/coursework (pass/fail credit requirements

For written exams, the column Examination Duration indicates the examination duration in minutes.

¹⁾ This module takes place over at least 2 semesters.

*) During the transition period to the school structure, module numbers may change; the old and new module numbers will be listed side by side in TUMonline.

<u>Appendix 2 a: Aptitude Assessment for Applicants with Higher Education Entrance</u> <u>Qualifications within the area of applicability of the Lisbon Convention</u>

Aptitude Assessment for the Master's Degree Program Nutrition and Biomedicine at the Technical University of Munich

1. Purpose of the Process

¹Eligibility for the Master's Degree Program Nutrition and Biomedicine, in addition to the requirements pursuant to § 36(1) Nos. 1 and 2, requires proof of aptitude pursuant to § 36(1) No. 3 in accordance with the following provisions. ²The special qualifications and skills of the candidates should correspond to the field of Nutritional Sciences. ³Individual aptitude parameters are:

- 1.1 Ability to do scholarly work and basic, methodologically sound research
- 1.2 Specialist knowledge in the field of Natural Sciences with a focus on Life Sciences from a bachelor's degree program
- 1.3 Knowledge of issues relating to Nutritional Science and Biomedicine
- 1.4 Knowledge of the technical terminology in English

2. Aptitude Assessment Process

- 2.1 ¹Aptitude Assessment is conducted annually. ²The TUM Enrollment, Student Fees Payment, Leave of Absence and Disenrollment Regulations (ImmatS) of 6 February 2023 as amended, in particular § 6, apply to the Aptitude Assessment process.
- 2.2 ¹Applications for admission to the aptitude assessment process in accordance with § 6 of the ImmatS must be submitted to the Technical University of Munich together with the documents listed in No. 2.3 and in § 36(1)2 no later than 31 May (absolute deadline) using the online application procedure.
- 2.3 The application must include:
- 2.3.1 Transcript of Records with modules of at least 120 credits for a six-semester bachelor's program, at least 150 credits for a seven-semester bachelor's program, and at least 180 credits for an eight-semester bachelor's program; the Transcript of Records must be issued by the relevant examination authority or the relevant academic programs office,
- 2.3.2 Complete (without time gaps) curriculum vitae in English,
- 2.3.3 A curricular analysis derived from the Transcript of Records is to be completed as part of the online application process; especially for modules that cannot be clearly assigned to the subject groups (see No. 5.1.1 a)) based on their title, it is recommended that the corresponding contents (e.g. module handbook, module descriptions) be uploaded in addition.

3. Aptitude Assessment Commission, Selection Committees

- 3.1 ¹Aptitude assessment is administered by the Aptitude Assessment Commission and the Selection Committees. ²Aptitude Assessment Commission is responsible for preparing the aptitude assessment process, organizing it and ensuring a structured and standardized process for determining aptitude within the framework of these Regulations; it bears responsibility, insofar as no other body is specified by these Regulations or through delegation of its authority to another body. ³Selection Committees are to conduct the assessment process in accordance with No. 5, subject to No. 3.2 Sentence 11.
- 3.2 ¹The Aptitude Assessment Commission consists of five members, one of whom is the Academic Program Director. ²The other four members of the Commission are appointed by the Dean, in consultation with the Vice Dean Academic and Student Affairs, from among the authorized examiners of the TUM School of Life Sciences; a deputy is to be appointed for each of the four members of the Commission. ³At least three Commission members must be university educators Higher within the meaning of the Bavarian Education Innovation Act [Hochschulinnovationsgesetzes (BayHIG)]. ⁴The departmental student council has the right to name a student representative to serve on the Commission in an advisory capacity. ⁵The Commission is chaired by the Academic Program Director. ⁶The Commission elects a deputy chairperson from among its members. ⁷Procedures are governed by the paragraph on the procedural provisions of the TUM Charter as amended. ⁸The term in office of Commission members is 2 years. ⁹Extensions of the term of office and reappointments are possible. ¹⁰Urgent decisions that cannot be postponed can be made by the Academic Program Director on behalf of the Commission. He/she must inform the Commission of such decisions without delay. ¹¹The Campus Office supports the Commission and the Selection Committee; the Commission may delegate to the Office the task of assessing formal admissions requirements in accordance with Nr. 4, as well as the determination of points to be awarded based on defined criteria for which there is no freedom of discretion involved. This includes, in particular, the conversion of grades and the calculation of the overall points earned by the applicant. The Office may also be involved in choosing the members of the Selection Committee from among the commissioners and assigning them to applicants.
- 3.3 ¹Each Selection Committee consists of two members of the TUM School of Life Sciences, who are authorized to conduct examinations in the degree program according to Art. 85(1) Sentence 1 of the Bavarian Higher Education Act [BayHSchG] in conjunction with the act governing examiners at institutions of higher education [Hochschulprüferverordnung]. ²At least one member must be a university educator within the meaning of the Bavarian Higher Education Innovation Act [Hochschulinnovationsgesetzes (BayHIG)]. ³It is permissible to serve concurrently on both the Aptitude Assessment Commission and the Selection Committee. ⁴Members of the Committee are appointed by the Commission for a term of 1 year; No. 3.2 Sentence 9 applies accordingly. ⁵Different Selection Committees may be assigned to individual criteria and stages of the assessment process.

4. Admission to the Aptitude Assessment Process

- 4.1 Admission to the aptitude assessment process requires that all documentation specified in No.2.3 has been submitted in a timely and complete fashion.
- 4.2 ¹ Applicants who have fulfilled the requirements according to No. 4.1 will be assessed according to No. 5. ²Applicants not suited for the program will receive a letter of rejection stating the grounds for rejection and informing them of legal remedies.

5. The Aptitude Assessment Process

5.1 First Stage

5.1.1 ¹The commission will assess, on the basis of the written application documents required under no. 2.3, whether or not an applicant is suitable for a program pursuant to no. 1 (First stage of the aptitude assessment process). ²For this purpose, the commission evaluates and grades the candidate's application documents on a scale ranging from 0 to 60 points, 0 being the worst and 60 the best possible result.

The following criteria will be applied to the evaluation:

a) Discipline-Specific Skills and Qualifications

¹The curricular analysis is conducted on the basis of competencies, rather than a schematic comparison of modules. ²The analysis is based on the fundamental subject groups listed in the following table of the bachelor's program Life Science Nutrition at the Technical University of Munich.

Subject Groups / Modules	Credits	Credits TUM		
Physics	7			
Inorganic Chemistry with Laboratory Course	10			
Organic and Physical Chemistry with Laboratory Course	10			
Biochemistry	8			
Mathematics and Statistics	7			
Cell Biology	3			
Genetics	3			
Microbiology	5			
Human and Animal Physiology	11			
Laboratory Courses (e.g. in Biochemistry, Microbiology; Human/Animal Physiology, Biology, etc.)	8			

³If it is established that there are no significant differences in the competencies acquired (learning outcomes), a maximum of 30 points will be awarded. ⁴If this value is not a whole number, it will be rounded up. ⁵For any competencies missing from the student's undergraduate curriculum, points equivalent to the amount of module credits for the respective competencies in the TUM bachelor's program Nutritional Science will be deducted from the overall score. ⁶In the subject groups *Organic and Physical Chemistry, Biochemistry, Human/Animal Physiology* and *Laboratory Courses*, modules of at least 5 credits each have to be demonstrated, otherwise 0 points will be awarded in these groups.

b) Grade

¹The applicant will be awarded one point for each tenth that the average calculated from examinations in the amount of 120 credits is better than 4.0. ²The maximum number of points is 30. ³Negative points will not be awarded. ⁴Grades of international degrees will be converted by applying the Bavarian formula. ⁵If the candidate has submitted a degree certificate containing more than 120 credits with the application, the assessment will be made on the basis of the best graded modules in the amount of 120 credits. ⁶The applicant needs to submit a list of the results together with the application and confirm its accuracy in writing. ⁷If the candidate submits this list, the average is calculated from graded module examinations with the best grades amounting to 120 credits; if no list is submitted, the overall average of grades submitted by the candidate will be used to calculate the average. ⁸The overall grade average is calculated as a weighted grade average. ⁹The grade weights of the individual modules correspond to the credits assigned to each module.

- 5.1.2 ¹The points total in the first stage will be calculated as the sum of the individual evaluations. ²Decimal places must be rounded up.
- 5.1.3 Applicants who have achieved at least 50 points will receive confirmation that they have passed the aptitude assessment.
- 5.1.4 Applicants who have achieved less than 40 points fail the aptitude assessment.

5.2. Second Stage

- ¹The remaining applicants will be invited to an assessment interview. ²In the second stage of 5.2.1 the aptitude assessment, the gualifications acquired in the bachelor's degree program and the result of the assessment interview are evaluated, whereby the qualification acquired in the bachelor's is to be weighted equally. ³Interview appointments will be announced at least one week in advance. ⁴Time slots for interviews must be scheduled before expiration of the application deadline. ⁵The interview appointment must be kept by the applicant. ⁶If the applicant is unable to attend an aptitude assessment interview due to reasons beyond his/her control, a later appointment may be scheduled upon a student's well-grounded request, but no later than two weeks before the beginning of classes. ⁷As a rule, the interview is conducted by video conference. ⁸If the video or audio transmission is disrupted, the interview can be continued after the disruption has been resolved or a follow-up appointment can be scheduled. ⁹In the event of repeated disruption, the aptitude assessment interview may be scheduled as a face-to-face meeting in exception to Sentence 7. ¹⁰Sentences 8 and 9 do not apply if it can be proven that the applicant is responsible for the disruption.¹¹In this case, the aptitude assessment interview will be assessed.
- 5.2.2 ¹The aptitude assessment interview is to be held individually for each applicant. ²The interview will be held in English and last at least 20 but not more than 30 minutes for each applicant. ³The interview will focus on the following topics:
 - 1. Laboratory experience: applicant has practical laboratory experience relevant to the course and can testify to it (30%),
 - 2. Professional aspirations: the applicant aspires to a career in Nutritional Science; with this in mind, the importance of the degree program in achieving this career goal should be made clear (10%),
 - 3. Discipline-specific skills and qualifications in the Life Sciences: a solution to an exemplary problem from the field of "Fundamentals of Life Science" can be demonstrated (30%),
 - 4. Scientific thesis: the theoretical background and main results of the thesis or a comparable academic paper can be presented (30%).

⁴The above topics may cover the documentation submitted according to 2.3. ⁵Any subjectspecific academic knowledge that is to be taught in the Master's Degree Program Nutrition and Biomedicine will not affect the decision. ⁶With the applicant's approval, a representative of the student body may sit in on the interview.

5.2.3¹ Each Committee member independently assesses each of the four areas with weighting as indicated. ²Each member of the Committee will grade the result of the interview on a scale from 0 to 60, 0 being the worst and 60 being the best possible result. ³The points total will be calculated as the arithmetic mean of the individual evaluations. ⁴Non-vanishing decimal places must be rounded up.

- 5.2.4 ¹The total number of points awarded in stage 2 is the sum of the points from 5.2.3 (points from interview) and the points from 5.1.1 a) (subject-specific qualification) and 5.1.1. b) (grade). ²Applicants with 70 or more points will be deemed suitable. ³Applicants with an overall score of less than 70 points have failed the aptitude assessment.
- 5.3 Determination and Notification of Results

¹Applicants will be informed of the results of the aptitude assessment through official notification. ²Applicants not suited for the program will receive a letter of rejection stating the grounds for rejection and informing them of legal remedies.

5.4 Candidate's suitability for the program, once determined in aptitude assessment, applies to all subsequent applications for this program.

6. Documentation

¹The aptitude assessment process must be documented, in particular the names of the participating members of the Selection Committee, the evaluation of the first and second stages, as well as the overall results. ²The aptitude assessment interview must be documented, including the date, duration, and location of the assessment, the names of the participating Selection Committee members, the applicant's name, and a list of main topics of discussion in bullet points.

7. Repeat Aptitude Assessments

Applicants who have failed an aptitude assessment may apply once to repeat the aptitude assessment process.

Appendix 2 b: Aptitude Assessment for Applicants with Higher Education Entrance Qualifications outside the area of applicability of the Lisbon Convention

Aptitude Assessment for the Master's Degree Program Nutrition and Biomedicine at the Technical University of Munich

1. Purpose of the Process

¹Eligibility for the Master's Degree Program Nutrition and Biomedicine, in addition to the requirements pursuant to § 36(1) No. 1, requires proof of aptitude pursuant to § 36(1) No. 4 in accordance with the following provisions. ²The special qualifications and skills of the candidates should correspond to the field of Nutrition and Biomedicine. ³Individual aptitude parameters are:

- 1.1 Ability to do scholarly work and/or basic and methodologically sound research
- 1.2 Specialist knowledge in the field of Natural Sciences with a focus on Life Sciences from a bachelor's degree program,
- 1.3 Knowledge of issues relating to Nutritional Science and Biomedicine
- 1.4 Knowledge of the technical terminology in English

2. Aptitude Assessment Process

- 2.1 ¹Aptitude Assessment is conducted annually. ²The TUM Enrollment, Student Fees Payment, Leave of Absence and Disenrollment Regulations (ImmatS) of 6 February 2023 as amended, in particular § 6, apply to the Aptitude Assessment process.
- 2.2 Applications for admission to the aptitude assessment process in accordance with § 6 of the ImmatS must be submitted to the Technical University of Munich together with the documents listed in 2.3 and in § 36(1)2 no later than 31 May (absolute deadline) using the online application procedure.
- 2.3 The application must include:
- 2.3.1 Transcript of Records with modules of at least 120 credits for a six-semester bachelor's program, at least 150 credits for a seven-semester bachelor's program, and at least 180 credits for an eight-semester bachelor's program; the Transcript of Records must be issued by the relevant examination authority or the relevant academic programs office
- 2.3.2 Complete (without time gaps) curriculum vitae in English
- 2.3.3 Proof of passing the electronic TUM Test Nutrition and Biomedicine according to Appendix 3 with a score of at least 40 points.

3. Aptitude Assessment Commission, Selection Committees

- 3.1 ¹Aptitude assessment is administered by the Aptitude Assessment Commission and the Selection Committees. ²Aptitude Assessment Commission is responsible for preparing the aptitude assessment process, organizing it and ensuring a structured and standardized process for determining aptitude within the framework of these Regulations; it bears responsibility, insofar as no other body is specified by these Regulations or through delegation of its authority to another body. ³Selection Committees are to conduct the assessment process in accordance with No. 5, subject to No. 3.2 Sentence 11.
- 3.2 ¹The Aptitude Assessment Commission consists of five members, one of whom is the Academic Program Director. ²The other four members of the Commission are appointed by the Dean, in consultation with the Vice Dean Academic and Student Affairs, from among the authorized examiners of the TUM School of Life Sciences; a deputy is to be appointed for each of the four members of the Commission. ³At least three Commission members must be university educators within the meaning the Bavarian Higher Education Innovation of Act [Hochschulinnovationsgesetzes (BayHIG)]. ⁴The departmental student council has the right to name a student representative to serve on the Commission in an advisory capacity. ⁵The Commission is chaired by the Academic Program Director. ⁶The Commission elects a deputy chairperson from among its members. ⁷Procedures are governed by the paragraph on the procedures of the TUM Charter as amended. ⁸The term in office of Commission members is 2 years. ⁹Extensions of the term of office and reappointments are possible. ¹⁰Urgent decisions that cannot be postponed can be made by the Academic Program Director on behalf of the Commission. He/she must inform the Commission of such decisions without delay. ¹¹The Campus Office supports the Commission and the Selection Committee; the Commission may delegate to the Office the task of assessing formal admissions requirements in accordance with Nr. 4, as well as the determination of points to be awarded based on defined criteria for which there is no freedom of discretion involved. This includes, in particular, the conversion of grades and the calculation of the overall points earned by the applicant. The Office may also be involved in choosing the members of the Selection Committee from among the commissioners and assigning them to applicants.
- 3.3 ¹Each Selection Committee consists of two members of the TUM School of Life Sciences, who are authorized to conduct examinations in the degree program according to Art. 85(1) Sentence 1 of the Bavarian Higher Education Act [BayHSchG] in conjunction with the act governing examiners at institutions of higher education [Hochschulprüferverordnung]. ²At least one member must be a university educator within the meaning of the Bavarian Higher Education Innovation Act [Hochschulinnovationsgesetzes (BayHIG)]. ³It is permissible to serve concurrently on both the Aptitude Assessment Commission and the Selection Committee. ⁴Members of the Committee are appointed by the Commission for a term of 1 year; No. 3.2 Sentence 9 applies accordingly. ⁵Different Selection Committees may be assigned to individual criteria and stages of the assessment process.

4. Admission to the Aptitude Assessment Process

- 4.1 Admission to the aptitude assessment process requires that all documentation specified in No. 2.2 has been submitted in a timely and complete fashion.
- 4.2 ¹Applicants who have fulfilled the requirements according to No. 4.1 will be assessed according to No. 5. ²Applicants not suited for the program will receive a letter of rejection stating the grounds for rejection and informing them of legal remedies.

5. The Aptitude Assessment Process

5.1 Second Stage

- 5.1.1 ¹It will be assessed, on the basis of the results of the TUM Test Nutrition and Biomedicine, whether an applicant is suitable for the program according to No. 1 (first stage of the aptitude assessment process). ²Relevant, here, is the points total in accordance with Appendix 3 No. 2 Sentence 14.
- 5.1.2 The points total in the first stage will be calculated based on the results of the test, rounded to a whole number.
- 5.1.3 Applicants with at least 50 points will be deemed suitable.

5.2 Second Stage

5.2.1 ¹The remaining applicants will be invited to an assessment interview. ²In the second stage of the aptitude assessment, the qualifications acquired in the bachelor's degree program (test) and the result of the assessment interview are evaluated, whereby the qualification acquired in the bachelor's is to be weighted equally.

³Interview appointments will be announced at least one week in advance. ⁴Time slots for interviews must be scheduled before expiration of the application deadline. ⁵The interview appointment must be kept by the applicant. ⁶If the applicant is unable to attend an aptitude assessment interview due to reasons beyond his/her control, a later appointment may be scheduled upon a student's well-grounded request, but no later than two weeks before the beginning of classes. ⁷As a rule, the interview is conducted by video conference. ⁸If the video or audio transmission is disrupted, the interview can be continued after the disruption has been resolved or a follow-up appointment can be scheduled. ⁹In the event of repeated disruption, the aptitude assessment interview may be scheduled as a face-to-face meeting in exception to Sentence 7. ¹⁰Sentences 8 and 9 do not apply if it can be proven that the applicant is responsible for the disruption. ¹¹In this case, the aptitude assessment interview will be assessed.

- 5.2.2 ¹The aptitude assessment interview is to be held individually for each applicant. ²The interview will be held in English and last at least 20 but not more than 30 minutes for each applicant. ³The interview will focus on the following topics:
 - 1. Laboratory experience: applicant has practical laboratory experience relevant to the course and can testify to it (30%),
 - 2. Professional aspirations: the applicant aspires to a career in Nutritional Science; with this in mind, the importance of the degree program in achieving this career goal should be made clear (10%),
 - 3. Discipline-specific skills and qualifications in the Life Sciences: a solution to an exemplary problem from the field of "Fundamentals of Life Science" can be demonstrated (30%),
 - 4. Scientific thesis: the theoretical background and main results of the thesis or a comparable academic paper can be presented (30%).

⁴The above topics may also cover the documentation submitted according to No. 2.3. ⁵Any subject-specific academic knowledge that is to be taught in the Master's Degree Program Nutrition and Biomedicine will not affect the decision. ⁶With the applicant's approval, a representative of the student body may sit in on the interview.

- 5.2.3 ¹ Each Committee member independently assesses each of the four areas with weighting as indicated. ²Each member of the Committee will grade the result of the interview on a scale from 0 to 60, 0 being the worst and 60 being the best possible result. ³The points total will be calculated as the arithmetic mean of the individual evaluations. ⁴Non-vanishing decimal places must be rounded up.
- 5.2. 4 ¹The total number of points awarded in stage 2 is the sum of the points from No 5.2.3 (points from interview) and the points from No 5.1.2 (test). ²Applicants with 70 or more points will be deemed suitable. ³Applicants with an overall score of less than 70 points have failed the aptitude assessment.

5.3 Determination and Notification of Results

¹Applicants will be informed of the results of the aptitude assessment through official notification. ²Applicants not suited for the program will receive a letter of rejection stating the grounds for rejection and informing them of legal remedies.

5.4 Candidate's suitability for the program, once determined in aptitude assessment, applies to all subsequent applications for this program.

6. Documentation

¹The aptitude assessment process must be documented, in particular the names of the participating members of the Selection Committee, the evaluation of the first and second stages, as well as the overall results. ²The aptitude assessment interview must be documented, including the date, duration, and location of the assessment, the names of the participating Selection Committee members, the applicant's name, and a list of main topics of discussion in bullet points.

7. Repeat Aptitude Assessments

Applicants who have failed an aptitude assessment may apply once to repeat the aptitude assessment process.

APPENDIX 3: TUM Test Nutrition and Biomedicine

1. Purpose of the Test

The TUM Test is intended to provide evidence that the competencies acquired in the first degree according to § 36(1) No. 1 meet the subject-related requirements of the Master's Degree Program Nutrition and Biomedicine and that the applicant can be expected to achieve the goal of the degree program independently and responsibly in a scholarly manner.

2. Conduct and Assessment

¹The TUM Test Nutrition and Biomedicine is conducted by the TUM School of Life Sciences once per admissions period before the application deadline. ²The TUM Test is an online, written test comprising approximately 10-15 questions requiring approximately 30 minutes to complete. ³The applicant bears the risk in the event of any technical problems, unless these are attributable to the Technical University of Munich.

⁴The TUM School of Life Sciences will announce further details, in particular the date and time of the TUM Test, for the application phase for the winter semester on the School's website no later than the start of the application period. ⁵Test results are valid for a maximum of two years. ⁶The applicant will receive confirmation of participation in the Test Nutrition and Biomedicine with place and date as well as the achieved score, which will serve as proof in the application process.

⁷The TUM Test covers the following categories in the indicated points distribution:

Cat.	Competencies acquired in the	Max. points	
	undergraduate degree program	P _{max}	
A	Mathematics and Statistics	15	
В	Research Methods	15	
С	Biochemistry/Metabolism	15	
D	Anatomy/Physiology/Pathophysiology	15	
	Total	60	

⁸Any subject-specific academic knowledge that is to be taught in the Master's Degree Program Nutrition and Biomedicine will not affect the decision. ⁹Applicants must demonstrate in the test that they are suitable for the degree program. ¹⁰Questions are selected by two members of the Commission in accordance with Appendix 2 b No. 3.2. At least one member must be a university educator within the meaning of the Bavarian Higher Education Innovation Act [Hochschulinnovationsgesetzes (BayHIG)]. ¹¹The test is a multiple choice test. ¹²For each correct response, the number of points specified in the test for the respective question will be awarded. ¹³The maximum possible number of points in the TUM Test is 60. ¹⁴The total number of points earned, which is used to assess aptitude in the first stage of the aptitude assessment process in Appendix 2 b No. 5.1.1 Sentence 2, is the sum of the individual points awarded.

3. Documentation

A record is to be kept about the conduct of the test (date, place, beginning and end of the test, the names of those present, the names of the applicants, as well as any unusual occurrences).

Executed following a resolution of the Senate of the Technical University of Munich dated 27 November 2024 and approval of the President of the Technical University of Munich on 12 December 2024.

Munich, 12 December 2024 Technical University of Munich

signed by Thomas F. Hofmann, President

These regulations were officially published online on the website <u>https://www.tum.de/satzungen</u> on 12 December 2024. In addition, access is available during office hours on the premises of the TUM Center for Study and Teaching - Legal Affairs, Arcisstraße 21, 80333 Munich, Room 0561. Day of proclamation is therefore 12 December 2024.