

Only the officially published version is binding

**Subject Examination and Study Regulations for
the Master's Program in Sustainable
Resource Management
at the Technical University of Munich**

From 20 August 2015

Readable version

**as amended by the SÄS for the appointment of the commission members in the aptitude test for
Master's programs of the TUM School of Life Sciences dated February 1, 2021.**

On the basis of Article 13, Paragraph 1, Sentence 2 in conjunction with Article 58, Paragraph 1, Sentence 1, Article 61, Paragraph 2, Sentence 1 and Article 43, Paragraph 5 of the Bavarian University Act (BayHSchG), the Technische Universität München enacts the following statutes:

Table of Contents:

- § 34 Scope, academic degree
- § 35 Start of studies, standard period of study, ECTS
- § 36 Qualification requirements
- § 37 Modularization, module examination, courses, fields of study, Language of instruction
- § 37 a Vocational internship
- § 38 Examination deadlines, progress monitoring, missed deadlines
- § 39 Examination board
- § 40 Crediting of periods of study, study and examination achievements
- § 41 Study-related examination procedure, forms of examination
- § 42 Registration and admission to the Master's examination
- § 43 Scope of the Master's examination
- § 44 Repeat, failure of examinations
- § 45 Study achievements
- § 45 a Multiple choice procedure
- § 46 Master's Thesis
- § 47 Passing and Assessment of the Master's Examination
- § 48 Certificate, Diploma Supplement
- § 49 Effectivity

Appendix 1: Examination modules

Appendix 2: Suitability procedure

§ 34

Scope, academic degree

- (1) The subject examination and study regulations for the master's degree program in Sustainable Resource Management (FPSO) supplement the General Examination and Study Regulations for Bachelor's and Master's Degree Programs at the Technical University of Munich (APSO) of March 18, 2011, as amended. The APSO has priority.
- (2) On the basis of the successful completion of the Master's examination, the academic degree "Master of Science" ("M.Sc.") is awarded. This academic degree may be awarded with the university suffix "(TUM)".

§ 35

Start of studies, standard period of study, ECTS

- (1) The Master's program in Sustainable Resource Management at the Technical University of Munich generally begins in the winter semester.
- (2) The number of credits required to obtain the Master's degree in the compulsory and elective areas is 78, spread over three semesters. In addition, six months (30 credits) are required to complete the Master's thesis in accordance with § 46. In addition, eight weeks (12 credits) of practical study must be completed. The scope of the examinations to be taken in the compulsory and elective areas in accordance with Appendix 1 in the Master's degree program in Sustainable Resource Management thus amounts to at least 120 credits. The standard period of study for the master's program is four semesters in total.

§ 36

Qualification requirements

- (1) The qualification for the master's degree program Sustainable Resource Management is proven by
 1. a qualified bachelor's degree of at least six semesters obtained at a domestic or foreign university or a degree of at least equivalent value in engineering, natural sciences, economics or social sciences or comparable courses of study,
 2. Adequate knowledge of the English language; for this purpose, students whose language of education is not English must provide evidence by means of a recognized language test such as the "Test of English as a Foreign Language" (TOEFL) (at least 88 points), the "International English Language Testing System" (IELTS) (at least 6.5 points) or the "Cambridge Main Suite of English Examinations"; if examinations amounting to 60 credits in English-language examination modules were taken in the undergraduate degree program, this also demonstrates adequate knowledge of the English language,
 3. passing the suitability procedure according to Annex 2.
- (2) A qualified university degree within the meaning of Paragraph 1 exists if there are no significant differences with regard to the competencies (learning outcomes) acquired in the scientifically oriented relevant bachelor's degree programs of TUM or a comparable university mentioned in Paragraph 1 No. 1 and these correspond to the subject-specific requirements of the master's degree program.
- (3) The commission for the aptitude procedure decides on the comparability of the study program, on the determination of the special aptitude as well as on the crediting of competences in the examination of university degrees acquired at foreign universities under the consideration of Art. 63 Bavarian University Act.

§ 37

Modularization, module examination, courses, fields of study, language of instruction

- (1) General regulations on modules and courses are laid down in §§ 6 and 8 APSO. In the event of deviations from module specifications, § 12 Para. 8 APSO shall apply.
- (2) The study plan with the modules in the compulsory and elective areas is listed in Appendix 1.
- (3) In the master's program Sustainable Resource Management, the following majors can be selected:
 - Management and Protection of Forest Ecosystems
 - Wildlife and Protected Area Management
 - Landscape Management
 - Renewable Resources
 - Climate, Air and Water
 - Soils and Soil Management
 - Material and Waste Management
 - Sustainable Agricultural Value Chains
- (4) The language of instruction in the Master's program Sustainable Resource Management is English. If students have not demonstrated knowledge of German in their application, the admission will be subject to the condition that at least one module in which integrative knowledge of German is acquired must be successfully completed by the end of the second semester. The offer will be announced by the Examination Committee in accordance with local practice. Voluntary extracurricular courses, such as German courses offered by the Language Center, will also be recognized.

§ 37 a

Professional internship

- (1) Practical vocational training must be completed as a course credit within the meaning of § 6 Para. 7 APSO. Its duration is 8 weeks (12 credits). Successful participation shall be confirmed by the companies and authorities in which the training took place and evidenced by internship reports.
- (2) The board of examiners decides on the recognition of successfully completed vocational training or an equivalent achievement as practical vocational training.

§ 38

Examination deadlines, study progress monitoring, missed deadlines

- (1) Examination deadlines, study progress monitoring and missed deadlines are regulated in § 10 APSO.
- (2) At least one of the module examinations from the Fundamentals listed in Appendix 1 must be successfully completed by the end of the second semester. If the deadline is exceeded, § 10 para. 5 APSO shall apply.

§ 39

Examination board

The body responsible for decisions in examination matters according to § 29 APSO is the Master's Examination Board Sustainable Resource Management of the Faculty of Forest Sciences and Resource Management.

§ 40

Crediting of periods of study, study and examination achievements

The crediting of study periods, study and examination achievements is regulated by § 16 APSO.

§ 41

Course-related examination procedure, forms of examination

- (1) Possible forms of examination according to § 12 and 13 APSO are, in addition to written examinations and oral examinations in this study program, in particular laboratory performances, exercise performances (if applicable, tests), reports, project work, presentations, learning portfolios, scientific papers and the examination course.
- a) An **examination** is written work under supervision with the aim of identifying problems in a limited time using the specified methods and defined aids and finding ways of solving them and, if necessary, being able to apply them. The duration of written examinations is regulated in § 12 Para. 7 APSO.
 - b) Laboratory services include, depending on the discipline, experiments, measurements, work in the field, field exercises, etc. with the aim of carrying out, evaluating and gaining knowledge. Components can be e.g.: the description of the processes and the respective theoretical basis incl. literature study, the preparation and practical execution, if necessary necessary calculations, their documentation and evaluation as well as the interpretation of the results with regard to the knowledge to be gained. The laboratory performance can be supplemented by a presentation in order to test the communicative competence in presenting scientific topics to an audience. The specific components of the respective laboratory performance and the competencies to be tested with it are listed in the module description.
 - c) The **exercise performance (if applicable, tests)** is the processing of given tasks (e.g. mathematical problems, programming tasks, modeling, etc.) with the aim of applying theoretical content to solve application-related problems. It serves the verification of factual and detailed knowledge as well as its application. The exercise performance can be carried out, among other things, in writing, orally or electronically. Possible forms are, for example, homework, exercise sheets, programming exercises, (e-)tests, tasks in the context of university internships, etc. The concrete components of the respective exercise performance and the competencies to be tested are listed in the module description.
 - d) A **report** is a written review and summary of a learning process with the aim of reproducing what has been learned in a structured manner and analyzing the results in the context of a module. The report should prove that the essential aspects have been recorded and can be reproduced in writing. Possible report forms are, for example, field trip reports, internship reports, work reports, etc. The written report can be supplemented by a presentation in order to test the communicative competence in presenting the contents to an audience.
 - e) In the context of a **project work**, a project assignment is to be achieved as a defined goal in a defined time and with the use of suitable instruments in several phases (initiation, problem definition, role allocation, idea generation, criteria development, decision, implementation, presentation, written evaluation). In addition, a presentation can be part of the project work in order to test the communicative competence in presenting scientific topics to an audience. The concrete components of the respective project work and the competencies to be tested with it are listed in the module description. The project work is also possible in the form of group work. In this case, it should be demonstrated that tasks can be solved in a team. The contribution to be assessed as examination performance in each case must be clearly individually recognizable and assessable. This also applies to the individual contribution to the group result.

- f) The **scientific paper** is a written performance in which a challenging scientific or scientific-application-oriented question is independently processed using the scientific methods of the respective discipline. It should be demonstrated that a question corresponding to the learning outcomes of the respective module can be completely processed in compliance with the guidelines for scientific work - from analysis to conception to implementation. Possible forms, which differ in their respective level of demand, are e.g. thesis paper, abstract, essay, study paper, seminar paper, etc. The scientific elaboration can be accompanied by a presentation and, if necessary, a colloquium in order to test the communicative competence of presenting scientific topics in front of an audience. The concrete components of the respective scientific elaboration and the competences to be examined with it are listed in the module description.
- g) A **presentation** is a systematic, structured and visually supported oral presentation using suitable media (such as beamers, transparencies, posters, videos), in which specific topics or results are illustrated and summarized and complex issues are reduced to their essential core. The presentation is intended to demonstrate the ability to work on a specific topic in a given time in such a way that it can be presented to an audience in a clear, concise and comprehensible manner. In addition, it should be demonstrated that questions, suggestions or discussion points of the audience can be dealt with in an informed manner in relation to the respective subject area. The presentation may be supplemented by a short written preparation. The presentation may be given individually or in groups. The contribution to be assessed as an examination performance must be clearly recognizable and assessable individually. This also applies to the individual contribution to the group result.
- h) An **oral examination** is a time-limited examination discussion on specific topics and concrete questions to be answered. In oral examinations it should be demonstrated that the qualification objectives documented in the module descriptions have been achieved and that the interrelationships of the examination area have been recognized and special questions can be placed in these interrelationships. The oral examination can be conducted as an individual examination or as a group examination. The duration of the examination is regulated in § 13 Para. 2 APSO.
- i) A **learning portfolio** is a written presentation of one's own work, selected according to previously defined criteria, with which learning progress and performance status at a certain point in time and in relation to a defined content is to be demonstrated. The selection of the work, its relation to one's own learning progress and its significance for the achievement of the qualification goals must be justified. The learning portfolio should demonstrate that responsibility has been taken for the learning process and that the qualification objectives documented in the module description have been achieved. Depending on the module description, the components of successful self-learning checks of the learning portfolio may include, in particular, work with application relevance, websites, weblogs, bibliographies, analyses, thesis papers as well as graphic presentations of an issue or a question. The concrete components of the respective learning portfolio and the competencies to be tested with it are listed in the module description.
- j) In the context of an **examination course**, several examination elements are to be completed within one examination performance. In contrast to a partial module examination, the examination performance is examined in an organizationally (spatially or temporally) coherent manner. Examination elements are several different examination formats which in their entirety cover the complete competence profile of the module. Examination elements can in particular also be examination formats according to letters a) to i). The total duration of the examination shall be specified in the module catalog; the examination form and duration of the individual examination elements shall be specified in the module description.
- (2) The module examinations are usually taken during the course of study. The type and duration of a module examination are specified in Annex 1. In the event of deviations from these stipulations, § 12 Para. 8 APSO must be observed. For the evaluation of the module examination, § 17 APSO shall apply. The grade weights of partial module examinations correspond to the weighting factors assigned to them in Annex 1.

- (3) If Appendix 1 specifies for a module examination that it is written or oral, the examiner shall announce the binding type of examination to the students in an appropriate manner no later than the beginning of the lecture.

§ 42

Registration and admission to the Master's examination

- (1) Upon enrollment in the Sustainable Resource Management master's program, students are considered admitted to the module examinations of the master's degree.
- (2) Registration for a module examination in the compulsory and elective area is governed by § 15 para. 1 APSO. Registration for a corresponding repeat examination in a failed compulsory/elective module is governed by § 15 para. 2 APSO.

§ 43

Scope of the Master's examination

- (1) The master's examination includes:
1. the module examinations in the corresponding modules according to par. 2,
 2. the Master's Thesis according to § 46 as well as
 3. the academic achievements listed in § 45.
- (2) The module examinations are listed in Appendix 1. There must be 33 credits in the compulsory modules, at least 45 credits in elective modules. When choosing the modules, § 8 para. 2 APSO is to be observed.

§ 44

Repetition, failure of examinations

- (1) The repetition of examinations is regulated in § 24 APSO.
- (2) The failure of examinations is regulated by § 23 APSO.

§ 45

Study achievements

In addition to the examinations mentioned in § 43 Para. 1, the successful completion of study achievements in the module Professional Internship in the amount of 12 credits according to § 37 a must be proven.

§ 45 a

Multiple choice method

The implementation of multiple-choice procedures is regulated in § 12 a APSO.

§ 46

Master's Thesis

- (1) Pursuant to § 18 APSO, students must prepare a Master's thesis as part of the Master's examination. The Master's thesis can be issued and supervised by expert examiners of the Technical University of Munich (topic setter). The expert examiners according to sentence 2 are appointed by the examination board.
- (2) The completion of the Master's Thesis module should normally represent the last examination performance. Students may be admitted to the Master's Thesis module prematurely upon application if the goal of the thesis as defined in Section 18 (2) APSO can be achieved while taking into account the previous course of study."
- (3) The time from issuance to delivery of the Master's Thesis may not exceed six months. The Master's Thesis shall be deemed to have been taken and not passed if it is not delivered on time without valid reasons recognized in accordance with § 10 Para. 7 APSO. The Master's thesis shall be written in English.
- (4) The completion of the Master's Thesis consists of a "Proposal" (course work) and a written paper.
- (5) If the Master's Thesis has not been evaluated with at least "sufficient" (4.0), it can be repeated once with a new topic. It must be re-registered no later than six weeks after the notification of the result.

§ 47

Passing and evaluation of the Master's examination

- (1) The master's examination is passed if all examinations to be taken within the framework of the master's examination according to § 43 Para. 1 have been passed and a point account balance of at least 120 credits has been achieved.
- (2) The module grade is calculated according to § 17 APSO. The overall grade of the Master's examination is calculated as the weighted grade average of the modules according to § 43 para. 2 and the Master's Thesis. The grade weights of the individual modules correspond to the assigned credits. The overall grade is expressed by the predicate according to § 17 APSO.

§ 48
Certificate, Diploma Supplement

If the Master's examination is passed, a certificate, a certificate and a Diploma Supplement with a Transcript of Records shall be issued in accordance with § 25 Para. 1 and § 26 APSO. The date of the certificate shall be the date on which all examination and study achievements have been completed.

§ 49
Entry into force*)

- (1) These regulations come into force on October 1, 2015. It applies to all students who begin their studies at the Technical University of Munich from the winter semester 2015/16 onwards.
- (2) The subject examination and study regulations for the master's degree program in Sustainable Resource Management at Technische Universität München dated March 6, 2009, last amended by the statutes dated November 3, 2014, shall expire at the same time. Students who have already commenced their subject studies at the Technische Universität before the winter semester 2015/16 shall complete their studies in accordance with the statutes pursuant to sentence 1. They may change to these subject examination and study regulations upon application.

*) This provision concerns the entry into force of the Articles of Association in the original version of August 20, 2015. The date of entry into force of the amendments is specified in the amending Articles of Association.

Appendix 1: Examination modules

No.	Module name	Teaching form V Ü S	Sem.	SWS	Credits	Exam type	Exam duration	Weighting factor	Teaching-language
-----	-------------	------------------------	------	-----	---------	-----------	---------------	------------------	-------------------

Mandatory modules

WZ1821	Natural Resources-Traits, Management and Theory of Sustainability	V	1	5	5	Written exam	90 min		English
WZ1824	System Analysis and Introduction to Ecology	V	1	4	5	Written exam	90 min		English
WZ2713	Methods of Scientific Communication	S	1	4	4	Scientific elaboration	-		English
WZ1822*	Introduction to Economics and Business Ethics	V	1	4	5	Written exam	90 min		English
WZ1823	Inventory Methods, Statistics and GIS	V Ü	1	4 V + 1 Ü	6	Written exam	120 min		English
WZ2712*	Project Management and Cross Cultural Communication	V S	1	4 V + 1 S	5	Project work	-		English
WI000926*	International Environmental Governance and Conflict Management	V	1	4	5	Scientific elaboration	-		English
WZ2714	General Education Subject ¹		2		3				German/ English
	Total				33				

¹ General Education Subject: 3 credits from the course offerings of TUM, Carl von Linde Akademie, UnternehmerTUM and Sprachenzentrum (except English courses) must be taken in the module - modules from the course offerings of the Sustainable Resource Management program cannot be taken.

* "Management Aspects": from the three modules of 15 credits, students must complete 10 credits.

Master's Thesis

WZ2731	Master's Thesis		4		30	Scientific elaboration + academic performance	-		English
--------	-----------------	--	---	--	----	---	---	--	---------

Elective Modules and Science Topics - 45 credits total (30 from Science Topics and 15 from Free Elective Modules).

Science Topics	No.	Module name	Teaching form V Ü S	Sem.	SWS	Credits	Exam type	Exam duration	Weighting factor	Teaching-language
----------------	-----	-------------	------------------------	------	-----	---------	-----------	---------------	------------------	-------------------

The examination board continuously updates the subject catalog of the elective modules. Changes will be announced on the website of the examination board at the beginning of the semester at the latest.

Free Elective Modules	WI000286	Environmental and Natural Resource Economics	V Ü	2	4	5	Written exam	120 min		English
	WZ2936	Sustainable and Environmental Regulations	S	2	4	5	Project work			English
	WZ1590	Climate Change Economics	V Ü	2	4	5	Written exam	90 min		English
	WZ1545	Human Resource Management in Agriculture and Related Industries	V	3	4	5	Written exam	90 min		English
	WZ1674	Research Methods and Economic Research Project	S	2	4	6	Scientific elaboration			English
	WZ1413	Wildlife Monitoring in Ecology: Concepts, Methods and Application	S	3	4	5	Written exam	90 min		English
Management and Protection of Forest	WZ4161	Forest Management	V Ü	2	2 VI + 3,5 Ü	5	Oral examination	30 min		English
	WZ2716	Forest Growth and Forest Operations	V Ü	2	3.5 V + 0.5 T	5	Written exam	90 min		English
	WZ2717	Genetic Resources Management and Forest Protection	V	3	4	5	Written exam	60 min		English
	WZ4082	Plantation Forestry and Agroforestry	V	3	4	5	Oral examination	30 min		English
Wildlife and Protected Area Management	WZ4197	Protected Areas Biodiversity and Management	V	2	4	5	Written exam	90 min		English
	WZ4198	Wildlife Management and Wildlife-Human Interactions	V S	2	2 V + 2 S	5	Scientific elaboration			English
	WZ4189	Fisheries and Aquatic Conservation	V Ü	2	2 V + 2 Ü	5	Written exam + SL	60 min		English
	WZ6432	Wildlife and Conservation Biology	V Ü	3	2V + 3 Ü	5	Written exam and project work	60 min	7:3	English

Science Topics	No.	Module name	Teaching form V Ü S	Sem.	SWS	Credits	Exam type	Exam duration	Weighting-factor	Teaching-language
----------------	-----	-------------	------------------------	------	-----	---------	-----------	---------------	------------------	-------------------

Landscape Management	WZ4201	Vegetation Ecology and GIS	V Ü	2	2 V + 2 Ü	5	Written exam	90 min		English
	WZ2718	Landscape Planning	V S	2	2 V + 2 S	5	Scientific elaboration	-		English
	WZ2719	Remote Sensing and Image Processing	S Ü	3	2.5 S + 2.5 Ü	5	Project work	-		English
	WZ4094	Landscape Management - Application Study	V I	3	5	5	Project work	-		English
Renewable Resources	WZ2720	Renewable Energy Technologies	V	2	4	5	Written exam	60 min		English
	WZ2721	Bioenergy Systems	V	2	4	5	Written exam	60 min		English
	WZ4098	Forestry Raw Materials and their Utilization	V Ü	3	2 V + 2 Ü	5	Written exam	60 min		English
	WZ4202	Political and Social Perspectives of Renewable Resources	V Ü	3	1,5 L + 1,5 Ü	5	Scientific analysis	-		English
Climate, Air and Water	WZ2731	Hydrometeorology and Management of Water Resources	V S	2	2 V + 2 S	5	Oral examination	30 min		English
	WZ2722	Mountain Catchments under Changing Climate	V Ü	2	2 V + 4 Ü	5	Scientific paper + written exam	60 min	6,5 : 3,5	English
	WZ2732	Environmental Monitoring and Data Analysis	V I	3	1 V + 2 S + 2 Ü	5	Written exam	135 min		English
	WZ2730	Climate Change - Science, Impacts and Adaptation, Mitigation	V S	3	2 V + 2 S	5	Oral examination	30 min		English

Science Topic	No.	Module name	Teaching form V Ü S	Sem.	SWS	Credits	Exam type	Exam duration	Weighting factor	Teaching-language
Material and Waste Management	WZ4206	Material Flow Management and Applications	V	2	3	5	Scientific elaboration	-		English
	WZ4207	Waste and Waste Water Treatment	V	2	4	5	Written exam	90 min		English
	WZ2723	Utilization and Treatment of Special Materials and Waste	S	3	4	5	Presentation	-		English
	WZ2724	Emission Control in Land-Use and Animal Husbandry	V	3	3	5	Oral or written	20 min 90 min		English
Sustainable Agricultural Value Chains	WZ1921	Strategy, Supply Chain Management and Sustainability in Agribusiness and the Food Industry	S	3	4	6	Learning portfolio			English
	WZ1567	Sustainability: Paradigms, Indicators and Measurement Systems	V	3	4	5	Report	-		English
	WI001190	Cooperation and integration in agricultural value chain	V	3	4	5	Written exam	120 min		English
	WI001215	Network and stakeholder analysis: Sustainable resource use and agri-food systems	V	3	4	5	Written exam	120 min		English
Soils and Soil Management	WZ2733	Introduction to Soil Science	V Ü	2	2 V + 3 Ü	5	Written exam + laboratory performance (SL)	60 min		English
	WZ2735	World Soil Resources	V Ü	2	2 V + 3 Ü	5	Oral examination + laboratory performance (SL)	30 min		English
	WZ2734	Soil Protection	V	3	4	5	Oral examination	30 min		English
	WZ2736	Analytical Characterization of Soil Resources	V Ü	3	1 V + 3 Ü	5	Scientific elaboration	-		English

No.	Module name	Teaching form V Ü S	Sem.	SWS	Credits	Exam type	Exam duration	Weighting factor	Teaching-language
-----	-------------	------------------------	------	-----	---------	-----------	---------------	------------------	-------------------

In addition to the 30 credits in the Science Topics area, 15 credits must be taken in the Free Electives area.

Examination achievements in the field of "Sustainable Resource Management" acquired at another university within the framework of a Master's program (e.g. semester abroad) can also be credited up to an extent of 15 credits and included in the Master's examination as elective achievements in the section Elective Modules according to Annex 1, if there is no corresponding module in the module catalog of Technische Universität München, but the other requirements correspond to those of the Master's program "Sustainable Resource Management". The examination board "Sustainable Resource Management" decides on the recognition in consultation with the subject advisor for the Master's program "Sustainable Resource Management" and the international representative of the Faculty of Forest Sciences and Resource Management.

Course Credits: A professional internship of 12 credits must be completed as course work:

WZ4061	Internship		2 and 3		12	Report			
--------	------------	--	---------------	--	----	--------	--	--	--

Explanations: Sem. = semester; SWS = semester hours per week; V = lecture; Ü = exercise; S = seminar;

ANNEX 2: Suitability procedure

Qualification procedure for the Master's program in Sustainable Resource Management at the Technical University of Munich

1. Purpose of the procedure

In addition to the requirements of § 36 para. 1 nos. 1 and 2, qualification for the master's degree program in Sustainable Resource Management requires proof of suitability in accordance with § 36 para. 1 no. 3 in accordance with the following regulations. The special qualifications and skills of the applicants should correspond to the professional field of sustainable resource management. Individual suitability parameters are:

- 1.1 Ability to work in a scientific or basic and methodological manner,
- 1.2 Existing subject knowledge relevant to the content of the program from the first degree in engineering, natural sciences, economics and/or social sciences.

2. Suitability testing procedure

2.1 The eligibility review process is conducted annually by the Department of Forestry and Resource Management.

2.2 Applications for admission to the procedure, together with the documents according to 2.3.1 up to and including 2.3.5 as well as § 36 para. 1 no. 2 for the winter semester, must be submitted to Technische Universität München in the online application procedure by May 31 (cut-off deadline). The certificate and the transcript as proof of passing the Bachelor's program must be submitted to the Application and Enrollment Department of Technische Universität München no later than five weeks after the start of lectures. Otherwise, admission to the Master's program is not yet possible in accordance with § 36 of these statutes.

2.3 The application must be accompanied by:

- 2.3.1 proof of a university degree in accordance with § 36; if this proof is not yet available at the time of application, complete proof of study and examination achievements in the first degree program (Transcript of Records) to the extent of 180 credits must be enclosed,
- 2.3.2 a curriculum vitae in tabular form,
- 2.3.3 a written justification in English of 400 words for the choice of the study program Sustainable Resource Management at the Technical University of Munich, in which the applicants explain which specific talents and interests make them particularly suitable for the Master's program Sustainable Resource Management at the Technical University of Munich; the special willingness to perform is to be substantiated, for example, by explanations of course-specific vocational training, internships, stays abroad or subject-related further education in the Bachelor's course that went beyond attendance times and compulsory courses; this is to be substantiated, if applicable, by attachments. This is to be documented by attachments, if necessary,

- 2.3.4 a scientific essay of 800 words written in English; the chairperson of the committee may choose one or more topics; this must be made known to the applicants no later than May 15,
- 2.3.5 an assurance that the justification for the choice of the course of study and the essay were prepared independently and without outside help, and that the thoughts taken from outside sources are marked as such.

3. Commission on the suitability procedure

- 3.1 The suitability procedure is carried out by a commission, which usually consists of the program director responsible for the master's program Sustainable Resource Management, at least two university professors and at least one research assistant. At least half of the commission members must be university professors. A student representative shall participate in the commission in an advisory capacity.
- 3.2 The appointment of the members shall be made by the Dean in consultation with the Associate Dean for Academic Affairs. At least one university lecturer shall be appointed as a deputy member of the commission. The commission is usually chaired by the Dean of Studies. 4Article 41 of the BayHSchG, as amended, applies to the course of business.

4. Admission to the qualification procedure

- 4.1 Admission to the qualification procedure requires that the documents mentioned in No. 2.3 are submitted in due time and in full.
- 4.2 Those who meet the necessary requirements will be examined in the suitability procedure in accordance with No. 5.
- 4.3 Those who are not admitted will receive a rejection notice with reasons and instructions on how to appeal.

5. Implementation of the suitability procedure

5.1 First stage of the implementation of the suitability procedure

- 5.1.1 On the basis of the written application documents required according to No. 2.3, the commission shall assess whether the applicants have the suitability for the study program according to No. 1 (first stage of the implementation of the suitability procedure). The commission shall evaluate the submitted documents on a scale of 0 to 100 points, whereby 0 is the worst and 100 the best result to be achieved:

a) Final grade

Two points are awarded for each tenth grade that the relevant university degree is better than 3.7. The maximum number of points is 54. Negative points are not awarded. For foreign degrees, the grade converted using the Bavarian formula is used.

b) Justification letter

The written statement of reasons is evaluated by two commission members on a scale of 0 - 16 points. The content of the letter of justification is evaluated according to the following criteria:

1. the connection between personal interests and contents of the study program can be presented in a well-structured way,
2. the special suitability and motivation for the Master's program can be convincingly substantiated by arguments and meaningful examples, such as professional training specific to the program, internships, stays abroad (cf. No. 2.3.3),

3. key points of the justification are highlighted in appropriate language and substantiated factually.

The commission members independently rate each of the three focal points on the point scale from 0 to 16, whereby 0 is the worst and 16 the best result to be achieved. The individual score of each member is the arithmetic mean of the scores of the equally weighted three focal points. The score of the letter of justification results from the arithmetic mean of the individual scores of the commission members. Non-vanishing decimal places are to be rounded up.

c) **Essay**

The essay should be designed as a scientific essay and will be evaluated by two commission members on a scale of 0 - 30 points. The content will be evaluated according to the following criteria:

1. professional substance and scientific structure,
2. Consistency of reasoning,
3. freedom from errors and technical language competence in English.

The commission members independently rate each of the three focal points on the point scale from 0 to 30, whereby 0 is the worst and 30 the best result to be achieved. The individual score of each member is the arithmetic mean of the scores of the equally weighted three focal points. The score of the essay is the arithmetic mean of the individual scores of the commission members. Non-vanishing decimal places are to be rounded up.

- 5.1.2 The score for the first stage is the sum of the individual scores. Digits that do not disappear are to be rounded up.
- 5.1.3 Those who have achieved at least 70 points will receive a confirmation that they have passed the eligibility process.
- 5.1.4 Unsuitable applicants with a total score of less than 60 points shall receive a notice of rejection with reasons and instructions on how to appeal, which must be signed by the head of the university. The authority to sign may be delegated. Applicants who are entitled to compensation for disadvantages due to disability, chronic or long-term illness shall, upon application and in deviation from No. 5.1.1 to 5.1.3, receive an invitation to the second stage of the aptitude test instead of a direct rejection if they would have received direct admission or admission to the second stage if they had achieved the highest grade in their final grade. The relevant evidence must be enclosed with the application.

5.2. Second stage of the implementation of the suitability procedure

- 5.2.1 The remaining applicants are invited to a selection interview. In the second stage of the aptitude test, the qualification acquired in the first degree program and the result of the selection interview will be evaluated. The date of the selection interview shall be announced at least one week in advance. Time slots for any selection interviews to be held must be set before the application deadline. The date set for the interview must be observed by the applicants. Anyone who is prevented from attending the selection interview for reasons for which he or she is not responsible may, upon justified application, be given a subsequent appointment no later than two weeks before the start of lectures.
- 5.2.2 The selection interview must be conducted individually for the applicants. The interview shall last a minimum of 20 minutes and a maximum of 30 minutes per applicant. The content of the interview shall cover the following main topics:
 1. Motivation for the Sustainable Resource Management Master's program.

- Why did the applicant choose the Sustainable Resource Management master's degree program?
- Why did the applicant decide to study at a German university (for German applicants: Why did the applicant choose an international degree program in English)?
- What are the applicant's career goals after or with the degree program, or what prospects does the applicant see after completing his or her master's degree at TUM?
- Has the applicant been involved with sustainable resource management?

2. Suitability parameters according to 1. sentence 3

- Presentation of previous expertise: Questions from engineering, natural sciences, economics, and/or social sciences,
- Explanation of a scientific work (e.g. the thesis) of the first degree.

3. Communication skills in English language

- The candidate is able to express him/herself clearly in English and can explain subject-relevant topics precisely,
- Statements are convincingly substantiated by arguments and meaningful examples,
- Questions concerning the first degree are justified in a terminologically exact and comprehensible manner.

Subject matter can also be the documents submitted according to 2.3. Scientific knowledge that is to be imparted only in the master's program Sustainable Resource Management does not decide. With the consent of the applicants, a member of the student group may be admitted to the audience.

- 5.2.3 The selection interview is conducted by two members of the commission. The commission members independently evaluate each of the three focal points on the point scale from 0 to 46, whereby 0 is the worst and 46 the best result to be achieved. The individual score of each member shall be the arithmetic mean of the scores of the equally weighted three focal points. The score of the selection interview results from the arithmetic mean of the individual scores of the commission members. Non-vanishing decimal places shall be rounded up.
- 5.2.4 The total number of points in the second stage is the sum of the points from 5.2.3 and the points from 5.1.1 a) Final grade. Whoever has achieved 60 or more points is classified as suitable.
- 5.2.5 The result of the suitability procedure determined by the commission shall be communicated in writing. The notification shall be signed by the management of the university. The authority to sign may be delegated. A notice of rejection shall be accompanied by reasons and instructions on how to appeal.
- 5.2.6 Admissions to the Sustainable Resource Management master's degree program apply to all subsequent applications to this program.

6. Transcript

A record must be made of the course of the suitability procedure, showing the date, duration and place of the suitability procedure, the names of the commission members, the names of the applicants and the assessment of the commission members as well as the overall result. The minutes must show the main reasons for and topics of the interview with the applicants; the main reasons and topics may be listed in brief.

7. Repetition

Students who have not provided proof of eligibility for the Sustainable Resource Management master's degree program may re-apply once for the eligibility process.