

**EXAMINATION AND COURSE REGULATIONS FOR THE MASTER'S DEGREE
PROGRAM IN MATHEMATICS AT UNIVERSITÄT REGENSBURG
FROM OCTOBER 14, 2015**

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This is a translation of the original "Prüfungs- und Studienordnung für den Masterstudiengang Mathematik an der Universität Regensburg vom 14. Oktober 2015 Geändert durch Satzung vom 18. Juli 2019". Only that original is legally binding. No legal claims or titles result from this English translation.

On the basis of Art. 13 Para. 1 Clause 2, in conjunction with Art. 43 Para. 5 Clause 2, Art. 58 Para. 1 Clause 1, and Art. 61 Para. 2 Clause 1 of the Bavarian Higher Education Act (BayHSchG), Universität Regensburg decrees the following examination and course regulations:

Preliminary remarks on language:

All terms in these rules relating to people and functions apply to both men and women in the same way.

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I. General regulations

§ 1

Scope of application

¹Universität Regensburg offers the consecutive master's degree program in mathematics. ²These examination and course regulations apply to earning course and examination credits and the award of academic degrees in this program.

§ 2

Aims of the program, examination objectives, academic degree

- (1) The master's degree program in mathematics is a research-oriented program.
- (2) ¹The master's program teaches students to think in a structured and creative way, to solve problems, and to undertake academic work independently. ²The students further develop and expand the knowledge, methodology and abilities they have acquired in their bachelor's program, such as the ability to think analytically and abstractly, and to persevere. ³They learn to familiarize themselves quickly with new areas and solve extensive, complex problems independently and efficiently. ⁴They further acquire profound academic knowledge in at least two of the three areas of specialization: global analysis and geometry, applied analysis and arithmetic geometry. ⁵Within this, as the program progresses, they develop the ability to frame concrete problems mathematically, to analyze their underlying structures, to exploit and carry through problem solving approaches based on existing methods of extensions thereof.
- (3) ¹The master's assessment concludes the further degree program which qualifies the holder professionally and gives them in-depth and research-oriented education in mathematics. ²It is used to determine if the student has acquired the technical knowledge and interdisciplinary qualifications needed for professional practice or for further academic work.
- (4) Universität Regensburg awards the academic degree "Master of Science" (abbreviated "M.Sc.") based on passing the master's assessment.

§ 3

Beginning studying, standard period of study, program structure

- (1) The program can be started in either the summer or winter semester.
- (2) The standard period of study is four semesters.
- (3) ¹The program has a modular structure. ²The master's program includes both the successful completion of the designated modules, curricular activities in the minor subject and elective area and the production of the final thesis.
- (4) A total of 120 credit points (CP) are necessary to successfully complete the master's program.
- (5) ¹The language of instruction for the master's degree program is English or German. ²Students have the right to English-language courses.

§ 4

Qualification

- (1) ¹The prerequisites for admission to this master's degree program are:
 1. Having successfully completed a degree or equivalent program of at least six semesters standard study time in mathematics or a related subject with average grade of at least "gut" (good, in the German system, 2.50 or better). The grades of students having graduated abroad will be converted using the modified Bavarian formula.
 2. Proof of in-depth mathematical knowledge to the extent of 18 credit points corresponding to the In-depth Module (Mat-BV) in the bachelor's program Mathematics at Universität Regensburg.
 3. Proof of English proficiency at the B2 level of the Common European Framework of Reference for Languages (CEFR); this level can also be shown by an equivalent TOEFL or IELTS test or another equivalent proof.

²If the grade is not "gut" (good, in the German system, 2.50) or better; if in-depth knowledge in accordance with Clause 1 No. 2 cannot be shown; or if the documents supplied do not unambiguously show that a degree or equivalent program in mathematics has been successfully completed, suitability for study must be shown by successfully completing the eligibility test in accordance with Appendix 1.
- (2) If it is not possible to present the graduation certificate at the time of the application, then qualification can be alternatively demonstrated in accordance with Para. 1 Clause 1 No. 1 via current accredited evidence of the courses and examinations already completed in the program comprising at least 140 CP. This evidence must show the provisional overall grade arising from the grades already achieved.
- (3) Assessment of the fulfillment of the prerequisites in accordance with Para. 1 is incumbent on the examination committee.

- (4) ¹Applications for admission to the master's program and for the eligibility test are to be made by December 1 for the summer semester and June 1 for the winter semester (cutoff deadlines) to the Faculty of Mathematics. ²If at the time of matriculation, the degree certificate cannot be presented, then gap-free certified certification of the course and examination credits achieved so far is to be submitted. ³In this case, the matriculation is provisional. The matriculation must then be confirmed by presenting the degree certificate in accordance with Para. 1 Clause 1 No. 1 at the latest at the end of the second semester.
- (5) ¹Applicants for the program who did not complete their undergraduate degree or did not qualify for university entrance at a German-speaking institution must show basic knowledge of the German language. ²This must be shown via language courses (basic courses) comprising at least 80 teaching hours, through knowledge of the German language at the level A1 of the Common European Framework of Reference for Languages (CEFR), or through a certificate from the examination committee responsible, which if necessary may be provided based on a recommendation from a teacher for German as a Foreign Language at the Center for Language and Communication of Universität Regensburg. ³If this proof of German proficiency cannot be given at the time of enrollment, then the matriculation will be provisional. The matriculation must then be confirmed by presenting such proof at the latest at the end of the first year of the studies.

§ 5

Student advisory service

¹Both the Central Course Counseling and a course-specific student advisory service offer advice for students. ²We advise you to consult

the Central Course Counseling, in particular

- before starting one's studies,
- if you change course or university;

the course-specific student advisory service, in particular

- for all questions relating to course planning and scheduling (including stays abroad),
- for questions relating to recognition of courses and examination credits,
- following failure in an examination;

the International Office, in particular before taking a stay abroad.

§ 6

Credit-point system and credit-point account

- (1) ¹The credit points awarded for the master's programs measure the workload necessary to successfully complete a module. ²They are awarded on the basis of the European Credit Transfer System (ECTS); accordingly, one credit point (CP, in German *Leistungspunkt* or *LP*) corresponds to a workload for the student of between 25 and 30 hours, including attending courses and private study. ³In order to be able to keep to the standard period of study, according to § 3 Para. 2, it is recommended that the student earn an average of 30 credit points per semester.

- (2) ¹Credit points are awarded both for the successful completion of a module, successful completion of courses in the minor subject and elective area, and for the successful preparation of the master's thesis. ²They can be credited only once within the degree program.
- (3) ¹The examination office will maintain a credit-point account for each student, detailing all modules, all courses within the minor subject and elective area, and the master's thesis, including those examination and course credits taken towards his or her successful completion. ²The student can see the status of his or her account via the university's electronic examination management system at any time. ³If the program is stopped or conclusively failed, the student, on request, will receive a summary of his or her account as a transcript; this includes the credit points awarded and the successfully completed modules, where applicable with their grades, and will make it clear if the student still has the right to take examinations.

§ 7

Teaching activities, course credits and examination credits

- (1) ¹The following types of teaching activity are designed to convey the aims and content of the program:

Lectures
Exercise courses
Seminars
Revision courses
Colloquium
Practical courses

²All teaching activities, with the exception of those in the elective area and possibly the minor subject, are assigned to modules (§ 8). ³This assignment arises from the module catalog (§ 8 Para. 5).

- (2) ¹Course credits, under these regulations, are tasks which are generally to be performed as part of teaching activities. They can also be specified more closely in § 14 as additional prerequisites of a module exam. ²Course credits are the successful participation in exercise courses, written examinations, technical discussions, talks, and seminar papers. ³They are specified more precisely in the module catalog.
- (3) ¹Examinations and examination credits, under these regulations, are module examinations, partial module examinations, examinations within other activities in accordance with § 14, and the thesis. ²Course credits are not subject to the provisions relating to examinations in accordance with Part II, and can be repeated as often as desired.

§ 8

Modules

- (1) ¹A module is a unit which is subject to examination; to which credit points are assigned; and which integrates the subject areas at a particular level thematically. ²It should generally correspond to at least five credit points and be possible to complete in at most two semesters.

³There are graded and ungraded modules. Graded modules are counted towards the overall grade of the master's degree in accordance with § 27.

- (2) ¹The following will be determined for every module: the contents to be imparted, the skills and competency to be gained, and the prerequisites for gaining the credit points assigned to the module. ²The credit points determined for a module are awarded upon successful completion of the module. ³The prerequisites for the successful completion of a module are:
 - a) passing a module examination in accordance with § 16, and / or
 - b) successfully completed course credits in accordance with § 7 Para. 2.
- (3) ¹In general, it should only be necessary to obtain one examination credit (in the sense of § 7 Para. 3) to successfully complete a module. ²Substantiated exceptions to this may provide for up to three binding examination credits per module. However, a total average examination load of six examinations per semester may not be exceeded.
- (4) ¹The program contains compulsory modules, constrained elective modules and a free elective area. ²Compulsory modules must be taken and successfully completed. ³The student may choose from the selection of constrained elective modules. ⁴A student may substitute constrained elective modules that have been conclusively failed with other constrained elective modules in the program's module selection. ⁵There is no entitlement for a constrained elective module to be held if there is an insufficient number of students. ⁶Similarly, there is no entitlement for the elective module to be held if Universität Regensburg does not have a suitable lecturer. ⁷Nevertheless, the ability to study in the program, or in the specialty offered must be provided for.
- (5) ¹The individual curricular activities assigned to a module; the contents to be imparted, the skills and competency to be gained; the prerequisites for gaining the credit points assigned to the module; the module-specific evaluation rules; and, where necessary, the recommended prior knowledge for participation in a module are imparted in a module catalog. ²The module catalog is adopted by the examination committee in agreement with the faculty board. It may not be changed before two semesters have passed. ³The promulgation of the module catalog will take place on the university's website one week before the start of a semester at the latest.

§ 9

Examination committee

- (1) ¹An examination committee will be formed to organize and carry out the examinations, appoint examiners and observers, and make decisions concerning examinations. ²It will consist of three members. ³The members are appointed by the faculty board. ⁴The term of office for membership of the examination committee is three years. Reappointment is possible.
- (2) ¹The examination committee selects a chair and deputy from among their number. ²The chair carries out the ongoing business and calls the meetings of the committee. ³He or she is authorized to make urgent decisions and take urgent action on behalf of the examination committee. ⁴Such matters will be communicated without delay to the examination committee. ⁵The examination committee can delegate the execution of further tasks to the chair, the deputy or the Central Examination's Office, and can revoke such a delegation.

- (3) ¹The examination committee has a quorum when all members have been invited with at least three days' notice, the majority is present and entitled to vote. Decisions are made with a majority of the votes cast in the meeting. ²Abstaining, secret votes and transferal of voting rights are not allowed. ³When the vote is tied, the chair has the casting vote. ⁴Minutes are to be made of the meeting. These must contain the date and location of the meeting, the names of the persons in attendance, the matters discussed and motions, decision and voting results. ⁵In suitable cases, resolutions can be made with written consent in lieu of a meeting, also in electronic form, as an alternative to Clause 1.
- (4) ¹The examination committee issues the communications required by these examination regulations in writing with justification and information on the candidate's statutory rights. ²The candidate is to be given an opportunity to be heard before a decision about him or her is adopted.
- (5) The central examination office supports the examination committee in the organization and implementation of the examinations.

§ 10

Examiners and observers

- (1) ¹Any person who is authorized to carry out examinations under the relevant in-force versions of the Bavarian Higher Education Act (*BayHSchG*) and the act governing examiners at institutions of higher education (*HSchPrüferV*) can be appointed an examiner. ²Any member of Universität Regensburg can be appointed an observer who has successfully concluded a corresponding or similar scientific degree program. ³The observers do not give examinations themselves.
- (2) ¹Any professor or junior professor, honorary professor and similar (those referred to in German as *Professor, Juniorprofessor, Honorarprofessor, Privatdozenten* or *außerplanmäßige Professor*) whose main occupation is at the Faculty of Mathematics can be appointed as a supervisor for the master's thesis, in accordance with Art. 2 Para. 1 of the Bavarian University Staff Act (*Bayerisches Hochschulpersonalgesetz – BayHSchPG*). ²The examination board can allow exceptions in so far as a university professor in accordance with Clause 1 consents to be the second examiner.
- (3) ¹If a member of the university authorized to give examinations leaves Universität Regensburg, then the examination committee can, upon his or her application, decide that he or she is still to be active as an examiner for a reasonable length of time. ²Generally, the authorization to give examinations should remain unchanged for up to one year. ³A longer period may be granted to retired professors.

§ 11

Recusal due to personal involvement, duty of confidentiality

- (1) A recusal from debate and voting in the examination committee or from an examination activity due to personal involvement is prescribed according to Art. 41 Para. 2 of the Bavarian Higher Education Act BayHSchG.

- (2) The duty of confidentiality of the members of the examination committee, the examiners, the examination observers and other persons involved with examinations is determined by Art. 18 Para. 3 of the Bavarian Higher Education Act BayHSchG.

§ 12

Consideration for special circumstances

- (1) ¹Upon request, for deadlines and due-dates, claims for protection periods conforming to the valid version of §§ 3, 4, 5 and 6 of the Maternity Protection Law (*Mutterschutzgesetz*) from May 23, 2017, and the periods in the valid versions of the laws for parental benefits and parental leave from December 5, 2006, are to be ensured. ²Appropriate documents are to be provided; changes in conditions are to be disclosed without delay.
- (2) ¹Should there be periods of study during which proper study is not possible or only possible in a very limited way for reasons beyond the student's control, upon request, this time will not be included in calculations of course deadlines. ²Reasons beyond the student's control are, in particular, illness or time providing nursing care at home for seriously ill dependents. ³Appropriate documents are to be provided without delay. In particular medical certificates, in case of doubt official medical certificates, are to be shown. ⁴Changes in conditions are to be disclosed without delay.
- (3) ¹In particular, pregnant students may, on request, suspend their examination, if it is established that an examination of the length proposed can, due to the pregnancy, not be taken. ²A medical certificate is to be provided. ³The provisions of § 13 Para. 3 apply.
- (4) It is recommended to take strictly into account the valid versions of the 'Family-friendly study and examination regulations - Universität Regensburg Guidelines'.

§ 13

Specific issues for students with disabilities or chronic illnesses

- (1) ¹The specific situation of students with disabilities or chronic illnesses is to be taken into account in an appropriate manner. ²If the student shows that, due to a disability or chronic illness, he or she is not capable of completing the course or examination credits according to § 7 either wholly or partly in the designated form or within the designated period allowed, then the examination committee allows the extension of the time allotted for completing the course or examination credits or the completion of a comparable course or examination credits in a form fitting the student's needs. ³The same applies to a possible eligibility test.
- (2) When it is foreseeable that a program cannot be carried out in the form provided for due to disability or chronic illness, there is the possibility of drawing up a study plan, in consultation with the examination committee, which is oriented on the individual's restricted capacity.
- (4) ¹The examination board makes decisions on cases according to Para. 1 and 2 upon written request, which generally has to be submitted eight weeks before the start of an examination at the latest to the examination office responsible, and informs the student of the decision in writing. ²Within the application according to Clause 1, the student can simultaneously express

the wish that the senate's representative for students with disability or chronic illness is heard before a negative answer is reached. ³The notification from the examination board is to be presented when registering and taking the examination.

- (4) A medical certificate, in case of doubt an official medical certificate, is to be shown to demonstrate a chronic illness or disability.

II. Special regulations

§ 14

Constituent parts of the master's assessment

- (1) ¹The master's assessment consists of obtaining 120 CP. ²These are distributed in the following manner:

1. The successful completion of the following modules, which are described in more detail in the module catalog, comprising a total of 63 CP:

a) Compulsory modules

MAT-MV	In-depth Master's Module (<i>Vertiefung Master</i>)	18 CP
MAT-MSem	Master's Seminar Module (<i>Seminar Master</i>)	9 CP

b) Two of the following constrained elective modules

MAT-MARGeo	Arithmetic Geometry (<i>Arithmetische Geometrie</i>)	18 CP
MAT-MAngAn	Applied Analysis (<i>Angewandte Analysis</i>)	18 CP
MAT-MGAGeo	Global Analysis and Geometry (<i>Globale Analysis und Geometrie</i>)	18 CP

2. proof of at least 12 CP in the minor subject;
3. proof of at least 8 CP in the elective area;
4. the successful completion of the master's thesis for a total of 30 CP.

³A minimum of 27 CP must be shown in total for the minor subject and elective area. ⁴The regulations in place for the relevant subject areas govern the course and exam credits in the minor subject and elective area.

- (2) ¹In order to ensure the breadth of the master's degree program in Mathematics, courses taken in the minor subject and elective area may not have already been taken as part of the degree program required, under § 4, for taking up the master's degree program. ²The same is true for constrained elective courses assigned to the modules MAT-BV and MAT-BSem of the Bachelor's Degree Program in Mathematics at Universität Regensburg.

- (3) ¹The content of the minor subject should build on the content of the minor subject chosen in the bachelor's program in a sensible way. ²The following subjects can be chosen as minors: Actuarial Science, Business Administration, Computational Science, Philosophy, Physics, Economics or Management Information Systems.

1. If the minor Actuarial Science is chosen, the module MAT-MAktuar is to be successfully completed.

2. If the minor Business Administration is chosen, the module MAT-MBWL is to be successfully completed. A prerequisite for the choice of Business Administration as the minor is that the bachelor's degree already included a successfully completed business administration minor, or equivalent competencies can be shown.
3. If the minor Computational Science is chosen, the module MAT-MCS is to be successfully completed. Students who had no minor subject in natural sciences during their bachelor's degree are strongly encouraged to talk to the course-related student advisory service.
4. If the minor subject Philosophy is chosen, the module MAT-MPHI is to be successfully completed. Students who did not have philosophy as a minor subject in their bachelor's degree will, upon application to the examination board, be given an individual syllabus replacing MAT-MPHI.
5. If the minor Physics is chosen, the module MAT-MPHY is to be successfully completed.
6. If the minor Economics is chosen, the module MAT-MVWL is to be successfully completed. Showing knowledge corresponding to the courses Macroeconomics I and II, and Microeconomics I and II at Universität Regensburg are prerequisite for choosing the minor subject Economics.
7. If the minor Management Information Systems is chosen, the module MAT-MWInf is to be successfully completed.

³Other subjects can be approved as minors if they are within the framework of the possibilities at Universität Regensburg. The examination board decides on such approval in agreement with the relevant faculties.

- (5) In the elective area, courses can be chosen from the whole range offered at Universität Regensburg.

§ 15

Crediting expertise

- (1) ¹Periods of study, course credits and examination credits which have been completed in different programs of study at other public or publicly recognized universities in the Federal Republic of Germany; by successful participation in a distance learning unit as part of a program of study at a public or publicly recognized university of the Federal Republic of Germany; or in programs of study at foreign universities are to be credited upon taking up studies, upon resuming studies and upon taking examinations unless there are significant differences in the expertise acquired (learning outcomes). ²The same holds for periods of study, course credits and examination credits which have been completed at public or publicly recognized universities in Bavaria as part of other programs according to Art. 56 Para. 6 No. 1 and 2 or the Bavarian Higher Education Act (BayHSchG), in particular courses offered according to Art. 47 Para. 3 Clause 1 of BayHSchG or those completed at the Virtuelle Hochschule Bayern (Bavarian Virtual University).
- (2) ¹Expertise which has been acquired as part of other further educational study according to Art. 56 Para. 6 No. 3 of BayHSchG or outside higher education can be credited when it is equivalent. ²Expertise acquired outside higher education may make up no more than a half of the expertise to be shown.
- (3) ¹If the grading system of course or examination credits achieved at a foreign university for which credits are to be awarded do not correspond to § 23, then the grade of the examination credit to be awarded will be determined according to a grade conversion key valid across the

university. ²In so far as a grade conversion key has been agreed with a foreign university as part of a partnership agreement, this is binding.

- (4) ¹Crediting periods of study and course and examination credits requires a written request from the applicant. ²Generally, one semester of study will be credited for each 30 CP obtained. ³The request is to be addressed to the chair of the examination committee and is to have the relevant documents attached. ⁴The documents to be supplied include, in particular, the module catalog, which shows the qualification objectives, educational content and the workload, amongst other things; and the grading system used as a basis for the evaluation of the module. ⁵An application to credit previously completed courses and/or examinations may only be made once. It must be made within the first semester after taking up or resuming one's studies at Universität Regensburg. ⁶For courses completed later, the application must be completed within one semester. ⁷When the examination which is to be credited against has taken place, such a crediting is no longer permitted. ⁸The chair of the examination board decides whether the prerequisites for awarding credits have been met, in agreement with the relevant specialist representative, taking into consideration Art. 63 of BayHSchG.

§ 16

The form of and procedure for the master's assessment and module examinations

- (1) The master's assessment takes place in the course of the student's studies in the form of successfully completed modules in accordance with § 8 Para. 2, successfully completed courses in the minor subject and elective area, and the master's thesis.
- (2) ¹Module examinations are examinations whose results, in accordance with § 27, are included in the graduation certificate. ²The module examination is to determine whether the student has achieved the qualifications and competency of the module as specified concretely in the module catalog. ³When a subject justifies it, in exceptional cases, up to three areas of competence can be assessed separately as part of the module examination. Each of these partial credits is an examination credit in accordance with § 7 Para. 3 Clause 1. ⁴The examination result will be graded according to § 23. ⁵In cases with special justification, it is also possible to conclude more than one module with one module examination.
- (3) ¹The organization (parts, form, lengths and contents) of the module examinations are displayed in the module catalog. ²The promulgation of the relevant valid module catalog will take place on the university's Internet site one week before the start of a semester at the latest.
- (4) A prerequisite for taking a module examination is that the candidate is registered as a student at Universität Regensburg.

§ 17

Examination dates, registration for module examinations

- (1) ¹Module examinations are held at least once during the time that the module takes place. ²The examination dates are to be conveyed to the students via the Universität Regensburg electronic module administration system.

- (2) ¹Registration for the examination is generally done via the Universität Regensburg electronic examination management system. ²If electronic registration is not possible, a written registration must be submitted to the examiner within the registration period. ³The registration for the examination must take place at least two weeks before the examination date unless the examiner determines differently.

§ 18 Written module examinations

- (1) ¹Written module examinations can take the form of invigilated examinations, or seminar or term papers. ²They are taken in the German or English language. ³The students have the right to an English-language written examination.
- (2) ¹If a written exam take the form of written tasks undertaken under invigilation, then the length of the examination will be at least 60 minutes and at most 240 minutes. ²A record is to be taken. ³The invigilator has to confirm its correctness with a signature. ⁴The record is to include all incidents which could be of interest in determining the examination results.
- (3) ¹If a written examination is evaluated as "not sufficient" (*nicht ausreichend*), then a second examiner is to evaluate the examination. ²The overall grade is determined according to § 23.

§ 19

Oral module examinations

- (1) ¹Oral examinations are carried out by an examiner and an observer or, after arrangement with the students, by two examiners in so far as the content of the examination relates to two or more courses. ²They are carried out in German or English. ³The students have the right to an English-language oral examination. ⁴The length of the examination is at least 15 and at most 60 minutes.
- (2) ¹A record of the oral examination is to be made. This is to include: the time and place of the examination; its duration; its subject matter and result; the name of the examiner(s) and where necessary the observer, and the candidate; and any special incidents. ²The record is to be signed by the examiner and the observer, or the examiners. ³The grades for an oral examination performance are determined by the examiner(s) according to § 23.

§ 20

Master's thesis

- (1) ¹The master's thesis should generally be completed in the fourth semester. ²It should demonstrate that the student is able to work on a problem from an area of mathematics using scientific methods, and to convey his or her results appropriately, objectively, clearly and without problems.
- (2) ¹Work on the master's thesis must be completed within six months of the assignment of the topic. ²The time limit begins with the announcement of the topic to the candidate. ³The thesis is to be submitted in good time so that the submission date is before the time given in § 22

Para. 1 Clause 1. ⁴Upon application, an extension will be awarded, if the student can show that there are reasons, for which he or she is not responsible, which hinder his or her work; § 26 Para. 3 applies similarly. ⁵The thesis is to be submitted on time as three bound copies and an electronic version (e.g. as a pdf file) to the examination office responsible. The date of the submission and whether it is complete in accordance with Clause 5 will be put on record. ⁶If the thesis is not submitted on time, it will be evaluated as "not sufficient" (*nicht ausreichend*).

- (3) ¹The master's thesis is to be formulated either in German or English, at the discretion of the student. ²Submission in another language must be agreed in advance with the examination board. ³It has to end with a declaration from the author that the print versions submitted are identical with the electronic version submitted, that the work has been completed independently, that no sources or aids have been used other than those noted, and that the work has not already been submitted to another university in order to obtain an academic degree. ⁴The declaration should also contain a confirmation from the author that he or she is familiar with the legal consequences noted in § 26 Para. 6.
- (4) ¹The master's thesis is to be evaluated by two referees within two months of its submission at the latest. ³At least one referee must be a member of the Faculty of Mathematics as their main occupation. ⁴The chair of the examination board appoints the referees. ⁵The provisions of § 23 apply correspondingly to the determination of the overall grade.

§ 21

Registration for the master's thesis

- (1) ¹The application for admission to write the master's thesis and assignment of a topic is submitted to the examination office responsible in writing. ²It is to be addressed to the chair of the examination board. ³Alongside the application, a declaration is to be included that the candidate has not already conclusively failed to qualify for the master's degree in mathematics. ⁴The application may contain a suggested supervisor and a topic area. ⁵The examination board appoints a supervisor and assigns a topic within two months. ⁶The topic of the master's thesis and the date of the assignment are to be put on record.
- (2) The following are prerequisite for admission to the master's thesis:
1. proof of at least 60 LP;
 2. matriculation at Universität Regensburg.
- (3) Admission is to be denied if the candidate
1. does not fulfill the prerequisites given in Para. 2 or
 2. has already conclusively failed the master's degree in mathematics.
- (4) ¹The candidate can, in justified and exceptional cases, return the topic within 6 weeks of its assignment. ²The declaration of the return of the topic is to be recorded. ³§ 20 and § 21 Para. 1 apply correspondingly for the assignment of a new topic.

§ 22

Examination deadlines

- (1) ¹Should the candidate, at the end of the sixth semester, not have achieved the 120 LP necessary under § 14 Para. 1 to qualify for the master's degree, then the master's assessment will be considered finished and failed at the first attempt, unless the student is awarded an extension due to reasons for which he or she is not responsible. ²The reasons are to be asserted with supporting documentation by the candidate without delay. ³The written application is to be made to the chair of the examination committee and submitted to the examination office responsible without delay. § 26 Para. 3 applies correspondingly. ⁴After the deadline given in Clause 1 has passed, modules which have not yet been successfully completed, and the master's thesis will be considered taken and failed at the first attempt.
- (2) ¹If those units necessary for successful completion of the master's assessment which are still outstanding cannot be completed within the following semester, then the master's assessment is considered conclusively failed, unless the student is awarded an extension due to reasons for which he or she is not responsible. ²Para. 1 Clauses 2 and 3 apply correspondingly.
- (3) Periods of study coming under § 15 are to be added to the time limits.

§ 23

Evaluation of examinations, announcement of the examination result

- (1) The examination performance will be evaluated as follows:

1 = very good	<i>(sehr gut)</i>	an excellent performance;
2 = good	<i>(gut)</i>	a performance significantly above the requirements;
3 = satisfactory	<i>(befriedigend)</i>	a performance meeting the requirements;
4 = sufficient	<i>(ausreichend)</i>	a performance which, despite its shortcomings, meets the requirements
5 = not sufficient	<i>(nicht ausreichend)</i>	a performance which, due to significant shortcomings, does not meet the requirements.

- (2) ¹For more differentiation in the assessment according to Para. 1 Clause 1, the grades can be incremented up or down by 0.3. ²The grades 0.7, 4.3, 4.7 and 5.3 are, however, excluded.
- (3) ¹Should an examination consist of several separately assessed tasks or assessment by more than one examiner, then the grades are averaged. In the case of § 16 Para. 2 Claus 3, the module description may contain a determination of the grade which deviates from the principle of averaging. ²When creating average grades in accordance with Clause 1, the first decimal place after the decimal point is taken into account. All further decimal places will be dropped without being rounded. ³The grade for the examination performance then reads as follows with respect to these averages

- to 1.5	=	very good
- from 1.6 to 2.5	=	good
- from 2.6 to 3.5	=	satisfactory
- from 3.6 to 4.0	=	sufficient.

- (4) An examination is successfully completed with a grade of "sufficient" (*ausreichend*, 4.0) or better.
- (5) An examination participant is considered notified of his or her results in an examination one week after these results have been placed in the Universität Regensburg electronic examination management program.
- (6) Separately assessed tasks, in the sense of Para. 1 Clause 1, only refers to independent (module) examinations; they are not discrete parts of examinations, in particular the term does not include individual problems within the same examination.

§ 24

Retaking module examinations and thesis

- (1) ¹Every module examination which is failed at the first attempt can be retaken twice. ²Should the module examination consist of several separately assessed tasks in accordance with § 16 Para. 2 Clause 3, only the separately assessed tasks which were failed are retaken.
- (2) ¹The first retake should generally be taken within six months from the time the examination was failed. ²The second retake should be taken within six months of the announcement of the result of the first retake which was failed.
- (3) The voluntary retaking of a module examination which has been passed is not allowed.
- (4) ¹If a master's thesis is assessed as "not sufficient" (*nicht ausreichend*), then a new thesis with a new topic can be submitted, subject to § 26 Para. 6. ²A corresponding application for a new allocation of a topic is to be made early enough that the deadlines in § 22 can be kept. ³A second retake is not possible. § 21 Para. 4 is not applicable.

§ 25

Shortcomings in examination processes

- (1) If an examination process contained deficiencies which might have influenced the examination results, upon request from a candidate or instituted ex officio, it is to be directed that a specific candidate or all candidates retake the examination or parts thereof.
- (2) Deficiencies in the examination process must be lodged with the chair of the examination committee or the examiner without delay.
- (3) Ex officio directives in accordance with Para. 1 may no more be reached after six months following the conclusion of the examination.

§ 26

Non-attendance, withdrawal, cheating, infringement of regulations

- (1) ¹The candidate can withdraw from an examination up to a deadline of four workdays before it starts without giving reasons. ²Withdrawal from the examination is done by the candidate via the university's electronic examination management system.
- (2) If the candidate withdraws from the examination after the deadline given in Para. 1 or misses the whole examination or part thereof, should the examination have several parts, for reasons attributable to him or herself, then the examination in question is considered taken and will be evaluated with "not sufficient" (*nicht ausreichend, 5.0*).
- (3) ¹The reasons invoked for missing the examination or for withdrawal in accordance with Para. 2 must be given immediately, with evidence and in writing via the examination office responsible to the examination board. ²The same holds for an inability to take the examination which commences during the exam. ³If the candidate is unable to take the examination due to illness, then a medical certificate is to be presented, which as a basic principle is to be based on a medical examination which takes place on the day of the inability to take the exam invoked. ⁴In case of doubt, an official medical certificate can be demanded. ⁵If the examination board accepts the reasons brought forward as sufficient, then the legal consequences of Para. 2 do not occur and the candidate can apply to participate in the examination the next time it is scheduled.
- (4) ¹Should the candidate attempt to affect the results of an examination in their or another's favor by cheating, exceeding the time allowed or using unauthorized aids, then the examination will be awarded a grade of "not sufficient" (*nicht ausreichend, 5.0*). ²During an invigilated written examination, if unauthorized aids are discovered at the desk after the examination has commenced, this will be deemed cheating.
- (5) A candidate who willfully disrupts the orderly conduct of the examination can be excluded from continuing to take the examination by the examiner or invigilator. In this case, the examination will receive the grade "not sufficient" (*nicht ausreichend, 5.0*).
- (6) ¹In the case of a test paper or the thesis, should the candidate fail to compose their work on their own or fail to name all aids and sources used, the work will be evaluated as "not sufficient" (*nicht ausreichend, 5.0*). ³In the case of a master's thesis, the examination committee may decide, in severe cases, that the candidate will not be given the opportunity to retake in accordance with § 24 Para. 4 Clause 1, and thus the master's assessment will be conclusively failed.
- (7) A candidate is to be informed in writing of decisions in accordance with Para. 2, 4, 5 and 6. Justification and information on the possibilities of contestation and appeal are to be included.

§ 27

Passing the master's assessment, overall grade

- (1) The master's assessment is passed when the 120 CP in accordance with § 14 Para. 1 are established.
- (2) ¹The overall grade of the master's degree is the arithmetic mean of the grades, weighted by credit points, of those modules awarded grades (§ 14 Para. 1 Clause 2 No. 1), the minor subject

(§ 14 Para. 1 Clause 2 No. 2), and the master's thesis (§ 14 Para. 1 Clause 2 No. 4). ²Here, the minor subject is weighted with 12 CP.

(3) Instead of the overall grade "very good", the overall grade will be "with distinction", when the master's thesis is awarded 1.0 from both referees, and the average computed in accordance with Para. 2 is 1.2 or better.

(4) ¹The master's assessment is conclusively failed if

1. the master's thesis is conclusively failed;
2. one of the modules required in the compulsory part is conclusively failed;
3. the credit points which must be obtained in the constrained elective area can no longer be obtained;
4. the credit points necessary to qualify for the master's degree (120 CP) can no longer be obtained due to the deadline according to § 22 Para. 2 having passed.

²The chair of the examination committee will give written notice of this, which is to include information on the possibilities of contestation and appeal.

§ 28

Degree certificates, diplomas and diploma supplements

(1) ¹A candidate who has passed the master's assessment receives a degree certificate detailing both the overall grade, and the modules taken, the minor subject, and the elective area with the associated credit points and grades. ²It contains the date the master's assessment was passed, which is the date that the last examination credit was earned. ³This degree certificate also shows the topic of the master's thesis, its grade and the credit points awarded for it. ⁴The candidate will be provided with a translation in English and a diploma supplement in English, which contains a description of the qualification obtained via the degree program. ⁵In addition, the candidate will be presented with a print out of their credit-point account (transcript of records) showing what courses were studied.

(2) ¹At the same time as the degree certificate is issued, the candidate will be provided with a master's diploma dated as per the degree certificate, with an English-language translation. ²This contains the certification of the award of the master's degree in accordance with § 2 Para. 4.

(3) ¹The degree certificate will be signed by the chair of the examination committee, the diploma by the dean of the relevant faculty. ²Both documents will be stamped with the seal of the faculty.

§ 29

Invalid examinations

(1) If the candidate has cheated in an examination, and this becomes known only after the issue of the degree certificate, then the examination committee can amend the grade in question retroactively and declare the examination wholly or partially failed.

(2) ¹Should the prerequisites for admission to an examination not be fulfilled, without the candidate wishing to deceive, and should this only come to light after the degree certificate is issued, then this flaw is remedied by the passing of the examination. ²Should the candidate have wrongly obtained admission, the examination committee will decide on the retraction of any unlawful administrative action, taking the general principles of administrative law into consideration.

- (3) The candidate is to be given the opportunity to be heard before a decision of the examination committee according to Para. 1 or Para. 2 is made.
- (4) ¹The incorrect examination certificate is to be confiscated and, where applicable, a new certificate issued. ²A decision in accordance with Para. 1 and Para. 2 Clause 2 is precluded following a deadline of five years after the date of the examination certificate.

§ 30

Inspection of the examination documents

It is possible to inspect the examination documents within one month of the notification of the examination results with the relevant examiner.

§ 31

Revocation of a degree

A revocation of a degree is based on Art. 69 Bavarian Higher Education Act (BayHSchG).

§ 32

Award of a master's degree due to a master's assessment taken at a foreign university

- (1) In the interests of cooperation between universities across the world, and particularly across Europe, the master's degree from Universität Regensburg named in § 2 Para. 4 can also be awarded on the basis of a master's assessment made at a university abroad (double degree) should the following conditions be fulfilled:
1. There is an agreement between Universität Regensburg and the universities abroad, detailing their cooperation in a double master's degree program in mathematics, including a joint study program approved by the Faculty Board for Mathematics.
 2. The applicant must have successfully completed a degree program recognized by the cooperation agreement and a joint study program. Within this, at least one semester must have been spent at each of the universities involved in the double degree.
 3. The applicant must have passed the master's examination with a grade of 4.0 (sufficient) or better (or this grade's equivalent at the university abroad).
- (2) ¹The grades from the exam credits earned abroad will be transferred. ²§ 15 Para. 3 applies similarly.

III. Final provisions

§ 33

Coming into effect

The statutes come into effect on the day after their announcement.

§ 34 Transitional provisions

¹These examination and course regulations are valid for all students who take up their master's studies in mathematics from the winter semester 2015–16. ²Students who took up their master's studies in mathematics before the winter semester 2015–16, can continue their studies in accordance with these regulations if they submit a written application to the chair of the examination board for master's programs at the Faculty of Mathematics by March 31, 2016.

Eligibility test

(1) ¹The eligibility test takes place once in each summer semester and each winter semester. ²The application for admission to the eligibility test in a winter semester is to be submitted to the Faculty of Mathematics before the previous June 1, and for the summer semester by the previous December 1. ³The following documents must accompany the application:

- a) certification of the qualification in accordance with § 4 Para. 1,
- b) a list of all the course and exam credits completed at the time of the application comprising at least 140 CP,
- c) a detailed resume,
- d) certification of further qualifications, such as stays abroad, relevant work experience or internships in relevant institutions

(2) ¹The decision on suitability for the master's degree program is made by the examination board on the basis of the application documents. ²The documents presented are evaluated according to the following criteria, which shed light on whether the candidate possesses the necessary prerequisites to gain in-depth knowledge in the area of the master's degree program, and attain the ability to undertake academic work independently.

1. Mathematical competencies, which include the abilities which are needed for the master's program in Mathematics at Universität Regensburg, in:

foundations of analysis, linear algebra, and applied mathematics (*praktische Mathematik*) to the extent of 45 CP (5 points);

in-depth foundations of analysis, algebra and a subject from applied mathematics (*praktische Mathematik*) to the extent of 45 CP (5 points);

in-depth competence in an area close to the specialization "arithmetic geometry", "global analysis and geometry", or "applied analysis", to the extent of 18 CP (10 points).

³Within this, in each area, a depth of content and methodology is expected that is equivalent to the bachelor's program Mathematics at Universität Regensburg. Should the student be partly able to show competencies in the areas above, points will be assigned proportionally in each area according to the credit points.

2. Overall grade of the university degree thus:

overall grade worse than 3.0: 0 points

overall grade at least as good as 3.0 but worse than 2.5: 5 points

overall grade at least as good as 2.5 but worse than 1.5: 10 points

overall grade at least as good as 1.5 but worse than 1.1: 15 points

Average grade 1.1 or better: 20 points

Should no (provisional) overall grade be available, then the average grade, weighted by credit points, of all the examination credits to date from the candidate's program of study is to be used.

3. Further qualifications: (for a maximum of 10 points):

Study abroad of at least three months: 4 points

At least one semester's work as a tutor at a university in mathematics: 4 points
Internship related to mathematics of at least three months: 4 points

⁴Eligibility for the master's program is clearly demonstrated when the documents provided are evaluated with at least 30 points, whereby at least 15 points must be shown by mathematical competencies and the overall grade of the university degree must be 3.0 or better. ⁵If the documents are evaluated with less than 20 points, or if the mathematical competencies are evaluated with less than 8 points, the application is to be turned down.

(3) ¹If the eligibility is not clearly demonstrated and the application is not turned down, then the examination board will invite the applicant to a selection interview. ²The selection interview lasts for at least 15 minutes and is to be conducted by two professors from the program. ³During discussion, it will be checked whether the candidate has sufficient competence that it is to be expected that he or she can successfully complete the master's degree program Mathematics. ⁴This includes:

- 1 mathematical ability/knowledge
2. the ability to implement methods learned and knowledge acquired in the classification and evaluation of mathematical situations and to answer concrete questions.

⁵Each of the preceding criteria will be evaluated in the selection interview on a point scale from 0 to 15. ⁶If the total result is at least 20 points, then eligibility has been shown.

- (4) ¹A record of the selection interview is kept. ²The record is to contain: the place and time of the interview, its duration, subject matter and results.
- (5) Rejections are to be supplied with a rationale and information on the possibilities of contestation and appeal.
- (6) ¹Applicants who have had their application rejected may register a second time for the eligibility test. ²Further retakes are not possible.

Issued on the basis of the decision of the Senate of Universität Regensburg from April 22, 2015 and the approval of the president of Universität Regensburg given on October 14, 2015.

Regensburg, October 14, 2015
Universität Regensburg
President

Prof. Dr. Udo Hebel

This statute was laid down on October 14, 2015 in the university. It was announced with notices in the university on October 14, 2015. The promulgation date is, therefore October 14, 2015.