

# Notices of the Bauhaus-Universität Weimar

## Academic regulations

Please note that this document is a translation and not legally binding.

<input checked="" type="checkbox"/> President <input type="checkbox"/> Chancellor	Examination regulations for the consecutive degree <i>»Natural Hazards and Risks in Structural Engineering«</i> leading to a Master of Science	Version <b>35/2020</b>
	Processing dept./div.                      Telephone <b>Faculty B    -4415</b>	Date <b>15 June 2020</b>

Pursuant to Section 3(1) in conjunction with Section 38(3) of the Thuringian Higher Education Act (ThürHG) dated 10 May 2018 (Thuringian legal notices – GVBl p. 149) last amended by Article 128 of the act dated 18 December 2018 (Thuringian legal notices – GVBl p. 731), the Bauhaus-Universität Weimar issues the following examination regulations for the »Natural Hazards and Risks in Structural Engineering« degree programme leading to a Master of Science (M.Sc.) qualification. The faculty board of the Faculty of Civil Engineering agreed the examination regulations on 13 May 2020. The President of the Bauhaus-Universität Weimar approved the regulations on 15 June 2020.

### Contents

- § 1 Purpose of the Master's examination
- § 2 Standard study period
- § 3 Examination structure
- § 4 Deadlines
- § 5 Scope and types of examinations
- § 6 Written examinations and other written work
- § 7 Oral examinations
- § 8 Electronic examinations
- § 9 Examination assessment, mark calculation and weighting
- § 10 Absences, withdrawal, cheating, regulation infringements
- § 11 Passing and failing examinations
- § 12 Repetition of module examinations
- § 13 Recognition of study periods, academic work and examinations, and knowledge acquired outside of higher education
- § 14 Assignment, submission, assessment and repetition of the Master's thesis
- § 15 Compensation for disadvantages
- § 16 Examination committee
- § 17 Examiners and assessors
- § 18 Degree title
- § 19 Degree certificate and Master's certificate
- § 20 Invalidity of examinations
- § 21 Viewing the examination files
- § 22 Appeal procedure
- § 23 Equal opportunity clause
- § 24 Entry into force

## **§ 1 – Purpose of the Master's examination**

The Master's examination serves to demonstrate that students have acquired in-depth expertise and possesses the skills needed to complete academic work.

## **§ 2 – Standard study period**

The standard study period is four semesters.

## **§ 3 – Examination structure**

(1) The Master's examination comprises the module examinations for the Master's degree and the Master's thesis including its defence (see Appendix 1).

(2) Modules conclude with examinations for which credits are awarded according to the European Credit Transfer and Accumulation System (ECTS). Module examinations are held during the degree programme and normally comprise an examination.

## **§ 4 – Deadlines**

(1) The Master's examination should be completed during the standard study period. If it is not completed within three semesters of the standard study period ending, it shall be deemed failed unless the student is not responsible for this. In such a case, the student can submit a justified request to extend their studies to the examination committee.

(2) A failed module examination must be repeated in the next examination period. The second repeat of the module examination must then be taken in the examination period after this. Once this period ends, the examination shall be deemed definitively failed unless the student is not responsible for this.

(3) Students must normally register for module examinations online; this registration is binding. The examination committee is responsible for setting the registration periods. It is possible to cancel individual module examinations or examination components up to seven calendar days before the respective examination phase starts.

(4) The examination registration remains valid if the student is unable to take the examination on the examination date due to illness or being on leave. It is therefore not necessary to re-register for the next possible examination date; the student is then obliged to take the examination.

(5) Should the times to repeat examinations clash, the student must first complete the examination that the study plan requires to be completed first. The student must withdraw from the other examination at the examination office. Examinations that are on the same day but for which the times do not clash must be completed. The student is obliged to complete a maximum of two module examinations per examination day.

## **§ 5 – Scope and types of examinations**

- (1) Examinations can take the form of:
1. written examinations and other written work (§ 6)
  2. oral examinations (§ 7)
  3. electronic examinations (§ 8)

(2) Academic achievements such as confirmations, course attendance certificates, internships and projects constitute preliminary examination-relevant achievements. The first examiner sets these and the type of examination and advises of these in the module descriptions.

The responsible examination committee shall announce in a notice posted on the noticeboard at least five calendar days before the examination date whether students have been admitted to the respective module examination or not following a review of the required preliminary examination-relevant achievements. The examination date indicated is binding for students who have registered and are admitted for this examination date.

(3) Suitable types of examination may also be permitted in the form of group work. However, it must be possible to clearly define the contribution of each individual student to the examination performance and to assess this separately. Groups should generally not consist of more than four students.

## **§ 6 Written examinations and other written work**

(1) In written examinations, students should demonstrate that they are able to recognise a problem, reflect on it, perform a critical analysis and find solutions within a limited period of time using the resources stipulated by the examiner and the methods commonly applied within the discipline. The time to complete written examinations should total around 30 minutes per credit but not longer than three hours.

(2) Students can demonstrate in other written work that they are able to

- take a systematic or analytical approach to define problems;
- apply methods to resolve these problems;
- discuss and expand on detailed solutions;
- develop and use resources,
- integrate existing knowledge into relevant contexts;
- interpret results and summarise relevant findings;
- present these findings in a comprehensible academic form.

(3) Written examinations and other written work must usually be assessed by two examiners, one of whom should be a university teacher.

(4) Examination papers and other written work that use a multiple choice format are not permitted.

## **§ 7 – Oral examinations**

(1) In oral examinations, students should demonstrate their familiarity with the examination subject and ability to situate specific questions within this context. Oral examinations should moreover establish whether students afford comprehensive basic knowledge. They should last at least 15 minutes but no more than 45 minutes per student.

(2) Oral examinations are completed in the presence of at least two examiners (examination panel) or one examiner and one competent assessor as a group or individual examination, whereby one of the examiners should be a university teacher.

(3) The main aspects covered and results of the oral examinations shall be recorded in an examination protocol. The student shall be informed of the examination result at the end of the oral examination.

(4) Students wishing to take the same examination at a later date should be permitted to attend the oral examination as witnesses should the available space permit it, unless the student completing the oral examination should object to this. This permission to attend the oral examination does not extend to the consultation and notification of the examination result for the student completing the oral examination.

## § 8 – Electronic examinations

(1) Written examinations in the sense of these examination regulations may be conducted in the form of an electronic examination (e-examination) should this seem technically appropriate. The type of examination must be defined in the module description.

(2) E-examinations take place under supervision in the presence of a competent person who prepares an examination protocol.

(3) It must be ensured that the electronic data can be clearly and permanently assigned to the student taking the examination. Pursuant to the general regulations, the student taking the examination is permitted to view the results achieved.

(4) Only IT systems (hardware and software) provided by university management or approved by the university's Service Centre for Computer Systems and Communication (SCC) for this purpose may be used for e-examinations.

(5) If academic work or examinations are to take the form of an e-examination, students must be given sufficient opportunity to familiarise themselves with the electronic examination system during the respective course. The data protection regulations must be complied with.

(5) E-exams that use a multiple choice format are not permitted.

## § 9 – Examination assessment, mark calculation and weighting

(1) The marks awarded for individual examinations are determined by the respective examiner. The following marks are to be used to assess the examination performance:

1.0 to 1.5	Very Good	Outstanding performance
1.6 to 2.5	Good	Performance is significantly above the average requirements
2.6 to 3.5	Satisfactory	Performance meets the average requirements
3.6 to 4.0	Sufficient	Despite some shortcomings, performance still meets the average requirements
4.0 or higher	Insufficient	Due to significant shortcomings, performance no longer meets the requirements

(2) For a differentiated assessment of examinations, individual marks (from 1.0 to 4.0) can be raised or lowered in increments of one tenth of a degree.

(3) If a module examination (exceptionally) consists of several examination components, the overall mark is calculated from the arithmetic mean of the marks awarded for the individual examinations, whereby these are weighted according to the number of credits awarded for each individual examination. Only the first digit after the decimal place is taken into account in the calculation of examination marks; all other digits are disregarded.

(4) A final mark is determined for the Master's examination. The overall mark for the Master's examination is calculated from the arithmetic mean of the marks for all module examinations and the Master's module, whereby these are weighted according to the number of credits awarded for the module. Only the first two digits after the decimal place are taken into account; all other digits are disregarded without any rounding. The examination committee may acknowledge outstanding achievements by awarding a distinction (»With distinction«). A mark of 1.0 must have been achieved for the Master's thesis as well as for the majority of the module examinations, with no lower than a mark of 2.0 achieved for any of the examinations.

(5) The German marks are supplemented with an ECTS mark as follows:

ECTS mark	Proportion of students usually awarded this mark
A	Top 10%
B	Next 25%
C	Next 30 %
D	Next 25%
E	Next 10 %
F	Fail

Should the cohorts on which the mark allocation is based not provide a sufficiently reliable basis for determining the relative marks, these shall not be reported.

### **§ 10 – Absences, withdrawal, cheating, regulation infringements**

(1) The mark of »Insufficient« is awarded for an examination if the student fails to attend an examination without good reason or withdraws from the examination without good reason after the examination has started. The same shall apply if a written examination is not completed within time provided for the examination.

(2) The examination committee or examiner must be informed in writing without delay of credible reasons for withdrawal or absence from the examination, as a rule within a maximum of three working days.

In case of illness, the student must provide a doctor's note certifying that they were unable to take the examination. If sufficient evidence exists that the student would have been capable of taking an examination or other evidence appears feasible, the university shall be entitled to request an official medical certificate at its expense.

If the reasons are accepted, a new time shall be set for the examination, usually the next normal examination date. The examination results already available must be offset in this case.

(3) Should a student attempt to influence the outcome of their examination by cheating or using impermissible resources, the mark of »Insufficient« shall be awarded for the examination. Should a student disturb the orderly examination procedure, they may be excluded from continuing the examination by the examiner or supervisor; in this case, the mark of »Insufficient« shall be awarded for this examination.

(4) Marks for academic work or examinations obtained through the literal or indirect transfer of external content without stating the source (plagiarism) constitutes cheating within the sense of (3) and shall be punished in the same manner.

(5) The student may request a review by the examination committee of the decisions made as per (4) within four weeks of receiving notification of the examination outcome. The student must be informed in writing immediately of any incriminating decisions by the examination committee, stating reasons and providing instructions on how to appeal.

### **§ 11 – Passing and failing examinations**

(1) A module examination is deemed passed if a mark of at least »Sufficient« is awarded for the module. If a module examination (exceptionally) consists of several examination components, a mark of at least »Sufficient« must have been awarded for all examination components. Examinations components for which a pass has not been awarded may be repeated as per § 12.

(2) No individual marks are provided for the sub-areas of a module examination consisting of several sub-areas. § 11(1) sentence 1 applies.

(3) The Master's examination is deemed passed if all of the module examinations including the Master's thesis and its defence have been passed.

(4) If the student has not passed the Master's examination, they can (upon request and presentation of the relevant evidence and the certificate of exmatriculation) be issued with a study certificate listing their examination results and their marks as well as the examinations not passed and indicating that the Master's examination has not been passed.

## **§ 12 – Repetition of module examinations**

(1) Failed module examinations or examination components must be repeated within the deadlines stated in § 4.

(2) The module examinations or examination components must be repeated for the second time within the deadlines stated in § 4. If the student does not pass an examination after repeating it for a second time, the examination shall be deemed definitively failed.

(3) If the student fails to attend the first repeat without good reason, the examination deemed failed. The same shall apply if the student fails to attend the second repeat without good reason: the examination shall be deemed failed.

(4) Students are not permitted to repeat a module examination or examination component that they have successfully passed.

## **§ 13 – Recognition of study periods, academic work and examinations, and knowledge acquired outside of higher education**

(1) Study periods, academic work and examinations completed at another German or international state or state-recognised higher education institution or in other courses of study at the same higher education institution are to be recognised, provided that no significant differences exist in the competences gained (learning outcomes). The examination committee shall decide on offsetting and recognition or refusal.

(2) If academic work and examinations are recognised, the marks must be transferred and included in calculation of the overall mark insofar as the marking systems are comparable. If the marking systems are not comparable, a »Pass« is merely indicated. The recognition may be indicated in the degree certificate.

(3) If the conditions of § 13(1) are met, a legal claim to recognition exists. The student must submit the documents required for recognition, ideally at the start of the first subject semester.

(4) Knowledge and skills acquired outside of higher education may be recognised if they are equivalent in content and level to the academic work and examinations that they should replace. They can replace a maximum of half of the total credits to be awarded for the degree programme. The examination committee shall decide on recognition. The knowledge and skills are to be assigned to the modules and included in the student's Transcript of Records. The examination committee must provide reasons for not recognising knowledge and skills. It is only possible to apply for the recognition of knowledge and skills following enrolment. Applications for recognition are usually processed within four weeks. Whether the student's knowledge and skills acquired outside of higher education are equivalent to the examinations is reviewed on a case-by-case basis according to the documents submitted by the student. These documents may include work samples, certificates, subject descriptions, teaching plans and similar. As a rule, these should not be more than five years old. The student is responsible for providing proof of equivalence.

(5) Denied applications for recognition must be justified in writing. The burden of proof that an application does not meet the necessary conditions shall lie with the party providing the assessment.

## § 14 – Assignment, submission, assessment and repetition of the Master's thesis

(1) The Master's thesis should show that the student is able to address a problem from their field of expertise independently within a given period of time using academic methods.

(2) Any faculty teacher, who imparts content for the degree in »Natural Hazards and Risks in Structural Engineering« is entitled to assign, supervise and evaluate Master's theses. Further permission can be requested and granted by the examination committee in coordination with the director of studies.

(3) Those able to prove that they have successfully completed at least 78 credits for the degree programme shall be granted admission to the Master's thesis, whereby all of the basic modules as well as the »Special Project« must have been passed.

(4) The Master's thesis must be registered with the examination committee in writing. The registration must include proposals for:

1. First and second examiners
2. Topic for the Master's thesis

(5) The examination committee is responsible for assigning the topic for the Master's thesis and appointing the examiners. The date of assignment must be recorded. The first examiner is responsible for technical supervision of the student during preparation of the work. The topic can only be rejected once and only within the first four weeks of its assignment.

(6) Group work can also be permitted for the Master's thesis if the individual students' contribution to be assessed is clearly distinguishable and assessable based on the submission of sections, page numbers or other objective criteria that enable a clear differentiation and fulfil the requirements as per § 14(1).

(7) A total of four months are set for completion of the Master's thesis. The subject, topic and scope of the work must be limited by the first examiner in such a way that the deadline set for the work can be met.

(8) The examination committee may permit an extension of the completion time if reasons beyond the student's control make an extension of the preparation time necessary. In individual cases, the examination committee may extend the completion time upon justified request if this is necessary for subject-related reasons. The maximum completion time may not exceed six months. If this period is exceeded and the student is not responsible for this, the thesis must be halted and a new topic assigned. In this case, the examination shall not be deemed attempted.

(9) The Master's thesis must be submitted to the first examiner by the deadline. The student must confirm at the time of submission that they wrote their work – or, in the case of group work, the contribution to the group work indicated – independently and did not use any sources or resources other than those indicated.

(10) The Master's thesis must be submitted in duplicate in print and digital formats in English. Upon request, the examination committee may permit the Master's thesis to be written in another language.

(11) One copy of the Master's thesis as well as the copy submitted in a digital format become the property of the Bauhaus-Universität Weimar and can be destroyed after a period of one year following completion of the examination procedure. The Bauhaus-Universität Weimar is granted the unlimited and unrestricted right to use the Master's thesis for non-commercial purposes in whole or in part in any media, provided the author is named. The copyright claims of the author remain unaffected otherwise.

(12) The Master's thesis must be assessed by two examiners independently within six weeks and defended in front of them. The defence takes the form of an oral examination; § 7 on oral examinations shall apply accordingly.

(13) The mark awarded for the Master's module shall consist of the assessment of the Master's thesis and the defence (weighting: 75% / 25%). The mark shall be calculated from the arithmetic mean of these individual marks. If an examiner awards the mark of »Insufficient«, a third examiner must be appointed. The thesis is deemed passed if two examiners award a mark of at least »Sufficient«.

(14) If the Master's thesis or defence is not passed, each may be repeated once. The topic of the Master's thesis may only be rejected within the period mentioned in (5) if the student has not already taken advantage of this option for the first thesis topic assigned.

## **§ 15 – Compensation for disadvantages**

Applications for compensation of disadvantages for examination performances must be submitted at least three weeks before the respective examination period. Applications for compensation for disadvantages for academic work must be submitted within a reasonable period of time prior to their completion. The disadvantage must be credible; a doctor's note may be required for this or, in justified individual cases, an official medical certificate. The student may propose a particular form of compensation. The application must be submitted in writing; students shall be informed of the decision in writing and, in the event of a rejection, given reasons in writing. Students must not experience any disadvantages from taking maternity, parental or care leave.

## **§ 16 – Examination committee**

(1) An examination committee shall be formed to perform the tasks assigned in these examination regulations.

(2) The faculty board shall appoint the members of the examination committee, the chairperson and their deputy.

(3) The examination committee consists of three representatives from the group of university teachers, one representative from the group of academic staff and one student. The term of office of the members of the examination committee is usually two years and one year for the student member.

(4) The examination committee reaches decisions through a majority of the votes cast. The examination committee has a quorum if the majority of its members, including the member elected chairperson or their deputy, are present and an absolute majority is ensured among the representatives from the group of university teachers.

(5) The meetings of the examination committee are not public. The members of the examination committee are bound to maintain confidentiality. If they are not in public service, they shall be obliged by the chairperson to maintain confidentiality.

(6) The examination committee shall ensure that the provisions of the examination regulations are complied with. It shall report to the faculty board regularly on the development of examinations and study periods, and provide suggestions for a reform of the study regulations, the course timetable and examination schedule, and the examination regulations. At the start of each semester, the examination committee shall determine the examination period.

(7) The members of the examination committee have the right to participate in approval of the examinations.



## **§ 17 – Examiners and assessors**

(1) The examination committee appoints the examiners and the assessors. Only members and affiliates of the Bauhaus-Universität Weimar or an affiliated university, who are or were authorised to teach the examination subject as a university teacher or *Privatdozent* or to teach independently by means of a teaching assignment, can be appointed as examiners. This also applies if authorisation to teach independently has been granted in a subject forming part of the examination subject. Examinations are generally assessed by at least two examiners, whereby at least one of them should be a university teacher. Only people who have passed the examination or hold an equivalent qualification may be appointed as assessors.

(2) If required by the purpose and nature of the examination, experienced persons from professional practice and training may also be appointed as examiners if they possess at least the qualification awarded for the examination or an equivalent qualification.

(3) The examiners are obliged to maintain confidentiality. If they are not in public service, they shall be obliged by the examination committee to maintain confidentiality.

## **§ 18 – Degree title**

Once students have passed the Master's examination, the Bauhaus-Universität Weimar awards the academic degree of »Master of Science« (M. Sc.) at the suggestion of the Faculty of Civil Engineering.

## **§ 19 – Degree certificate and Master's certificate**

(1) The student shall receive a degree certificate in German and English, where possible within four weeks, detailing the credits awarded for the modules of the Master's programme as well as their overall mark.

(2) The degree certificate bears the date that the last examination was completed.

(3) The Bauhaus-Universität Weimar shall issue a diploma supplement (DS) in German and English.

(4) The student shall receive the Master's certificate in German and English bearing the same date as the degree certificate at the same time. This certifies the awarding of the Master's degree. The Master's certificate and the degree certificate are signed by the dean of the faculty and the chairperson of the examination committee, and bear the university seal.

## **§ 20 – Invalidity of examinations**

(1) If a student is found to have cheated during an examination and this fact only becomes known after the degree certificate has been issued, the mark awarded for the examination can be corrected as per § 10. Where appropriate, the mark of »Insufficient« shall be awarded for the module examination.

(2) If the conditions for admission to a module examination are wrongly fulfilled without a student intentionally cheating and if this fact only becomes known after the degree certificate has been issued, this shortcoming shall be remedied by awarding a pass for the module examination. If a student intentionally wrongly obtains the right to take a module examination, this module examination shall be declared »Insufficient«.

(3) The student must be given the opportunity to make a statement before a decision is reached.

(4) An incorrect degree certificate shall be withdrawn and a new one issued as necessary. The Master's certificate and diploma supplement are to be withdrawn along with the incorrect degree certificate. A decision pursuant to § 20(1) and (2) sentence 2 is ruled out after a period of five years from the date on the degree certificate.

### **§ 21 – Viewing the examination files**

Within one year of conclusion of the examination, the student is to be granted access to their written examinations, the examiners' reports on these and the examination protocols upon request within a reasonable period.

### **§ 22 – Appeal procedure**

(1) Decisions to reject an application reached according to these examination regulations must be made in writing, justified and accompanied by instructions on how to appeal. An appeal may be lodged with the examination committee within one month of receipt of the decision.

(2) If the appeal relates to an examiner's assessment, the examination committee shall forward the appeal to the examiner in question for review. If the examiner amends their decision in accordance with the request, the examination committee shall approve the appeal. Otherwise, the examination committee shall review whether its decision:

1. was based on incorrect assumptions or irrelevant considerations;
2. infringes generally recognised principles of assessment standards;
3. infringes legal regulations;
4. infringes general principles of life experience.

They shall then inform the student of the outcome of their appeal.

(3) If the appeal relates to a decision of the examination committee, the dean shall make a final decision upon hearing from the examination committee if the examination committee does not approve the appeal.

(4) A decision is to be made on the appeal at the earliest possible opportunity. If the appeal is not approved, this decision must be justified and information provided on the appeal procedure.

### **§ 23 – Equal opportunity clause**

The statuses and functions described in these regulations apply equally to all genders.

### **§ 24 – Entry into force**

(1) These regulations shall enter into force on the first day of the month following their publication in the notices of the Bauhaus-Universität Weimar.

(2) These regulations shall first apply for the students beginning their studies in the winter semester 2020/21.

Faculty board resolution dated 13 May 2020

Prof. Dr.-Ing. Uwe Plank-Wiedenbeck  
Dean

The regulations are subject to approval.

Dr. Steffi Heine  
Head of Legal  
Affairs

Approved  
Weimar, 15 June 2020

Prof. Dr. Winfried Speitkamp  
President

Study Regulations – Appendix 1 (Study and examination plan) M.Sc. in »Natural Hazards and Risks in Structural Engineering«		Semester 1	Semester 2	Semester 3	Semester 4
		Credits	Credits	Credits	Credits
Module	Credits				
Applied mathematics and stochastics for risk assessment	6	6			
Geographical Information Systems (GIS) and building stock survey	6	6			
Primary hazards and risks	6	6			
Finite element methods and structural dynamics	6	6			
Structural engineering	6	3	3		
Elective module **	6	3	3		
Structural parameter survey and evaluation	6		6		
Earthquake engineering and structural design	6		6		
Geo- and hydrotechnical engineering	6		6		
Elective compulsory module *	6		6		
Disaster management and mitigation strategies	6			6	
Life-lines engineering	6			6	
Elective compulsory module *	6			6	
Special Project	12			12	
Elective module **	6				6
Master's thesis	24				24
<b>Total</b>	<b>120</b>	<b>30</b>	<b>30</b>	<b>30</b>	<b>30</b>

\* See the NHRE module catalogue (updated every semester, subject to confirmation by the examination committee).

\*\* Free choice of modules from the Master's programmes offered at the Bauhaus-Universität Weimar (graded German courses worth max. 6 credits may also be selected).