

# Notices from Bauhaus-Universität Weimar

## ACADEMIC REGULATIONS

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

### Examination regulations for the consecutive degree programme “Natural Hazards and Risks in Structural Engineering” with the degree Master of Science

Pursuant to Sections 3 Para. 1, 137 Para. 2 Sentence 2 of the Thuringian Higher Education Act (ThürHG) dated 10 May 2018 (GVBl. S. 149), most recently modified by Article 128 of the Act dated 18 December 2018 (GVBl. S. 731) in conjunction with Section 34 Para. 3 of the Thuringian Higher Education Act in the version published on 13 September 2016 (GVBl. Page 437) Bauhaus-Universität Weimar issues the following examination regulations for the degree programme *Natural Hazards and Risks in Structural Engineering* with the Master of Science (M. Sc.) degree.

The council of the Faculty of Civil Engineering passed the examination regulations on 15/05/2019. The president of Bauhaus-Universität Weimar has approved the regulations with the decree dated 3 July 2019.

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## **Section 1 - Purpose of the Master's examination**

The Master's examination demonstrates that the student has acquired the in-depth expertise and has the skills to work to academic standards.

## **Section 2 - Normal study period**

The normal study period is four semesters.

## **Section 3 - Examination structure**

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

(2) Modules are completed with examinations and based on these credits (CP) are awarded using the ECTS system. Module examinations are conducted during the course and usually comprise an examination performance.

## **Section 4 - Deadlines**

(1) The Master's examination should be completed during the normal study period. A Master's examination that is not completed within three semesters of completing the normal study period is not considered to have been passed unless the candidate is not responsible for missing the examination. In this case the candidate must submit a justified request for extension of study to the examination committee.

(2) A module examination not passed must be completed within the relevant next examination period. The second repeat examination for a module must in turn be completed in the following examination period. After the end of this period, the examination is considered to be "finally not passed" unless the candidate is not responsible for this.

(3) The registration for the module examination generally takes place online and is binding. The relevant registration periods are set by the examination committee. Cancellation of the individual elements of the module examination or sub-examination performances is possible up to 7 days before the start of the relevant examination phase.

(4) The registration for an examination remains valid if a candidate is not able to take the examination on the planned date due to illness or waiver, i.e. new registration for the next possible examination deadline is not required and the student is obliged to take part in the examination.

(5) If there are timing conflicts due to repeat examinations, the examination that must be completed first according to the study programme is to be repeated first. The candidate must cancel the other examination with the examination office. Examinations on the same day that do not conflict in terms of timing must be taken. The candidate is obliged to take part in a maximum of 2 module examinations per examination day.

## **Section 5 - Scope and type of examinations**

- (1) Examination performances must be provided through
1. Class papers and other written work (Section 6),
  2. Oral examinations (Section 7),
  3. Electronic examinations (Section 8).

(2) Study performances such as confirmations, course attendance certificates, internships, projects are preliminary performances for examinations. They and the type of examination performance are set by the initial examiner and made known in the module descriptions.

The admission or non-admission is made known and posted for the relevant module after checking the necessary examination performances at the latest five calendar days before the stated examination date by the relevant examination committee. For students who have registered and are admitted to this deadline, the stated examination appointment is binding.

(3) Suitable forms of examination performances may also be permitted in the form of group work. The contribution of the individual in the examination performance to be graded must be clearly defined and assessed separately. The group should generally not consist of more than four students.

## **Section 6 - Class papers and other written work**

(1) The class papers aim to demonstrate that the candidate can recognise a problem, handle it using reflection and critical analysis and find solutions in a limited period of time and with the resources stipulated by the examiner using the subject area's common methods. The work period for class papers is around 30 minutes per credit but not longer than three hours.

(2) The candidate should demonstrate in the other written work that they

- Can define problems systematically or analytically,
- Work on methods to resolve them,
- List and reveal solutions in a comprehensive manner,
- Develop or apply resources,
- Integrate the existing knowledge in a relevant context,
- Interpret results and compress relevant conclusions and
- Then depict these in a comprehensible academic form.

(3) Class papers and other written work are generally to be assessed by two examiners of which one should be a lecturer.

(4) Class papers and other written work using multiple choice are not permitted.

## **Section 7 - Oral examinations**

(1) In the oral examinations the candidate should demonstrate that they have recognised the interactions in the area being examined and can assign special issues to these interactions. The oral examinations should also determine whether the candidate has a wide range of basic knowledge. The duration of the oral examinations is a minimum of 15 and a maximum of 45 minutes for each candidate.

(2) Oral examinations are completed in front of at least two examiners (colleague examination) or one examiner in the presence of an expert assessor as a group or individual examination, of which at least one examiner must be a lecturer.

(3) The key objects and results of the oral examinations should be stored in a protocol. The result is to be notified to the candidate after the oral examination.

(4) Students who want to undertake the same examination at a later date should be permitted access as auditors to the oral examination if there is sufficient space unless the candidate opposes this. Admission to act as an auditor however does not cover the advice and notification of the examination results to the candidate.

### **Section 8 - Electronic examinations**

(1) Written examinations as defined by these examination regulations can be in the form electronic examinations (E-exams) if this appears appropriate from a technical perspective. The type of examination is to be set in the module description.

(2) The e-exam takes place in terms of supervision in the presence of an expert person who keeps the logs.

(3) It must be ensured that the electronic data can be uniquely and permanently assigned to the candidate. The candidate must be granted a view of the results achieved under the general requirements.

(4) E-exams may only use IT systems (hardware and software) that have been provided by the university's management or authorised by the computer centre (SCC) for this purpose.

(5) If course or examination performances are to be provided in the form of e-exams, the student must be given sufficient opportunity during the relevant teaching event to become familiar with the electronic examination system. Data protection regulations must be complied with.

(5) Electronic examinations using multiple choice are excluded.

### **Section 9 - Examination assessment, formation and weighting of grades**

(1) The grades for the individual examination performances are set by the relevant examiner. The following grades are to be used to assess examination performances:

1.0 to 1.5	Very good	Excellent performance;
1.6 to 2.5	good	Performance that is significantly above the average requirements;
2.6 to 3.5	Satisfactory	Performance that meets the average requirements;
3.6 to 4.0	Adequate	Performance that, in spite of its faults, still meets the requirements;
over 4.0	Not satisfactory	Performance, which due to its faults, no longer meets the requirements.

(2) To provide the differentiated assessment of examination performances, individual grades in the range between 1.0 and 4.0 can be raised or lowered using the numbers after the decimal point.

(3) If a module examination (as an exception) comprises several examination performances, the grade is calculated from the arithmetic average of the individual examination performances, whereby a weighting is provided with the credits assigned to the individual performances. When establishing examination grades, only the first decimal point after the comma is taken into account and all other numbers are ignored.

(4) A final mark is calculated for the Master's examination. The overall grade for the Master's examination is calculated as the arithmetic average of the grades for all of the module examinations and the Master's module whereby a weighting is given for the credits assigned to the module. The second digit after the decimal point is taken into account; all other digits are ignored without rounding. The examination committee may issue the award "Distinction" for outstanding performances with an average to 1.19. This requires that the Master's thesis is graded as 1.0 and the majority of the module examinations are also graded as 1.0; in addition no grade may be worse than "good".

(5) The German grades are supplemented by an ECTS grade using the following scheme:

ECTS grade	Share of the successful students that are usually given this grade
A	the best 10%
B	the next 25%
C	the next 30 %
D	the next 25%
E	the next 10 %
F	Exam not passed

## Section 10 - Absence, withdrawal, fraud, order infringement

(1) An examination performance is considered to be "unsatisfactory" if the candidate is absent for an examination without an appropriate reason or if they withdraw from the examination after it starts without an appropriate reason. This also applies if they do not provide a written examination performance within the stated processing time.

(2) The reasons asserted for the withdrawal or absence must be notified immediately to the examination committee or examiner, usually within a maximum of three working days in writing and must be credible. If the candidate is ill a doctor's certificate must be provided and it must state that the candidate is unable to take part in the examination. If there are sufficient real reasons to assume as likely the inability to take the examination or other evidence appears appropriate, the university is entitled to request an occupational doctor's certificate at its expense. If the reasons are recognised, a new date is set, usually the next normal examination date. The examination results already in place must be offset in this case.

(3) Examination participants who become sick during the examination must notify this before handing over the examination documents. The early end must be noted by the supervisors and notified to the examination office immediately after the end of the examination. In this case, the student must provide a doctor's certificate to confirm the illness to the examination office within three working days. Otherwise the examination is considered not to have been passed. The candidate declares by the early submission of the examination documents their withdrawal from the examination due to health reasons. The examination performance is not assessed and the documents are locked away. The examination committee decides on recognising the withdrawal after presentation of the medical certificate. Paragraph 2 Sentence 3 applies. In rare cases when the candidate is unable to provide the examination performance without themselves noticing this inability, approval of the withdrawal from the examination by the examination committee is only possible under very tight conditions. The candidate must explain in detail in writing the extent to which the sickness occurred whilst providing the examination performance and the reasons why they did not notice the occurrence of the sickness. In addition, a medical certificate must also be provided. Paragraph 2 Sentence 3 applies.

(4) If a candidate attempts to influence the result of an examination performance by fraud or the use of impermissible resources, this examination performance is graded as "unsatisfactory". A candidate that disturbs the proper process of the examination may be excluded from continuing the examination by the relevant examiner or supervisor; in this case the relevant examination performance is graded as "unsatisfactory".

(5) The candidate may request within four weeks of notification of the examination result that the decisions under Para. 4 are checked by the examination committee. Adverse decisions by the examination committee must be notified to the candidate without delay in writing, justified and provided with notification on legal remedies.

### **Section 11 - Passing and failing**

(1) A module examination is passed if the module grade is at least "adequate". If as an exception a module examination comprises several parts, all sub-elements must be graded with at least "adequate". Sub-elements must be repeated as stated in Section 12.

(2) There are no individual grades for the sub-elements in a module examination comprising various sub-elements. Para. 1 Sentence 1 applies.

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

(4) If the candidate does not pass the Master's examination, on request and on presentation of the relevant documents and the deregistration confirmation, they are issued with a study certificate that contains the examination performances provided and their grades and indicates that the Master's examination was not passed.

### **Section 12 - Repeating the module examinations**

(1) Module or sub-element examinations not passed must be repeated within the periods stated in Section 4.

(2) A second repeat module examination or sub-element examinations must be completed within the periods stated in Section 4. If the candidate does not pass the second repeat examination, the examination performance is finally not passed.

(3) If the candidate does not take part in the first repeat examination without good reason, the examination is considered not to have been passed. If the candidate does not take part in the second repeat examination without good reason, the examination is considered not to have been passed finally.

(4) The repetition of a passed module examination or sub-element examination is not permissible.

### **Section 13 - Recognition of study periods, studies and examinations**

(1) Study times, course and examination performances that were provided at another domestic or international state or state-recognised university or other degree programmes from the same university are to be credited if there is no significant difference in terms of the competencies gained (learning results). The examination committee will take decisions on offsetting, recognising or refusing these results.

(2) If study and examination performances are recognised - if the grade systems are comparable - the grades are to be transferred and included in the calculation of the overall grade. The note "passed" is used for grade systems that are not comparable. It is permissible to indicate the recognition in the attestation.

(3) If the requirements in Paragraph 1 are met, there is a legal right to recognition. The candidate must present the documents required for the recognition if possible at the start of studies in the 1st semester.

(4) Rejected decisions must be justified in writing. The burden of proof that an application does not meet the necessary requirements is with the department conducting the assessment.

(5) Knowledge and skills acquired outside of university settings can be recognised if they are equivalent in terms of content and level to the course and examination performances that they are to replace. Overall they can replace at most half of the degree's assigned credits. The examination committee decides on recognition. They are to be assigned to the modules and shown in the student's performance overview. Reasons must be given for non-recognition. Applications for recognition can only be made after enrolment. They are usually processed within four weeks. The check on whether the performances provided by the student outside of the university are equivalent to the examination performances that are to be replaced, is made on the individual basis using the documents presented by the student such as work samples, certificates, subject descriptions, teaching plans etc. which are usually less than 5 years old. The student is responsible for demonstrating the equivalence.

#### **Section 14 - Issuing, submitting, assessing and repeating the Master's thesis**

(1) The Master's thesis should show that the candidate is able to independently work through a problem relating to the specialist area using academic methods within a stated period of time.

(2) Each lecturer in the faculty who has taught content for the "*Natural Hazards and Risks in Structural Engineering*" degree is entitled to issue, support and assess Master's theses. Other permissions can be requested and confirmed by a decision from the examination committee in agreement with the degree programme leadership.

(3) Those who can demonstrate the successful acquisition of at least 78 credits in this degree programme are permitted to undertake the Master's thesis whereby all of the basic modules and the "special project" must have been passed.

(4) The Master's thesis is to be registered in writing with the examination committee. The following must be included with the registration:

1. A proposal for the initial examiner and second examiner as well as
2. a proposal for the subject of the Master's thesis.

(5) The examination committee issues the subject of the Master's thesis and appoints the examiner. The timing of the issue is to be entered in the files. The initial examiner is responsible for the technical support of the candidate when producing the work. The subject can only be returned once and only within the first four weeks after issue.

(6) The Master's thesis can also be authorised as group work if the contribution by each candidate to the examination performance enables clear differentiation, is clearly identifiable, can be graded separately and the requirements in Section 1 are met as a result of stating sections, page numbers or other objective criteria.

(7) The processing term of the Master's thesis is four months. The subject, theme and scope of the work must be limited by the initial examiner such that the stipulated period can be complied with.

(8) An extension of the processing time may be permitted by the examination committee to make an extension to the processing period necessary for reasons for which the candidate is not responsible. In individual cases the examination committee may extend the justified request if this is required for reasons relating to the subject matter. The maximum processing time may not exceed six months. If this period is exceeded and the candidate is not responsible for this delay, the processing must be stopped and a new subject issued. The examination attempt in this case is not considered to have been made.

(9) The Master's thesis must be submitted to the initial examiner by the deadline. On submission the examination candidate must make assurances in writing that they completed the work - or the indicated section of the work for group work - independently and that they have not used sources and resources other than those stated.

(10) The Master's thesis must be submitted in duplicate in print as well as in digital form in English. On request the examination committee may permit the production of the Master's thesis in another language.

(11) A copy of the Master's thesis and the copy provided digitally become the property of Bauhaus-Universität Weimar and may be destroyed one year after completion of the examination process. Bauhaus-Universität Weimar receives the unrestricted right without time limit to use the Master's thesis in full or in part in any media whilst stating the author for non-commercial purposes. The copyright claims of the author are otherwise unaffected.

(12) The Master's thesis must be assessed by two examiners independently within six weeks of each other and defended in front of them. The defence has the character of an oral examination; Section 7 (Oral examinations) applies accordingly.

(13) The grade for the Master's module is comprised of the assessment of the Master's thesis (weighting 75%) and the assessment of the defence (weighting 25%). The grade arises from the arithmetic mean of the individual grades. If the examiner grades the work as "not satisfactory" a third examiner must be appointed. The work is passed if two examiners grade it as at least "adequate".

(14) If the Master's thesis or its defence are not passed, they can each be repeated once. Returning the subject of the Master's thesis within the period stated in Paragraph 5 is however only possible if the examination candidate does not use this option when producing their first work.

### **Section 15 - Reconciling disadvantage**

Applications for reconciling disadvantage for examination performances should be made at the latest 3 weeks before the relevant examination period. Applications to reconcile disadvantage for study performances are to be made in an appropriate period before their provision. The disadvantage must be credible. Therefore a medical certificate or in justified individual cases the presentation of an official medical certificate can be requested. The student can propose a particular form of reconciliation. The request is to be made in writing, the decision notified in writing and any refusal is to be justified in writing. The student must not experience any disadvantages from utilising maternity, parental or care leave.

### **Section 16 - Examination committee**

(1) An examination committee is formed to undertake the tasks assigned by these examination regulations.

(2) The faculty council appoints the members of the examination committee, chairman and deputy.

(3) The examination committee is made up of three representatives of lecturers, one representative of academic employees and a student. The term of office of the members of the examination committee is usually two years; usually one year for the student member.

(4) The examination committee passes its resolutions with the majority of the votes given. The examination committee has a quorum if the majority of its members, including the member elected to be the chair or their deputy, are present and the absolute majority of the lecturer representatives is ensured.

(5) The meetings of the examination committee are not public. The members of the examination committee are subject to confidentiality concerning the office. If they are not in public service they must be obliged by the chair to maintain confidentiality.

(6) The examination committee ensures that the provisions of the examination regulations are complied with. It reports regularly to the faculty council on the development of the examinations, study periods and gives suggestions on reforming the study regulations, study and examination schedule and the examination regulations. At the start of each semester the examination committee sets the period for the examinations.

(7) The members of the examination committee have the right to take part in approving the examinations.

### **Section 17 - Examiners and assessors**

(1) The examination committee appoints examiners and assessors. Only members and employees of Bauhaus-Universität Weimar or another university who are or were authorised to teach independently in the relevant examination subject as a lecturer or private teacher or via a teaching appointment are permitted to act as examiners. This also applies if the authorisation for independent teaching was issued for a subject that makes up part of the examination subject. Examination performances are usually assessed by two examiners; at least one examiner should be a university lecturer. Only those who have passed the examination or have an equivalent qualification may be appointed as an assessor.

(2) If the purpose and type of examination requires it, experienced people from professional practice and training may be appointed as examiners if they have as a minimum the qualification to be issued by the examination or an equivalent one.

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

### **Section 18 - Degree**

After passing the Master's examination, Bauhaus-Universität Weimar will issue the academic title "Master of Science" (M. Sc.) at the proposal of the Faculty of Civil Engineering.

### **Section 19 - Attestation and Master's certificate**

(1) The examination candidate will receive without delay, if possible within four weeks, an attestation for the passed Master's examination with the credits for the modules of the Master's degree in German and English as well as the overall grade.

(2) The attestation bears the date on which the last examination performance was provided.

(3) Bauhaus-Universität Weimar provides a Diploma Supplement (DS) in English and German.

(4) At the same time as the attestation of the Master's examination the examination candidate receives the Master's certificate in German and English with the date of the attestation. This certifies the award of the Master's degree. The Master's certificate and attestation are signed by the faculty dean and chair of the examination committee and bear the university's seal.

## **Section 20 - Invalidity of the examinations**

(1) If the candidate commits fraud in an examination performance and this fact only becomes known after the attestation has been handed over, the examination performance grade may be adjusted accordingly pursuant to Section 10. If appropriate, the module examination may be declared "not satisfactory".

(2) If the requirements were not met for approval of a module examination without the candidate intending fraud and this fact only becomes known after the attestation has been handed over, this defect is rectified by passing the module examination. If the examination candidate has deliberately incorrectly arranged to complete a module examination, this module examination is declared to be "not satisfactory".

(3) Before a decision is made, the candidate is permitted to make a statement.

(4) The incorrect attestation is to be withdrawn and if necessary a new one issued. The Master's certificate and diploma supplement are to be withdrawn along with the incorrect attestation. A decision under Paragraph 1 and Paragraph 2 Sentence 2 is excluded after a period of five years from the attestation's date.

## **Section 21 - Viewing the examination files**

Within one year of completing the examination process, the candidate is to be granted a view of the written examination work, the related examiner's report and the examination protocols on request after an appropriate period.

## **Section 22 - Appeal process**

(1) Rejecting decisions made according to these examination regulations are to be notified in writing and justified; a right of appeal notification must be included. An appeal may be subjected to the examination committee within one month of receipt of the notification.

(2) If the appeal relates to the grade decision of an examiner, the examination committee passes this objection to this examiner for checking. If the examiner changes their decision as requested, the examination committee approves the appeal. Otherwise the examination committee decides on whether:

1. incorrect requirements or unrelated considerations were assumed,
2. infringements were made against generally recognised principles for assessment standards,
3. legal regulations or
4. general principles from life experience.

They then issue the appeal notification.

(3) If the appeal relates to the decision of the examination committee, the dean makes a final decision after 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, the decision is to be justified and an appeal procedure must be included.

### **Section 23 - Equal opportunity clause**

Status and function titles in these regulations apply equally to all genders.

### **Section 24 - Entry into force**

(1) These regulations come into force on the first date of the month following their notification by Bauhaus-Universität Weimar.

(2) These regulations apply first to students who start their degree programme in the 2019/20 winter semester.

Faculty council resolution dated 15/05/2019

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

The rules must be approved

Dipl.-Jur. Rainer Junghanß  
Lawyer

approved:  
Weimar, 3 July 2019

Prof. Dr. Winfried Speitkamp  
President

Study regulations - Appendix 1 (study programme) Master's "Natural Hazards and Risks in Structural Engineering"		1st semester	2nd semester	3rd semester	4th semester
Modules	LP	LP	LP	LP	LP
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 module list NHRE (can be updated each semester, to be confirmed by the examination committee)

\*\* free choice from the Master's range at Bauhaus-Universität Weimar (graded German courses possible up to a max. of 6 credits)