

Examination and Study Regulations
for the Master's Programme
Geography of Environmental Transformation
at the University of Bayreuth
dated 25 February 2026

Article 9 sentence 1 in conjunction with Article 80 para 1 sentence 1, Article 84 para 2 sentence 1 and Article 90 para 1 sentence 2 of the Bavarian Higher Education Innovation Act (BayHIG) forms the framework for the following regulations issued by the University of Bayreuth:

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§ 1

General Examination and Study Regulations

¹Studying in the Master's Programme Geography of Environmental Transformation (TransFormGeo) is governed by the General Examination and Study Regulations for Bachelor's and Master's Programmes at the University of Bayreuth (APSO). ²Supplementary and deviating provisions for the Master's Programme Geography of Environmental Transformation are set out in these regulations.

§ 2

Aim and Structure of the Degree Programme

(1) ¹The Master's Programme Geography of Environmental Transformation provides students with the following skills:

- interdisciplinary problem-solving skills for spatially oriented geographical questions in the context of environment and society;
- the ability to comprehensively analyse and assess complex environmental systems;
- an advanced, theory-based understanding of the functioning and processes of complex environmental systems at different spatial and temporal scales;
- the ability to establish and assess connections between aspects of environmental systems from the natural sciences and cultural studies;
- knowledge of state-of-the-art techniques in environmental analysis, data collection, data analysis and modelling for characterising and assessing environmental systems;
- the ability to carry out further independent academic research.

²The Master's Programme Geography of Environmental Transformation, including all examinations, is conducted in English. ³Upon passing the master's examination, the University of Bayreuth, through the Faculty of Biology, Chemistry & Earth Sciences, awards the academic degree Master of Science (abbreviated: M.Sc.).

(2) ¹Completion of an internship of at least five weeks at a relevant environmental science institution outside the University is a mandatory component of the programme. ²Students who wish voluntarily to complete a longer internship or additional internships outside the requirements of the examination regulations are expressly encouraged and supported in doing so. ³The timing of the internship during the semester break shall be based on the requirements of the internship provider and shall be organised independently by the students. ⁴The respective internship provider shall certify the nature and duration of the internship.

(3) ¹The Master's Programme may be completed as a full-time or part-time degree programme. ²New students may begin the programme in the winter semester.

§ 3

Admission to the Programme

- (1) Admission requirements for the Master's Programme are:
 1. a degree from a higher education institution with an examination grade of at least 'good' (2.5) in the Bachelor's Programme Geography: Society and Environment or Ecology and the Environmental Sciences at the University of Bayreuth, or an equivalent degree;
 2. proof of English language skills at least at level B2 of the Common European Framework of Reference for Languages for applicants who have neither acquired their higher education entrance qualification nor the initial degree qualifying them for admission to the programme in English;
 3. proof of German language skills at least at level A1 of the Common European Framework of Reference for Languages for applicants who have neither acquired their higher education entrance qualification nor the initial degree qualifying them for admission to the programme in German. Applicants who do not fulfil this requirement shall be enrolled on the condition that they submit proof of the required language skills by the end of the second semester at the latest;
 4. determination of programme-specific aptitude in a process pursuant to Annex 2.
- (2) ¹When assessing the equivalence of a degree, there must be no substantial differences in the skills acquired compared with the degrees referred to in para 1 no. 1. ²Article 86 BayHIG shall apply to determining whether domestic and foreign degrees are eligible for recognition. ³The board of examiners shall decide on the equivalence of a degree.
- (3) ¹If the certificate for the relevant initial degree is not yet available, confirmation of the individual grades for all examinations and coursework completed by the application deadline must be submitted. ²These academic achievements must amount to at least 135 credit points and correspond to at least the grade 'good' (2.5) according to the calculation of the overall grade. ³Applicants who fulfil the requirements of sentence 2 shall be enrolled on the condition that they submit the certificate for the relevant initial degree with a grade of at least 'good' (2.5) by the end of the first semester. ⁴Upon request, the board of examiners may extend the deadline for submitting the relevant degree certificate until the end of the second semester if the reasons for the extension are beyond the student's control. ⁵This applies in particular if the student has already completed all examinations but the grading of the academic achievements or issuance of the certificate is still pending.

§ 4

Supplementary and Deviating Provisions

- (1) Deviations from and additions to § 2 para 1 APSO:
 1. Notwithstanding sentence 3, the board of examiners consists of four members and one substitute representative for each member.
 2. Sentence 4:
 - a) By way of deviation, one member shall be elected from among the research associates (Art. 71 BayHIG) of the Faculty of Biology, Chemistry & Earth Sciences.
 - b) In addition, students may be invited to attend as guests.
 - c) In addition, at the same time as the substitute representatives are elected, the Faculty Council shall, in the event that a professor is unable to serve or leaves office, determine a fixed order in which the professors are to be represented or permanently replaced by the substitute representatives. If the chair or deputy chair leaves office, the Faculty Council shall elect a new member for the remainder of the term of office.
 3. In addition to sentence 5, the chair and deputy chair of the board of examiners must be professors.
- (2) ¹In addition to § 6 APSO, students may take additional examinations in module areas B, C and F beyond the required scope; para 3 and § 14 para 1 APSO must be observed. ²There is no requirement to repeat additional examinations that have not been passed. ³The additional examinations shall be listed in the transcript of records unless the student requests otherwise.
- (3) Deviations from and additions to § 14 para 1 sentence 1 APSO:
 - a) By way of deviation, the final grade for the master's examination is calculated as follows: the grades for module areas A, B, C and F each contribute 10%, the module Research Training contributes 10%, and the master's thesis contributes 50% to the final grade.
 - b) In addition, when calculating the final grade and taking into account the required credit points, only the modules with the best grades shall be included if more credit points than required are completed in module areas B, C and F.
- (4) Deviations from and additions to § 31 APSO:
 1. para 4:
 - a) Notwithstanding sentence 1, the master's thesis must be submitted in English.
 - b) Notwithstanding sentence 5, the master's thesis must contain a summary in English.

2. In addition to para 5, at the request of the first examiner, up to two additional typed, bound and paginated copies of the master's thesis must be submitted to the examiners. In addition, all raw data collected, analysed data and graphics must be submitted in digital form to the first examiner.
3. In addition to para 7 sentence 3, the board of examiners may appoint an additional examiner in special cases, in particular where the grades awarded differ by more than one full grade.
4. In addition to the master's thesis, the content of the master's thesis shall be presented in a 15-minute presentation (disputation). The presentation shall be followed by a 15-minute discussion placing the content of the master's thesis in a broader disciplinary context. The presentation shall take place before the examiners and the public. At the student's request, the presentation may be held in private. The performance shall be assessed as 'pass' or 'fail'. If assessed as 'fail', the presentation may be repeated once. The disputation shall not be included in the calculation of the final grade for the master's examination.

§ 5

Effective Date

- (1) ¹These regulations enter into force on 26 February 2026. ²They apply to students who begin this degree programme from the winter semester 2026/2027 onwards. ³All other students shall complete their studies under the previous Examination and Study Regulations for the Master's Programme Environmental Geography (M.Sc.) at the University of Bayreuth dated 8 July 2016 (AB UBT 2016/033), last amended by regulations dated 9 January 2023 (AB UBT 2023/002).
- (2) Upon entry into force of these regulations, the Examination and Study Regulations for the Master's Programme Environmental Geography (M.Sc.) at the University of Bayreuth dated 8 July 2016 (AB UBT 2016/039), last amended by regulations dated 9 January 2023 (AB UBT 2023/002), shall cease to be in force, subject to the provision in para 1 sentence 3.

Annex 1: Modules, Credit Points and Examinations

The module areas, the respective modules, credit points (CP) and corresponding examinations are listed below.

Modules that can be assigned to more than one area may only be counted once.

Deviations from and additions to § 9 APSO:

- In addition to para 2 sentence 6, the board of examiners may decide to appoint an additional examiner to assess a written examination.

Abbreviations:

	Vertical bars between forms of examination indicate possible alternatives.
+	Plus signs indicate that several examination components must be completed.
x/y	Fractions indicate the weighting of the respective examination component in the module grade.
()	Round brackets group related examination components. They may be used to define alternative forms of examination for an examination component or to divide an examination component into several parts.
*	Examination components marked with '*' are not included in the calculation of the module grade or final grade.
K	written examination
mP	oral examination
H	term paper
P	presentation
E	essay
B	contribution
semA	assignments during the semester
sA	written paper

CO identifier	Module Area Module	CP	Examination	Included in final grade
	A Fundamentals of Geography and Environmental Transformation	10		
Fak229819	Introduction to Geography and Environmental Transformation	5	Portfolio examination: P* + B	x
Fak229820	Debated Topics	5	Portfolio examination: P* + B	x

CO identifier	Module Area Module	CP	Examination	Included in final grade
	B Earth, Soil, Surface	10		
Fak226251	Process Geomorphology	5	Portfolio examination: (semA K mP) 3/5 + B 2/5	x
Fak229799	Soils and Climate Change	5	Portfolio examination: K + B	x
Fak229948	Environmental Soil Physics	5	Portfolio examination: mP 3/5 + B 2/5	x
Fak229951	Natural Hazards	5	Portfolio examination: K + sA	x
	C Climate, Water, Vegetation	10		
Fak229802	Climate Change	5	Portfolio examination: mP + semA *	x
Fak211046	Ecological Climatology	5	Portfolio examination: H + B *	x
Fak229980	Biogeography and Global Ecology	5	Portfolio examination: (K mP) + P *	x
Fak229952	Population Ecology in Forest Ecosystems	5	Portfolio examination: (P B) + semA *	x
Fak227536	Dynamic Vegetation Ecology	5	Portfolio examination: B + P *	x
Fak229815	Changes in Hydrological Systems	5	Portfolio examination: K + P *	x
	D Environmental Focus	5		
	One module must be completed from module area B or C that has not already been successfully completed in that area.	5	see module areas B and C	
	E Research in Environmental Geography <i>Of the modules listed below, the module Research Training is compulsory.</i>	20		
Fak229821	Research Training	10	sA	x
Fak229822	Conference	2	P * B *	
Fak229823	Conference	3	P * B *	

CO identifier	Module Area Module	CP	Examination	Included in final grade
Fak229824	Scientific Workshop / Science School	2	P* B*	
Fak229825	Scientific Workshop / Science School	3	P* B*	
Fak229826	Scientific Workshop / Science School	5	P* B*	
Fak229827	Scientific Workshop / Science School	10	P* B*	
Fak229828	Internship (5 weeks)	5	P* B*	
Fak229829	Internship (10 weeks)	10	P* B*	
	F Environment and Society	10		
Fak215125	Socio-Economic and Political Dimensions of Global Change	5	semA	x
Fak529998	Sport Ecology	5	Portfolio examination: P + (K E semA)	x
Fak229331	Ecosystem Services	5	Portfolio examination: K + semA*	x
	G Methods in Environmental Geography <i>Modules totalling 15 CP must be completed. The modules may be selected from one or more topic areas.</i>	15		
	Statistics, Data Science and Artificial Intelli- gence			
Fak230000	Introduction to R – Basics and Data Handling	2	semA*	
Fak230001	Statistical Data Analysis with R	3	semA	
Fak230031	Spatial Statistics and Visualization with R	3	B*	
Fak213382	Time Series Analysis	5	Portfolio examination: semA* + P*	
Fak229956	AI in Environmental and Ecological Research	3	K* mP* P* B* semA*	
Fak229982	Ecoinformatics and Biogeographical Modelling	5	mP* P* semA*	
	GIS and Remote Sensing			
Fak229957	Advanced GIS	2	semA*	
Fak230003	Advanced Remote Sensing	3	semA*	
Fak229958	AI for Spatial Data Analysis	3	K* mP* P* B* semA*	

CO identifier	Module Area Module	CP	Examination	Included in final grade
	Environmental Models and Simulation			
Fak230004	Climate Data Modelling	3	semA*	
Fak118966	Mathematical Modeling for Climate and Environment	8	K mP	
Fak229949	Modelling Soil-Plant-Atmosphere Systems	5	Portfolio examination: semA + B	
Fak229959	Introduction to Environmental and Ecological Modelling	2	semA*	
Fak229996	Ecosystem Services Assessment of Landscapes	2	semA*	
Fak229997	Modeling Ecosystem Services	3	semA*	
	H Free Choice	5		
	<i>Students may choose any modules from master's programmes at the University of Bayreuth that are not already an integral compulsory component of the Master's Programme Geography of Environmental Transformation.</i>	5	See the relevant (F)PSO	
	I Research Skills	5		
Fak229970	Research Skills	5	Portfolio examination: semA* + B* + (P* B*)	
	J Master's Thesis	30		
Fak229830	Master Thesis & Disputation - Geography of Environmental Transformation	30	Master's thesis + P*	x
	TOTAL	120		

Annex 2: Aptitude Assessment Process

1. Purpose of the Aptitude Assessment Process

¹The process established pursuant to Art. 90 para 1 sentence 2 BayHIG determines, in accordance with § 3 para 1 no. 4, applicants' aptitude for the Master's Programme Geography of Environmental Transformation at the University of Bayreuth. ²The aptitude criteria are:

- a) a sound command of subject-specific knowledge from prior studies in geography, geoecology or another equivalent environmental science that is relevant to understanding and analysing questions in the field of Geography of Environmental Transformation;
- b) a strong interest in environmental science questions and the capacity for reflection and abstraction required to understand an interdisciplinary degree programme;
- c) the ability to engage with the subject matter in depth, both receptively and productively, in English.

2. Committee Responsible for Conducting the Aptitude Assessment Process

Preparation and conduct of the aptitude assessment process are the responsibility of the board of examiners pursuant to § 2 APSO in conjunction with § 4 para 1.

3. Procedure for Determining Aptitude

3.1 ¹The aptitude assessment process is conducted once a year in the summer semester. ²The documents for admission to the aptitude assessment process must be uploaded online via the University of Bayreuth application portal. ³The documents must have been received electronically via the University of Bayreuth application portal by 15 June of the respective year for admission in the following winter semester (strict deadline). ⁴Documents pursuant to no. 3.2.3 may be submitted subsequently via the application portal by 15 August for the winter semester.

3.2 The following documents must be uploaded:

3.2.1 A written statement of motivation of no more than two DIN A4 pages in English explaining the choice of the Master's Programme Geography of Environmental Transformation, in which the applicant sets out the specific aptitudes and interests on the basis of which they consider themselves particularly suited to the intended degree programme. Particular commitment to achievement is to be demonstrated, for example, by reference to vocational training relevant to the degree programme, internships, periods spent abroad or subject-specific further training during the bachelor's programme that went beyond compulsory courses. Appropriate supporting documents must be enclosed.

- 3.2.2 A declaration that the letter containing the reasons for choosing the degree programme was prepared independently and without outside assistance and that ideas taken from external sources have been identified as such.
- 3.2.3 The certificate for the relevant initial degree with an examination grade of at least 'good' (2.5), together with confirmation showing the individual grades for the examinations and coursework completed during the programme of study. If the certificate for the relevant initial degree is not yet available, confirmation of the individual grades for all examinations and coursework completed by the application deadline must be submitted. These academic achievements must amount to at least 135 credit points and correspond to at least the grade 'good' (2.5) according to the calculation of the overall grade. Upon request, the board of examiners may extend the deadline for submitting the relevant degree certificate until the end of the second semester if the reasons for the extension are beyond the student's control. This applies in particular if the student has already completed all examinations but the grading of the academic achievements or issuance of the certificate is still pending.
- 3.2.4 A list of modules from the relevant initial degree for which no evidence of academic achievement can yet be submitted.
- 3.2.5 A tabular curriculum vitae in English (one DIN A4 page) as supplementary information.
- 3.2.6 Where available, evidence of
- a) relevant special qualifications (e.g. vocational training relevant to the degree programme, distinctions such as scholarships or prizes, internships, periods spent abroad), or
 - b) interdisciplinary study skills.
- 3.2.7 Where applicable, a request for disadvantage compensation pursuant to § 12 APSO.

4. Admission to the Aptitude Assessment Process

- 4.1 Admission to the aptitude assessment process requires that the documents referred to in no. 3.2 have been received by the University of Bayreuth via the application portal by the relevant deadline.
- 4.2 Applicants who fulfil the required prerequisites shall undergo the aptitude assessment process pursuant to no. 5.
- 4.3 Applicants who are not admitted shall receive a notice of rejection; no. 6.2 shall apply accordingly.

5. Conduct of the Aptitude Assessment Process

- 5.1 ¹On the basis of the uploaded application documents, the committee shall examine whether the applicant is suited to the Master's Programme Geography of Environmental Transformation on the basis of their demonstrated qualifications and stated specific aptitudes and abilities. ²The assessment is made on a scale from 0 to 10 points, where 0 is the lowest and 10 the highest possible result. ³The total score is the sum of the individual assessments (nos. 5.1.1 to 5.1.3). ⁴Points are awarded independently by two committee members in each case. ⁵The respective score is calculated by adding the two individual assessments and dividing the sum by two, with the result rounded up to a whole number. ⁶Points are awarded according to the following criteria:

5.1.1 Written statement of motivation pursuant to no. 3.2.1 and special qualifications pursuant to no. 3.2.6(a)

The qualifications evident from the documents pursuant to nos. 3.2.1 and 3.2.6(a) are assessed with a maximum of 3.0 points. The assessment considers the extent to which the submitted documents demonstrate a strong interest in the field of 'Geography of Environmental Transformation' and the extent to which the applicant shows potential for interdisciplinary and international work.

- a) Written English communication skills (maximum 1 point):
The applicant is able to express themselves precisely and clearly in written English.
- b) Interest (maximum 1 point):
The connection between personal interests and the interdisciplinary and international character of the degree programme can be presented in a structured manner.
- c) Special qualifications (maximum 1 point):
The applicant has relevant qualifications that go beyond the skills acquired in the initial degree, e.g. prizes, scholarships, vocational training relevant to the degree programme, internships or periods spent abroad (pursuant to no. 3.2.6(a)).

5.1.2 Subject-specific academic performance pursuant to nos. 3.2.3 and 3.2.4

The subject-specific coursework and examination results of the relevant initial degree pursuant to § 3 para 1 are assessed with a maximum of 5.0 points.

The curricular analysis is based on skills rather than a schematic comparison of modules. The skills are assessed with reference to the demonstrated range of academic achievement and their relevance to fundamental subject groups, in particular the natural science foundations of geography, geoecology or another environmental science in the areas of the atmosphere, biosphere, geosphere and pedosphere.

5.1.3 Interdisciplinary study skills pursuant to no. 3.2.6(b)

The Master's Programme Geography of Environmental Transformation requires a particularly high degree of interdisciplinary, problem-solving-oriented thinking and action in an

international context. Therefore, up to a further 2.0 points are awarded for interdisciplinary academic achievements, e.g. an additional programme of study, courses taken abroad, language courses or other courses outside the curriculum of the applicant's subject group.

5.2 Applicants who achieve at least 7 points shall receive confirmation that they have passed the aptitude assessment process.

5.3 ¹Applicants who achieve fewer than 4 points shall not participate further in the process. ²Applicants who achieve at least 4 but fewer than 7 points overall and fewer than 3 points for the subject-specific coursework and examination results shall likewise not participate further in the process. ³They shall receive a notice of rejection; no. 6.2 shall apply accordingly.

5.4 ¹The remaining applicants with scores of at least 4 but fewer than 7 points shall be invited to an aptitude interview provided that the subject-specific coursework and examination results from the relevant initial degree (no. 5.1.2) were assessed with at least 3 points. ²The aptitude interview shall be conducted online, e.g. via Skype. ³The date of the interview shall be announced at least one week in advance. ⁴Anyone who fails to attend at the scheduled time shall be deemed rejected; no. 6.2 shall apply accordingly. ⁵If an applicant is prevented from taking part in the aptitude interview for reasons beyond their control, a new date shall be set upon a reasoned request, no later than two weeks before the beginning of classes.

5.5 ¹The aptitude interview shall be conducted individually in English for each applicant. ²The interview shall last at least 20 and no more than 30 minutes per applicant and is intended to show whether, on the basis of the applicant's prior education, they can be expected to achieve the aim of the degree programme. ³During the interview, the applicant must confirm the impression that they are suited to the degree programme. ⁴The aptitude interview shall be conducted by two committee members. ⁵The aptitude interview shall be assessed according to the following criteria:

- a) Spoken English communication skills (10%):
The applicant is able to express themselves precisely and clearly in spoken English, support statements convincingly with arguments and appropriate examples, and respond appropriately to questions.
- b) Motivation and commitment (20%):
The applicant demonstrates that their specific aptitude for the degree programme gives reason to expect a level of achievement that clearly exceeds the level demonstrated in the previous degree.
- c) Subject-specific aptitude (20%):
The applicant is able to analyse fundamental questions in the environmental sciences in an appropriate manner.

⁶Each committee member records the result of the aptitude interview on a grading scale from 1 to 5. ⁷In determining the grade, the previous subject-specific coursework and examination results

pursuant to no. 5.1.2 are taken into account at a weighting of 50%. ⁸The arithmetic mean of the individual assessments is calculated and rounded to one decimal place. ⁹Applicants who achieve a grade of at least 'good' (2.5) are deemed suitable. ¹⁰All other applicants are not suited to the Master's Programme Geography of Environmental Transformation and shall receive a notice of rejection; no. 6.2 shall apply accordingly.

- 5.6 ¹Minutes shall be taken of the aptitude interview, showing the date, duration and place of the assessment, the names of the committee members involved, the applicant's name, the assessments of the committee members involved and the overall result. ²The minutes must indicate the topics discussed with the applicant and the reasons for the assessment. ³The reasons and topics may be recorded in note form. ⁴The minutes shall be signed by the committee members present.

6. Determination and Notification of the Result

- 6.1 The aptitude assessment process must be documented; in particular, the committee's decisions pursuant to these regulations and the overall result must be recorded.
- 6.2 ¹The applicant shall be informed of the result of the aptitude assessment process in writing. ²A notice of rejection must include reasons and information concerning legal remedies.
- 6.3 Admission granted on the basis of the aptitude assessment process for the Master's Programme Geography of Environmental Transformation shall remain valid for all subsequent applications to this degree programme unless the content and aim of the degree programme have changed so substantially that aptitude for the programme can no longer be demonstrated on the basis of an aptitude assessment process conducted at an earlier date.

7. Repetition

Applicants who have not demonstrated aptitude for the Master's Programme Geography of Environmental Transformation may apply to undergo the aptitude assessment process one more time.

8. Aptitude Assessment Process for Entry into Higher Semesters

Nos. 3 to 7 shall apply accordingly to applicants who wish to enter a higher semester (university transfer students and lateral entrants).

Issued on the basis of the decision of the Senate of the University of Bayreuth dated 4 February 2026 and the approval of the President of the University of Bayreuth dated 24 February 2026, Ref. No. A 3720.73 - I/1.

Bayreuth, 25 February 2026

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UNIVERSITY OF BAYREUTH
THE PRESIDENT
[*signature*]
Professor Dr. Dr. h. c. Stefan Leible

These regulations were enacted at the University on 25 February 2026.

This was announced on 25 February 2026 by posting a notice at the University.

The date of the announcement is 25 February 2026.