



**Examination and Study Regulations
for the Master's Programme
Experimental Geosciences
at the University of Bayreuth
dated 25 February 2026**

On the basis of Art. 9 sentence 1 in conjunction with Art. 80 para. 1 sentence 1, Art. 84 para. 2 sentence 1 and Art. 90 para. 1 sentence 2 of the Bavarian Higher Education Innovation Act (BayHIG), the University of Bayreuth issues the following regulations:

Table of Contents

§ 1	General Examination and Study Regulations	2
§ 2	Objectives and Structure of the Programme	2
§ 3	Admission to the Programme	2
§ 4	Supplementary and Deviating Provisions	3
§ 5	Entry into Force	5
	Annex 1: Modules, Credit Points and Examinations	6
	Annex 2: Aptitude Assessment Process	9

§ 1

General Examination and Study Regulations

¹Study in the master's programme Experimental Geosciences is governed by the General Examination and Study Regulations for the Bachelor's and Master's Programmes at the University of Bayreuth (APSO).

²Supplementary and deviating provisions for study in the master's programme Experimental Geosciences are set out in these Regulations.

§ 2

Objectives and Structure of the Programme

(1) ¹The master's programme Experimental Geosciences equips students with the following competencies:

- the ability to independently familiarize themselves with academic research questions and to identify suitable methods for addressing them;
- specialist knowledge in experimental geosciences;
- the ability to undertake further independent academic work.

²The master's programme Experimental Geosciences, 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 of Master of Science (abbreviated: M.Sc.).

(2) ¹The master's programme is to be completed as a full-time programme. ²Students may commence the programme in the winter semester or the summer semester.

§ 3

Admission to the Programme

(1) The requirements for admission to the master's programme are:

1. a university degree with at least the examination grade 'good' (2.5) in a bachelor's programme in the natural sciences at the University of Bayreuth or an equivalent degree;
2. documented knowledge in the fields of physics or geophysics (at least 8 credit points) and chemistry or geochemistry (at least 8 credit points). Applicants who do not meet these requirements shall be enrolled on the condition that they submit proof of the required academic achievements by the end of the second semester; the required credit points shall be included in the maximum of twelve credit points referred to in para. 2 sentence 2;

3. proof of English language proficiency at level B2 or higher of the Common European Framework of Reference for Languages for applicants who earned neither their higher education entrance qualification nor the first degree granting access to the programme in English;
 4. proof of German language proficiency at level A1 or higher of the Common European Framework of Reference for Languages for applicants who earned neither their higher education entrance qualification nor the first degree granting access to the programme in German. Applicants who do not meet this requirement shall be enrolled on the condition that they submit proof of the required language proficiency by the end of the second semester at the latest;
 5. determination of programme-specific aptitude in a process pursuant to Annex 2.
- (2) ¹The degrees must not exhibit substantial differences, with regard to the competencies acquired, from a bachelor's programme in the natural sciences at the University of Bayreuth. ²Where substantial differences are present that can be compensated for, applicants may be admitted subject to the condition that, in addition to the academic achievements required in the master's programme, they successfully complete coursework and examinations amounting to a maximum of twelve credit points from the bachelor's programme by the end of the second semester at the latest; otherwise, the requirements for admission to the programme shall be deemed not to have been met. ³The provisions of the respective subject/examination and study regulations at the University of Bayreuth, as amended, shall apply. ⁴Art. 86 BayHIG shall apply to the recognition of domestic and foreign degrees. ⁵These decisions shall be made by the board of examiners.
- (3) ¹If the certificate for the relevant first degree is not yet available, a confirmation listing the individual grades for all examinations and coursework completed by the application deadline must be submitted. ²These achievements must amount to at least 150 credit points in total and must correspond to at least the grade 'good' (2.5) based on the calculation of the overall grade. ³Applicants who meet the requirements of sentence 2 shall be enrolled on the condition that they submit the certificate for the relevant first degree with at least the grade 'good' (2.5) by the end of the first semester. ⁴Upon request, the board of examiners may grant an extension of 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 shall apply in particular if the student has already completed all examinations but the grading of the examinations or the issuance of the certificate is still pending.

§ 4

Supplementary and Deviating Provisions

- (1) Deviations from and supplements to § 2 para. 1 APSO:

1. In deviation from sentence 3, the board of examiners shall consist of four members and one substitute representative for each member.
 2. Sentence 4:
 - a) In deviation from sentence 4, one of the members shall be elected from among the research associates (Art. 71 BayHIG) of the Faculty of Biology, Chemistry & Earth Sciences.
 - b) ¹In addition, at the same time as the substitute representatives are elected, the Faculty Council shall determine a fixed order in which the professors are to be represented or permanently replaced by the substitute representatives in the event of a professor's absence or departure. ²If 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 of examiners and the deputy chair must be professors.
- (2) ¹In addition to § 6 APSO, additional examinations may be taken in core elective area C beyond the required scope; para. 3 and § 14 para. 1 APSO must be observed. ²There is no obligation to repeat failed additional examinations. ³The additional examinations shall be listed in the certificate unless the student requests otherwise.
- (3) ¹In addition to § 14 para. 1 APSO, if more credit points than required are earned in core elective area C, only the modules with the best grades shall be taken into account when calculating the final grade, subject to the required number of credit points. ²If the last module to be taken into account causes the number of credit points in the module group to be exceeded, the grade for that module shall be included in the calculation of the final grade only on a pro rata basis corresponding to the remaining credit points required.
- (4) Deviations from and supplements to § 31 APSO:
1. In deviation from para. 3 sentences 1 and 2, the period from assignment of the topic to submission of the master's thesis shall be five months.
 2. Para. 4:
 - a) In deviation from sentence 1, the master's thesis must be submitted in English.
 - b) In deviation from sentence 5, the master's thesis must contain an abstract in English.
 3. Para. 7:
 - a) In deviation from sentence 2, the reviews/grades for the master's thesis should be available no later than four weeks after receipt of the thesis.
 - b) In addition to sentence 3, the board of examiners may call upon an additional examiner in special cases, in particular if the grades assigned differ by more than one grade.

4. ¹In addition to the master's thesis, a final oral examination on the topic of the master's thesis and the underlying content of the master's programme forms part of the examination for the master's thesis module; it shall be conducted by two examiners. ²The final oral examination should be held within four weeks after submission of the master's thesis. ³The date shall be determined by the chair of examiners, taking the candidate's wishes into account where possible. ⁴If the final oral examination is graded 'unsatisfactory', it may be repeated once. ⁵With the candidate's consent, students enrolled in the programme may be admitted as listeners. ⁶The assessment shall be communicated to the candidate after the examination. ⁷The deliberations and announcement of the examination result shall not be open to the public.
5. In deviation from para. 8 sentence 1, the overall grade for the master's thesis is calculated from the arithmetic mean of the master's thesis (weighting 2/3) and the grade for the final oral examination (weighting 1/3).

§ 5

Entry into Force

- (1) ¹These Regulations shall enter into force on 26 February 2026. ²They shall apply to students who commence this programme from the winter semester 2026/2027 onwards. ³All other students shall complete their studies in accordance with the previous Examination and Study Regulations for the Master's Programme Experimental Geosciences (M.Sc.) at the University of Bayreuth dated 10 May 2017 (AB UBT 2017/023), 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 Experimental Geosciences (M.Sc.) at the University of Bayreuth dated 10 May 2017 (AB UBT 2017/023), last amended by regulations dated 9 January 2023 (AB UBT 2023/002), shall cease to be in force, subject to para. 1 sentence 3.

Annex 1: Modules, Credit Points and Examinations

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

Deviations from and supplements to § 9 APSO:

- In addition to para. 2 sentence 6, the board of examiners may decide that an additional examiner is to be called upon to assess a written examination.
- In addition to para. 9 sentence 4, the assessment of a presentation should be completed within four weeks after the end of the course.
- In addition to para. 13, written assignments in the form of research reports shall have a maximum length of 30 pages. The deadline for completing a research report shall end at the end of the semester to which the laboratory practical belongs. In justified exceptional cases, upon request by the candidate, the chair of examiners may extend this deadline by no more than three weeks after consulting the supervisor. Research reports shall be assessed by two examiners. Assessment by a second examiner may be dispensed with if no such person is available or if appointing such a person would delay the examination process to an unreasonable extent. The assessment should be available no later than four weeks after completion of the respective research report. In special cases, the board of examiners may call upon an additional examiner, in particular if the grades assigned differ by more than one grade.

Abbreviations:

	Vertical bars between forms of examination indicate possible alternatives.
+	Plus signs indicate multiple examination components that must be completed.
x/y	Fractions indicate the weighting with which the respective examination component is included in the module grade.
()	Round brackets group related examination components. They may be used to indicate alternative forms of an examination component or to define the division of an examination component into several components.
*	Examination components marked with '*' are not included in the calculation of the module grade or final grade.
K	written examination
mP	oral examination
sA	written assignment
semA	semester-long tasks
P	presentation

CO code	Module group Module	CP	Examination
	A: Experimental Methods	20	
BGIX17161	Diffraction Methods	5	K
BGIX17162	Spectroscopic Methods	5	K
BGIX17163	High Pressure Experimental Techniques	5	K
BGIX17164	Geochemical Thermodynamics	5	K
	B: Research Techniques	55	
BGIX29785	Literature Research I	5	Portfolio examination: semA 2/4 + P 1/4 + P 1/4
BGIX29786	Literature Research II	5	Portfolio examination: semA 2/4 + P 1/4 + P 1/4
BGIX17167	Research Practice I	15	sA
BGIX17168	Research Practice II	15	sA
BGIX17169	Research Practice III	15	sA
	C: Core Elective Modules <i>In addition to the core elective modules listed here, further eligible modules from other degree programmes may be taken from the module handbook. These must correspond to the learning objective of the area and likewise ensure achievement of the programme qualification objectives. For these modules, the provisions concerning forms of examination and credit points in the respective (subject-specific) examination and study regulations of the corresponding degree programme shall apply. Inclusion in the module handbook shall be decided by the Faculty Council in consultation with the programme coordinator and the module coordinator.</i>	10	
BGIX29787	Geophysics and Geodynamics	5	Portfolio examination: semA 1/4 + P 1/4 + K 2/4
BGIX17154	Basic Physics for Experimental Geosciences	5	semA
BGIX17155	Crystal Chemistry of Geophysical Materials	5	K
BGIX29788	Geodynamical Modelling	3	Portfolio examination: semA 3/8 + P 3/8 + sA 2/8
BGIX29789	Finite Difference Methods	3	semA

CO code	Module group Module	CP	Examination
BGIX29790	Planetary Sciences	5	Portfolio examination: semA 1/4 + mP 1/4 + K 2/4
BGIX29791	Data to Display	2	Portfolio examination: semA 4/5 + K 1/5
BGIX29792	Geochemistry of the Solid Earth	5	Portfolio examination: semA 2/4 + sA 1/4 + P 1/4
BGIX29641	Mineral Optics	3	Portfolio examination: semA + K
Fak218735	Mineral Physics	5	sA
BGIX29793	Planetary Chemistry	5	Portfolio examination: semA 2/4 + sA 1/4 + P 1/4
Fak223670	Planetary Formation	2	P
BGIX29794	Planetary and Geophysics	5	Portfolio examination: semA 1/4 + mP 1/4 + K 2/4
	D: Master's Thesis	35	
BGIX29795	Master's Thesis – Experimental Geosciences M.Sc. with Oral Examination	30	Master's thesis 2/3 + P 1/3
BGIX29796	Scientific Seminar	5	P
	TOTAL	120	

Annex 2: Aptitude Assessment Process

1. Purpose of the Aptitude Assessment Process

¹The process specified pursuant to Art. 90 para. 1 sentence 2 BayHIG is used to determine applicants' aptitude for study in the master's programme Experimental Geosciences at the University of Bayreuth in accordance with § 3 para. 1 no. 5. ²The aptitude parameters are:

1. a sound command of specialist knowledge acquired in the first degree in a natural science subject or related disciplines that is relevant to understanding and analysing questions in the field of Experimental Geosciences;
2. a pronounced ability to engage with questions in geochemistry, geophysics, petrology or mineralogy, together with the capacity for reflection and abstraction required to understand a research-oriented programme;
3. the ability to engage with the subject matter at an advanced level, both receptively and actively, in English.

2. Board Responsible for the Aptitude Assessment Process

The board of examiners is responsible for preparing and conducting the aptitude assessment process pursuant to § 2 APSO in conjunction with § 4 para. 1.

3. Process for Determining Aptitude

3.1 ¹The aptitude assessment process shall be conducted twice a year. ²The documents required 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 by the University of Bayreuth via the application portal by 15 June for admission for the following winter semester and by 15 December for admission for the following summer semester (cut-off deadlines).

3.2 The following documents must be uploaded:

3.2.1 A written statement of no more than two DIN A4 pages in English explaining the applicant's choice of the master's programme Experimental Geosciences and setting out the competencies on the basis of which the applicant considers himself or herself particularly suited to the intended programme.

3.2.2 The certificate for the relevant first degree with at least the examination grade 'good' (2.5), together with a confirmation listing the individual grades for the examinations and coursework completed during the programme. If the certificate for the relevant first degree is not

yet available, a confirmation listing the individual grades for all examinations and course-work completed by the application deadline must be submitted. These achievements must amount to at least 150 credit points in total, and based on the calculation of the overall grade the achievements must correspond to at least the grade 'good' (2.5).

- 3.2.3 A list of modules in the relevant first degree for which no assessment documentation can yet be submitted.
- 3.2.4 A tabular curriculum vitae in English (maximum two DIN A4 pages) as supplementary information.
- 3.2.5 Where available, evidence of special programme-relevant qualifications, e.g. vocational training, distinctions such as scholarships or prizes, internships, or stays abroad.
- 3.2.6 Where applicable, a request for reasonable accommodations pursuant to § 12 APSO.

4. Admission to the Aptitude Assessment Process

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

5. Conduct of the Aptitude Assessment Process

- 5.1 ¹On the basis of the uploaded application documents, the board shall determine whether the applicant is suited to study in the master's programme Experimental Geosciences on the basis of his or her demonstrated qualifications and the specific aptitudes and abilities described. ²Assessment shall be by decimal grades with one decimal place. ³The overall assessment grade shall be the arithmetic mean of the individual grades under nos. 5.1.1 and 5.1.2. ⁴Only the first decimal place shall be taken into account; all further decimal places shall be truncated without rounding. ⁵Grades shall be awarded according to the following criteria:

5.1.1 Written Statement pursuant to no. 3.2.1 and Special Qualifications pursuant to no. 3.2.5

The written statement together with the special qualifications shall be assessed using a weighted average based on criteria 1 to 3 below. The grades shall be assigned independently by two board members. The final grade for the written statement shall be the average of the two individual grades.

- 1. Written expression (weighting 20%): The applicant is able to express himself or herself precisely and comprehensibly in written English.

2. Personal competencies (weighting 70%): The relationship between personal competencies, educational background, and the research-oriented nature and content of the programme can be presented in a structured manner.
3. Special qualifications (weighting 10%): The applicant possesses relevant programme-specific qualifications pursuant to no. 3.2.5.

5.1.2 Academic Performance pursuant to no. 3.2.2

The coursework and examinations from the relevant first degree pursuant to § 3 shall be carried over provided the grading systems are comparable. Otherwise, the grades shall be converted pursuant to § 5 APSO.

- 5.2 Applicants who achieve an average grade of 1.5 or better for nos. 5.1.1 and 5.1.2 shall receive confirmation that they have passed the aptitude assessment process.
- 5.3 Applicants who receive a grade of 2.6 or worse for nos. 5.1.1 and 5.1.2 shall take no further part in the process and shall receive a rejection notice; no. 6.2 shall apply accordingly.
- 5.4 ¹The remaining applicants with average grades between 1.6 and 2.5 for nos. 5.1.1 and 5.1.2 shall be admitted to the further selection process. ²The further selection process comprises a written aptitude test and a personal aptitude interview. ³The examinations shall be conducted in English. ⁴The dates for the written aptitude test and the aptitude interview shall be announced at least one week in advance. ⁵Anyone who does not appear at the scheduled dates shall be deemed rejected; no. 6.2 shall apply accordingly. ⁶If the applicant is prevented from taking part in the written aptitude test or aptitude interview for reasons beyond his or her control, a make-up date shall be scheduled upon substantiated request no later than two weeks before the start of lectures.
 - 5.4.1 The written aptitude test shall assess subject-specific knowledge. Basic knowledge of earth sciences, physics and chemistry (1/3), as well as the ability to critically analyse academic texts (2/3), shall be tested. The written aptitude test shall last 120 minutes and shall be graded according to the grading system in § 13 APSO.
 - 5.4.2 The aptitude interview shall be conducted individually in English for each applicant. The 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, he or she can be expected to achieve the objectives of the programme. In the interview, the applicant must confirm the impression that he or she is suited to the programme. The aptitude interview shall be conducted by two members of the board of examiners. The aptitude interview shall be assessed using a weighted average of the individual grades under the grading system in § 13 APSO according to the following two criteria:
 1. Oral expression (weighting 20%): The applicant is able to express himself or herself precisely and comprehensibly in spoken English.

2. Subject-specific aptitude (weighting 80%): The applicant is able to analyse and answer basic questions in earth sciences in an appropriate manner.

The grades shall be assigned independently by two board members. The final grade for the aptitude interview shall be the average of the two individual assessments.

- 5.4.3 A record shall be prepared of the aptitude interview showing the date, time, duration and location of the interview, the names of the board members involved, the name of the applicant, the assessments of the board members involved, and the overall result. The record must indicate the topics discussed with the applicant and the reasons for the assessment. The reasons and topics may be listed in note form. The record shall be signed by the board members present.
- 5.4.4 The final grade in the aptitude assessment process shall be calculated as the average of the singly weighted grade for the written aptitude test (no. 5.2.1) and the aptitude interview (no. 5.2.2), together with the double-weighted coursework and examination performance from the relevant first degree (no. 5.1.2). ²Applicants who achieve a final grade of 2.5 or better shall be classified as suitable.
- 5.4.5 Applicants who achieve a final grade of 2.6 or worse are not suitable for the master's programme Experimental Geosciences and shall receive a rejection notice; no. 6.2 shall apply accordingly.

6. Determination and Notification of the Result

- 6.1 The aptitude assessment process shall be documented; in particular, the decisions of the board pursuant to these Regulations and the overall result must be evident from the documentation.
- 6.2 ¹The applicant shall be notified in writing of the result of the aptitude assessment process. ²A rejection notice shall include a rationale and information concerning how to appeal.
- 6.3 Admissions granted in the aptitude assessment process for the master's programme Experimental Geosciences shall remain valid for all subsequent applications to this programme, unless the content and objectives of the 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. Repeating the Process

- 7.1 Applicants who have not demonstrated aptitude for the master's programme Experimental Geosciences may register for the aptitude assessment process one more time.

8. Aptitude Assessment Process for Entry into Higher Semesters

For applicants wishing to enter a higher semester of study (students transferring from another higher education institution or lateral entrants), nos. 3 to 7 shall apply accordingly.

Executed on the basis of the resolution 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. A 3720.72 - I/1.

Bayreuth, 25 February 2026

[seal]

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

These Regulations were deposited at the University on 25 February 2026.

The deposit was announced by posting at the University on 25 February 2026.

The date of announcement is 25 February 2026.