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Unofficial English translation - for information only. Only the German version published in the Amtliche Bekanntmachungen der Universität Bayreuth (AB UBT 2026/048) is legally binding. In case of discrepancies, the German text prevails.

Subject-Specific Examination and Study Regulations for the Master's Programme Environmental Chemistry at the University of Bayreuth of 20 May 2026

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

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§ 1

General Examination and Study Regulations

¹The Master's programme Environmental Chemistry is governed by the General Examination and Study Regulations for the Bachelor's and Master's programmes at the University of Bayreuth (Allgemeine Prüfungs- und Studienordnung – APSO). ²Supplementary and deviating provisions for the Master's programme Environmental Chemistry are set out in these statutes.

§ 2

Aims and structure of the programme

(1) ¹The Master's programme Environmental Chemistry provides students with the following competences:

- identifying novel problems related to chemical burdens on the environment, analysing complex issues and developing flexible proposals for solutions;
- in-depth understanding of the function and regulation of complex biogeochemical processes and element cycles in the compartments air, soil and water, taking into account abiotic and microbial reactions;
- the ability to quantitatively assess substances, especially pollutants, in ecosystems, including their effects on humans; knowledge of the sustainable use and remediation of ecosystems;
- the ability to use state-of-the-art techniques of environmental analysis, data analysis and modelling for the detection, interpretation, evaluation and prediction of environmental-chemical problems;

– the qualification for further independent scientific work.

²The Master's programme Environmental Chemistry, including all examinations, is taught in English. ³On the basis of the passed Master's examination, the University, through the Faculty of Biology, Chemistry and Earth Sciences, awards the academic degree Master of Science (abbreviated: M.Sc.).

(2) ¹The Master's programme may be completed as a full-time or part-time programme. ²Studies may commence in the winter semester.

§ 3

Admission requirements

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

1. a university degree with at least the final grade “gut” (2.5) from a German or foreign higher education institution in biology, chemistry, geoecology, geology, forestry, agricultural sciences, hydrology, engineering ecology, limnology, meteorology, physical geography, environmental physics, environmental informatics, environmental economics, environmental law, environmental sciences, or an equivalent degree;
2. proven knowledge in the fields of physics, biology and chemistry (at least 20 CP) and environmental sciences (at least 20 CP). Applicants who do not meet these requirements are enrolled on condition that they submit proof of the required achievements by the end of the second semester;
3. proof of English language skills at least at level B2 of the Common European Framework of Reference for Languages for applicants who obtained neither their higher education entrance qualification nor the first degree giving access to the programme in English;
4. proof of German language skills at least at level A1 of the Common European Framework of Reference for Languages for applicants who obtained neither their higher education entrance qualification nor the first degree giving access to the programme in German. Applicants who do not meet this requirement are enrolled on condition that they submit proof of the required language skills by the end of the second semester at the latest;
5. the determination of programme-specific aptitude in a procedure pursuant to Annex 2.

(2) ¹When assessing the equivalence of a degree, there must be no substantial differences in the competences acquired compared with the degrees listed in para. 1 no. 1. ²Art. 86 BayHIG applies to the recognition of German and foreign degrees. ³The decision on the equivalence of a degree is made by the Examination Board.

(3) ¹If the certificate of the relevant first degree is not yet available, a confirmation listing the individual grades of all examination and study achievements completed by the application deadline must be submitted. ²These achievements must total at least 135 credit points and, according to the overall grade calculation, correspond to at least the grade “gut” (2.5). ³Applicants who meet the requirements of sentence 2 are enrolled on condition that they submit the certificate of the relevant first degree with at least the grade “gut” (2.5) by the end of the first semester.

§ 4

Supplements and deviations

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

1. In deviation from sentence 3, the Examination Board consists of four members and one substitute member.

2. ¹In deviation from sentence 4, one of the members is elected from among the academic staff (Art. 71 BayHIG) of the Faculty of Biology, Chemistry and Earth Sciences. ²Students may be consulted as guests.
3. In addition to sentence 5, the chair of the Examination Board and their deputy must belong to the group of university professors.
- (2) ¹In addition to § 6 APSO, it is possible to take further examinations in the Elective areas I, II and Elective/Internship 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 are shown on the transcript unless the student applies otherwise.
- (3) In addition to § 14 para. 1 sentence 1 APSO, if more credit points than required are earned in the Elective areas I and II, only the best-graded modules, taking into account the required credit points, are used to calculate the overall grade.
- (4) Deviations from and supplements to § 31 APSO:
 1. 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 a summary in English.
 2. ¹In addition to para. 5, at the request of the first examiner, up to two additional typewritten, bound and paginated copies of the Master's thesis must be submitted to the examiners. ²In addition, all raw data collected, processed data and graphics must be submitted in digital form to the first examiner.
 3. In addition to para. 7 sentence 3, the Examination Board may, in special cases, appoint a further examiner, in particular if the grades awarded differ by more than one grade.

§ 5

Entry into force

- (1) ¹These statutes enter into force on 21 May 2026. ²They apply to students who begin this programme from the winter semester 2026/2027 onwards. ³All other students continue their studies under the previous Examination and Study Regulations for the Master's programme Environmental Chemistry (M.Sc.) at the University of Bayreuth of 15 July 2016 (AB UBT 2016/039), last amended by the statutes of 9 January 2023 (AB UBT 2023/002).
- (2) Upon the entry into force of these statutes, the Examination and Study Regulations for the Master's programme Environmental Chemistry (M.Sc.) at the University of Bayreuth of 15 July 2016 (AB UBT 2016/039), last amended by the statutes of 9 January 2023 (AB UBT 2023/002), cease to have effect, 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 the associated examinations are listed below.

Deviations from and supplements to § 9 APSO:

- In addition to para. 2 sentence 6, a further examiner may be appointed for the assessment of a written examination by decision of the Examination Board. In deviation from para. 2 sentence 9, the assessment of a written examination should be available no later than six weeks after it was taken.
- In addition to para. 9 sentence 4, the assessment of a presentation should be completed within six weeks after the end of the course.
- In addition to para. 11, contributions must be submitted no later than three weeks (full-time study) or six weeks (part-time study) after the end of the course. Furthermore, the assessment of a contribution should be completed within six weeks (full-time study) or nine weeks (part-time study) after the end of the course.

Abbreviations:

	Vertical bars between examination forms indicate possible alternatives.
+	Plus signs define several examination components that must all be completed.
x/y	Fractions indicate the weighting with which the respective examination component contributes to the module grade.
()	Round brackets group related examination components. They may be used to define alternative forms of one examination component or the division of one examination component into several parts.
*	Examination components marked with “ * ” are not included in the calculation of the module grade or overall grade.
K	Written examination (Klausur)
mP	Oral examination (mündliche Prüfung)
P	Presentation (Präsentation)
B	Contribution (Beitrag)
semA	Coursework during the semester (semesterbegleitende Aufgaben)
sA	Written report (schriftliche Ausarbeitung)

CO ID	Module area / Module	CP	Examination	Counts toward final grade
Mandatory		35		
Fak229987	A1 Atmospheric Chemistry I	5	K	x
Fak230362	S1 Introduction to Soil Chemistry	5	Portfolio examination: K + B	x
ForZ29973	ISO1 Isotope Biogeochemistry	5	K mP	x
Fak229960	C1 Geochemical Modelling	5	K mP	x
Fak230363	M1 Scientific Writing and Symposium	5	Portfolio examination: B* + P*	
Fak230364	M2 Research Module	5	P* B*	
Fak230379	M3 Paper seminar, Research plan	5	Portfolio examination: B* + P*	
Elective I		20		
Fak229988	A2 Atmospheric Chemistry II	5	B	x
Fak229989	S2 Soils as Sink and Source of Carbon	5	Portfolio examination: K + B	x
Fak230380	W2 Reactive Transport in Environmental Systems	5	Portfolio examination: semA 3/10 + (sA K) 7/10	x

CO ID	Module area / Module	CP	Examination	Counts toward final grade
Fak229964	C2 Environmental Analytical Chemistry I – Basic Methods	5	K mP	x
Fak230381	C3 Inorganic Pollutants & Environmental Forensics	5	K mP	x
Fak230382	EB1 Environmental Microbiology	5	Portfolio examination: (K mP) + B	x
Fak230383	Stat1 Statistics and R	5	Portfolio examination: semA + semA	x
Elective II		20		
Fak229990	S3 Soil Contamination	5	Portfolio examination: K + B	x
Fak229975	W3 Biogeochemical Cycles in Aquatic System	5	Portfolio examination: K + semA*	x
Fak230384	W4 Hydrology and Organic Pollutants	5	Portfolio examination: K + semA*	x
Fak229965	C4 Environmental Analytical Chemistry II – Advanced Methods	5	K mP	x
Fak229966	C5 Mass Spectrometry	5	K mP	x
Fak230385	EB2 Analytical Microscopy Project	5	B	x
Elective/Internship		15		
	Students may choose modules not yet taken from Elective areas I and II as well as modules from other degree programmes of the University of Bayreuth, or – upon application to the Examination Board – internships and foreign languages other than English in a freely selectable module.	15	See the respective (subject-specific) examination and study regulations	
Fak229967	E1 Creative Science Communication for People and the Planet	5	semA	
Fak229953	E2 Soils and Environmental Health	5	Portfolio examination: K + B	
Master's Thesis		30		
Fak215311	T Master's Thesis – Environmental Chemistry M.Sc.	30	Master's thesis	x
TOTAL		120		

Annex 2: Aptitude assessment procedure

1. Purpose of the aptitude assessment procedure

¹The procedure established pursuant to Art. 90 para. 1 sentence 2 BayHIG determines the aptitude of applicants for studies in the Master's programme Environmental Chemistry at the University of Bayreuth in accordance with § 3 para. 1 no. 5. ²The aptitude parameters are:

1. a sound command of subject knowledge from the first degree in biology, chemistry, geoecology, geology, forestry, agricultural sciences, hydrology, engineering ecology, limnology, meteorology, physical geography, environmental physics, environmental informatics, environmental economics, environmental law, environmental sciences and related disciplines that is relevant for understanding and analysing questions in the field of environmental chemistry,
2. a strong interest in environmental-chemical questions, and the capacity for reflection and abstraction needed to understand an interdisciplinary programme,
3. the ability to comprehend the subject in depth, passively and actively, in English.

2. Committee responsible for conducting the aptitude assessment procedure

The preparation and conduct of the aptitude assessment procedure are the responsibility of the Examination Board pursuant to § 2 APSO in conjunction with § 4 para. 1.

3. Procedure for determining aptitude

3.1 ¹The aptitude assessment procedure is held once a year in the summer semester. ²The documents for admission to the aptitude assessment procedure must be uploaded online via the application portal of the University of Bayreuth. ³The documents must have been received electronically by the University of Bayreuth via the application portal by 15 June of each year for admission to the following winter semester (cut-off deadline).

3.2 The following documents must be uploaded:

- 3.2.1 A written statement in English of no more than two A4 pages giving reasons for choosing the Master's programme Environmental Chemistry, in which the applicant explains which specific talents and interests make them particularly suited for the intended programme. Particular commitment should be substantiated, for example, by describing programme-relevant vocational training, internships, stays abroad, or subject-related further education during the Bachelor's studies that went beyond compulsory courses. Corresponding evidence must be enclosed.
- 3.2.2 A declaration that the cover letter with the statement of reasons for choosing the programme was written independently and without outside assistance, and that ideas taken from other sources have been marked as such.
- 3.2.3 The certificate of the relevant first degree with at least the final grade "gut" (2.5) and a confirmation listing the individual grades of the examination and study achievements completed during the course of study. If the certificate of the relevant first degree is not yet available, a confirmation listing the individual grades of all examination and study achievements completed by the application deadline must be submitted. These achievements must total at least 135 credit points and must, according to the overall grade calculation, correspond to at least the grade "gut" (2.5). The certificate of the relevant first degree must be submitted by the end of the first semester. Upon application, the Examination Board may extend the deadline for submitting the relevant degree certificate until the end of the second semester, provided the reasons for the extension are beyond the student's control. This is in particular the case if the student has already completed all examinations but the grading of the achievements or the issuing of the certificate is still pending.

- 3.2.4 A list of the modules of the relevant first degree for which no proof of achievement can yet be submitted.
- 3.2.5 A tabular curriculum vitae in English (one A4 page) as supplementary information.
- 3.2.6 Proof of English language skills at least at level B2 pursuant to § 3 para. 1 no. 3.
- 3.2.7 Where available, evidence of relevant special qualifications (e.g. interdisciplinary study competences, programme-relevant vocational training, awards such as scholarships or prizes, internships, stays abroad).
- 3.2.8 If applicable, an application for compensation for disadvantages pursuant to § 12 APSO.

4. Admission to the aptitude assessment procedure

- 4.1 Admission to the aptitude assessment procedure requires that the documents listed in no. 3.2 have been received by the University of Bayreuth via the application portal by the deadline.
- 4.2 The aptitude assessment procedure pursuant to no. 5 is conducted with applicants who meet the necessary requirements.
- 4.3 Applicants who are not admitted receive a notice of rejection; no. 6.2 applies accordingly.

5. Conduct of the aptitude assessment procedure

5.1 ¹On the basis of the uploaded application documents, the committee examines whether the applicant, by virtue of their proven qualifications and the specific talents and abilities they have set out, is suited for studies in the Master's programme Environmental Chemistry. ²The assessment is made on a scale of 0 to 100 points, where 0 is the worst and 100 the best achievable 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 each. ⁵The respective score is the sum of the two individual assessments divided by two, rounded up to whole points. ⁶Points are awarded according to the following criteria:

5.1.1 Written statement pursuant to no. 3.2.1

The written statement is assessed with a maximum of 30 points according to the following criteria:

1. Linguistic expression (maximum 15 points): The applicant is able to express themselves precisely and comprehensibly in writing in English.
2. Interest (maximum 15 points): The connection between personal interests and the interdisciplinary and international character of the programme can be presented in a structured way.

5.1.2 Academic achievements pursuant to nos. 3.2.3 and 3.2.4

The subject-specific study and examination achievements of the relevant first degree pursuant to § 3 are assessed with a maximum of 50 points. The curricular analysis is not carried out by a schematic comparison of modules but on the basis of competences. Competences are assessed, taking into account the discernible range of achievements, according to their proximity to elementary subject groups, which include the scientific fundamentals in physics, chemistry and biology as well as specialisations in environmental sciences, e.g. in the areas of atmosphere, biosphere, chemosphere, hydrosphere, pedosphere and geosphere.

5.1.3 Special qualifications pursuant to no. 3.2.7

The applicant has relevant qualifications that go beyond the competences acquired in the first degree, e.g. programme-relevant vocational training, additional studies, courses taken abroad, language courses, stays abroad, internships, awards such as scholarships or prizes. A further maximum of 20 points is awarded for these.

5.2 Applicants who have achieved at least 70 points receive confirmation that they have passed the aptitude assessment procedure.

5.3 ¹Applicants whose result is below 50 points are excluded from the remainder of the procedure.

²Applicants whose result is between 50 and 69 points but who have achieved fewer than 30 points for the subject-specific study and examination achievements are excluded from the remainder of the procedure. ³They receive a notice of rejection; no. 6.2 applies accordingly.

5.4 ¹The remaining applicants with scores of between 50 and 69 points are invited to an aptitude interview, provided that their previous academic achievements pursuant to no. 5.1.2 were assessed with at least 30 points. ²The aptitude interview is conducted in English, in person or online (e.g. via Skype). ³The date of the interview is announced at least one week in advance.

⁴Anyone who does not attend on the appointed date is deemed to have been rejected; no. 6.2 applies accordingly. ⁵If the applicant is prevented from attending the aptitude interview for reasons beyond their control, a substitute date no later than two weeks before the start of lectures is set upon a substantiated application.

5.5 ¹The aptitude interview in English is conducted individually for each applicant. ²The interview lasts at least 20 and at most 30 minutes per applicant and is intended to show whether, on the basis of the applicant's prior education, it can be expected that they will achieve the aim of the programme. ³The aptitude interview is conducted by two committee members. ⁴The aptitude interview is assessed with a maximum of 30 points according to the following criteria:

1. Linguistic expression (maximum 15 points): The applicant is able to express themselves precisely and comprehensibly orally in English, to present statements convincingly with arguments and meaningful examples, and to respond appropriately to questions asked.
2. Commitment to performance (maximum 5 points): The applicant demonstrates that a specific aptitude for the programme suggests a level of performance clearly exceeding the level of performance of the previous degree.
3. Subject-specific aptitude (maximum 10 points): The applicant is able to analyse fundamental questions of environmental sciences in an appropriate manner.

⁵Points are awarded independently by two committee members each. ⁶The respective score is the sum of the two individual assessments divided by two, rounded up to whole points.

5.6 The total score is the sum of the points from the aptitude interview and the previous assessment of academic achievements pursuant to no. 5.1.2. Applicants who have achieved a total of at least 55 out of 80 points from the aptitude interview and the subject-specific study and examination achievements are classified as suitable.

5.7 ¹Applicants who have achieved 54 points or fewer are not suitable for the Master's programme Environmental Chemistry. ²They receive a notice of rejection; no. 6.2 applies accordingly.

5.8 ¹Minutes must be taken of the course of the aptitude interview, showing the date, duration and place of the assessment, the names of the committee members involved, the name of the applicant, the assessment by the committee members involved, and the overall result. ²The minutes must show the topics discussed with the applicant and the reasons for the assessment.

³The reasons and topics may be recorded in note form. ⁴The minutes must be signed by the committee members present.

6. Determination and notification of the result

6.1 The course of the aptitude assessment procedure must be documented; in particular, the committee's decisions pursuant to these statutes and the overall result must be evident.

6.2 ¹The applicant is notified of the result of the aptitude assessment procedure in writing. ²A notice of rejection must state the reasons and include information on legal remedies.

6.3 Admission within the framework of the aptitude assessment procedure for the Master's programme Environmental Chemistry is valid exclusively for the year in which the aptitude assessment procedure was conducted and for the first year following the procedure.

7. Repetition

Applicants who have not demonstrated their aptitude for the Master's programme Environmental Chemistry may register once more for the aptitude assessment procedure.

8. Aptitude assessment procedure for higher semesters

For applicants wishing to enter higher subject semesters (students transferring from other universities, lateral entrants), nos. 3 to 7 apply accordingly.

Issued on the basis of the resolution of the Senate of the University of Bayreuth of 13 May 2026 and the approval of the President of the University of Bayreuth of 15 May 2026, ref. A 3396/16 - I/1.

Bayreuth, 20 May 2026

UNIVERSITY OF BAYREUTH
THE PRESIDENT

[seal and signature]

Professor Dr. Dr. h. c. Stefan Leible

These statutes were deposited at the University on 20 May 2026. The deposit was announced by posting at the University on 20 May 2026. The date of promulgation is 20 May 2026.