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Subject-Specific Examination and Study Regulations
for the jointly offered international
Elite Master's Programme
Ecological Forecasting
within the Elite Network of Bavaria (ENB)
at the University of Bayreuth
in cooperation with Julius-Maximilians-Universität Würzburg
dated 20 March 2026
as amended on 15 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 (BayHIG), the University of Bayreuth issues the following Regulations:

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§ 1

General Examination and Study Regulations

¹Studies in the international Elite Master's Programme Ecological Forecasting at the University of Bayreuth, which is jointly offered with Julius-Maximilians-Universität Würzburg pursuant to Art. 6 para. 3 sentence 3 BayHIG, are governed by the General Examination and Study Regulations for Bachelor's and Master's Programmes at the University of Bayreuth (APSO). ²Supplementary provisions and derogations governing the Master's Programme Ecological Forecasting are set out in these Regulations.

§ 2

Objectives and Structure of the Programme

(1) ¹The interdisciplinary approach of the jointly offered English-taught Elite Master's Programme equips students with the following competencies:

- Academic competence:
 - Advanced academic methods and analytical skills to produce ecological forecasts and address complex ecological questions.
 - Ability to assess economic risks associated with environmentally caused damage.
 - In-depth scientific understanding of ecological interrelationships and the societal consequences of global environmental change.
 - Integration of theory and practice and preparation for cutting-edge research in an emerging field.
 - Ability to undertake further independent academic work.
- Professional competence:
 - Targeted preparation for careers in research, environmental management, nature conservation, and policy advice.
 - Ability to provide well-founded forecasts and evidence for decision-making on ecological challenges, opening up career opportunities in the public and private sectors.
- Personal development:
 - Strengthening critical reflection, problem-solving skills, and interdisciplinary collaboration.
 - Fostering independence, responsibility, and the capacity to act sustainably in a dynamic and complex field.
- Societal engagement:
 - Developing approaches to solve ecological problems and address global challenges

such as climate change and biodiversity loss.

- Actively helping to shape a sustainable future.

²The jointly offered Master's Programme Ecological Forecasting, including all examinations, is conducted in English. ³Upon passing the Master's examination, the University of Bayreuth, acting through the Faculty of Biology, Chemistry & Earth Sciences, confers the academic degree Master of Science (abbreviated M.Sc.).

- (2) ¹The provisions governing the internship (module 'Pilot Study') are set out in Appendix 1.
- (3) ¹The jointly offered Master's programme is completed as a full-time programme. ²Students begin the programme at the University of Bayreuth in the winter semester.

§ 3

Admission to the Programme

- (1) The requirements for admission to the jointly offered Master's programme are:
1. a university degree from a bachelor's programme in Biology, Geo-Ecology, Philosophy & Economics, Physics, Computational Mathematics, Mathematics, Applied Computer Science, or Data Science and AI at the University of Bayreuth, or an equivalent qualification;
 2. a determination of programme-specific aptitude in accordance with the procedure set out in Appendix 2;
 3. evidence of English language proficiency at no lower than level B2 of the Common European Framework of Reference for Languages from applicants who obtained neither their higher education entrance qualification nor the first degree qualifying them for admission to the programme in English;
 4. evidence of German language proficiency at no lower than level A1 of the Common European Framework of Reference for Languages from applicants who obtained neither their higher education entrance qualification nor the first degree qualifying them for admission to the programme in German. Applicants who do not meet this requirement are enrolled on condition that they submit evidence of the required language proficiency no later than the end of their second semester.
- (2) ¹When determining the equivalence of a degree, there must be no substantial differences between the competencies acquired and those acquired through the degrees specified in para. 1 no. 1. ²Art. 86 BayHIG applies to determining whether German and foreign degrees are eligible for recognition. ³The Board of Examiners decides whether a degree is equivalent.

- (3) ¹If the certificate for the relevant first degree is not yet available, applicants must submit a statement listing the individual grades for all examinations and coursework completed by the application deadline. ²These assessments must amount to at least 135 credit points. ³Applicants who meet the requirement in sentence 2 and have successfully completed the aptitude assessment procedure under Appendix 2 are enrolled on condition that they submit the certificate for the relevant first degree by the end of their second semester.

§ 4

Supplementary Provisions and Derogations

- (1) The following derogations from and supplements to § 2 para. 1 APSO apply:
1. By way of derogation from sentence 3, the Board of Examiners consists of five members and one alternate representative for each member; at least two members and their alternate representatives must belong to Julius-Maximilians-Universität Würzburg.
 2. In addition to sentence 4, when electing the alternate representatives, the Faculty Council establishes a fixed order in which they are to represent or permanently replace members of the Board of Examiners if a member is unable to serve or leaves office. If the Chair of Examiners or the Deputy Chair leaves office, the Faculty Council elects a new member for the remainder of the term of office.
- (2) ¹In addition to § 6 APSO, students may take further examinations in the areas Themes in Ecological Forecasting and Pilot Study beyond the required total of 35 credit points; para. 3 and § 14 para. 1 APSO must be observed. ²There is no obligation to repeat failed assessment components as defined in sentence 1. ³The assessment components defined in sentence 1 are listed on the certificate unless the student requests otherwise.
- (3) ¹In addition to § 14 para. 1 sentence 1 APSO, only the four modules with the highest grades in the module area Themes in Ecological Forecasting are included in the calculation of the overall grade, subject to the required number of credit points. ²Assessment components under para. 2 sentence 1 are not included in the calculation of the overall grade.
- (4) ¹By way of derogation from § 31 para. 2 sentence 1 APSO, the Chair of Examiners appoints an examiner as supervisor and examiner, taking the student's preference into account. ²If the master's thesis is graded 'unsatisfactory', it must be assessed by a second examiner appointed by the Chair of Examiners.

§ 5

Entry into Force

¹These Regulations enter into force on 21 March 2026. ²They apply to students who begin this programme in or after the winter semester 2026/2027.*)

*) The Amending Regulations of 15 May 2026 contain the following provision on entry into force:

These Regulations enter into force on 16 May 2026.

Appendix 1: Modules, Credit Points and Examinations

The following lists the module areas, the respective modules, the credit points (CP), and the corresponding examinations.

Modules already completed in the underlying bachelor's programme may not be recognized or taken again in the Master's programme. Modules that may be assigned to more than one area may be counted only once.

The following derogations from and supplements to § 9 APSO apply:

By way of derogation from para. 1 sentence 2, examinations may also be conducted in German by agreement with the examiner.

Abbreviations:

- | Vertical bars between types of examination indicate permitted alternatives.
- * Assessment components marked with an asterisk (*) are not included in the calculation of the module grade or overall grade.

WE	written examination
TP	term paper
P	presentation
C	contribution
WP	written paper
ST	semester tasks

CO Code	Module Area / Module	CP	Examination
	Foundations of Ecological Forecasting	40	
Fak229451	Ecological Forecasting	5	TP P WP
Fak229453	A Primer in Ecology	5	TP P WP
Fak229454	A Primer in Scientific Programming	5	P WE ST
Fak229455	Probability Theory	5	P WE ST
Fak229457	Deep Learning	5	P WE ST
Fak229458	Statistical Modelling	5	TP P WP
Fak229471	The Philosophy and Behavioural Economics of Decision Making	5	ST

CO Code	Module Area / Module	CP	Examination
Fak229473	Remote Sensing	5	TP P WP
	Themes in Ecological Forecasting	20 - 30	
Fak229474	Forest Ecosystem Ecology	5	TP P WP
Fak229475	Open Ecosystem Ecology	5	C P ST
Fak229476	Systems Ecology	5	TP P WP
Fak229477	Aquatic Ecology	5	C P WP
Fak229478	Innovation Projects for Sustainability	5	P WP
Fak229479	Eco-evolutionary Dynamics	5	TP P WP
Fak229480	Biodiversity Conservation	5	P WP ST
	Pilot Study	5 - 15	
Fak229481	Pilot Study I	5	WP*
Fak229482	Pilot Study II	5	WP*
Fak229483	Pilot Study III	5	WP*
	Research	15	
Fak229484	Forecasting Challenge	5	P WP
Fak229485	Research Proposal	5	WP
Fak229486	Peer Review	5	WP
	Master's Project	30	
Fak229487	Master's Project	30	master's thesis
	TOTAL	120	

Module Area 'Themes in Ecological Forecasting':

In the module area 'Themes in Ecological Forecasting', only the four modules with the highest grades are included in the calculation of the overall grade, subject to the required number of credit points.

Module 'Pilot Study':

In the module 'Pilot Study', students individually complete an internship lasting at least three weeks. It is carried out under the coordination of an academic supervisor associated with the Master's Programme Ecological Forecasting. The Pilot Study may be undertaken at an external organisation or within a research group led by academic staff involved in the programme. In most cases, one or more Pilot Studies will form the basis of the Master's Project.

The module 'Pilot Study' may be completed as an alternative to the thematic modules. Students must complete between one and three Pilot Studies (5 CP each).

Appendix 2: Aptitude Assessment Procedure

1. Purpose of the Aptitude Assessment Procedure

¹Under Art. 90 para. 1 sentence 2 BayHIG, qualification for the jointly offered international Elite Master's Programme Ecological Forecasting within the Elite Network of Bavaria (ENB) requires, in addition to the requirements under § 3 para. 1 nos. 1, 3, and 4, proof of aptitude in accordance with the following provisions. ²The aptitude assessment procedure is intended to give qualified and particularly high-achieving students access to the jointly offered Elite Master's Programme Ecological Forecasting (M.Sc.). ³The aptitude assessment procedure plays a particularly important role in interdisciplinary, internationally oriented elite programmes because it is aimed at applicants from different disciplinary cultures, grading cultures, and countries of origin.

2. Aptitude Assessment Committee

¹An Aptitude Assessment Committee is responsible for preparing and conducting the aptitude assessment procedure. ²The Committee consists of two university teachers from the University of Bayreuth who are involved in the programme and one university teacher from Julius-Maximilians-Universität Würzburg who is involved in the programme. ³They are appointed by the Faculty Council for a term of five years. ⁴At least one additional university teacher from either participating institution must be appointed as an alternate member. ⁵Other members of the full-time academic staff who are authorized to conduct examinations may also serve on the Committee. ⁶University teachers must constitute a majority of the Committee. ⁷The members elect a university teacher from among their number as Chair.

3. Procedure for Determining Aptitude

3.1 ¹The aptitude assessment procedure is conducted once each year in the summer semester. ²The documents required for admission to the aptitude assessment procedure must be uploaded online via the University of Bayreuth application portal. ³The documents must be received electronically by the University of Bayreuth via the application portal no later than 15 June of each year for admission in the following winter semester (strict deadline). ⁴Documents under nos. 3.2.2 and 3.2.3 may be submitted subsequently via the application portal until 15 July of that year. ⁵For the winter semester 2026/2027, by way of derogation from sentence 3, the documents must be received by the University of Bayreuth no later than 15 July 2026 (strict deadline); by way of derogation from sentence 4, documents under nos. 3.2.2 and 3.2.3 may be submitted subsequently until 15 August 2026.

3.2 The following documents must be uploaded:

3.2.1 a detailed written statement in English (maximum two A4 pages) explaining the specific competencies on which the applicant's particular aptitude for the programme is based;

- 3.2.2 the certificate for the relevant first degree under § 3 and a statement 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 statement listing the individual grades for all examinations and coursework completed by the application deadline (amounting to at least 135 credit points) must be submitted;
- 3.2.3 where applicable, evidence of stays abroad, internships, and foreign-language courses;
- 3.2.4 a curriculum vitae in tabular form as supplementary information intended to provide points of reference for conducting the aptitude interview (no. 5.2);
- 3.2.5 where applicable, an application for reasonable accommodations under § 12 APSO.

4. Admission to the Aptitude Assessment Procedure

- 4.1 Admission to the aptitude assessment procedure requires that the documents specified in no. 3.2 have been received by the University of Bayreuth via the application portal by the applicable deadline.
- 4.2 The aptitude assessment procedure under no. 5 is conducted for applicants who meet the required conditions.
- 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 Preselection (first stage of the aptitude assessment procedure)
 - 5.1.1 On the basis of the uploaded application documents, the Committee determines whether an applicant's demonstrated qualifications and stated specific competencies make them suitable for the international Elite Master's Programme Ecological Forecasting (M.Sc.) within the Elite Network of Bavaria (ENB). Two members of the Aptitude Assessment Committee assess the documents independently on the basis of the following criteria:
 - 5.1.1.1 The grade for the relevant first degree, or the average grade for the assessments completed to date if the certificate for the relevant first degree is not yet available, is assigned a weighting factor of 1. Specific conversion factors may be applied to international applicants.
 - 5.1.1.2 The written statement under no. 3.2.1, together with the evidence under no. 3.2.3 where applicable, is graded on a scale from 1 to 5 (1 = very good, 2 = good, 3 = satisfactory, 4 = sufficient, 5 = unsatisfactory) and assigned a weighting factor of 1. The assessment considers the extent to which the written statement demonstrates

outstanding relevant prior knowledge of ecological systems (50%) and the necessary modelling and data-analysis competencies (50%).

- 5.1.2 The singly weighted grade for prior academic performance (no. 5.1.1.1) and the singly weighted grade for the written statement (no. 5.1.1.2) are added to produce a score calculated to one decimal place without rounding.
- 5.1.3 Applicants whose score exceeds 4.0 points or whose written statement was not graded at least 2 (good) are excluded from the remainder of the procedure. They receive a notice of rejection; no. 6.2 applies accordingly.
- 5.2 Aptitude interview (second stage of the aptitude assessment procedure)
 - 5.2.1 The remaining applicants (4.0 points or fewer) are invited to an aptitude interview. The date of the interview is announced at least two weeks in advance. Applicants who do not attend at the scheduled time are deemed rejected; no. 6.2 applies accordingly. If an applicant is unable to attend the aptitude interview for reasons beyond their control, a replacement date no later than two weeks before the start of lectures is arranged upon a substantiated application.
 - 5.2.2 The aptitude interview is conducted by two Committee members with one applicant at a time. It lasts at least 15 and no more than 30 minutes, is conducted in English, and is intended to determine whether the applicant can be expected to achieve the objectives of the programme. Applicants are questioned on the basis of their application documents in order to determine whether they possess the outstanding relevant prior knowledge of ecological systems (50%) and the necessary modelling and data-analysis competencies (50%) required for the Elite Master's Programme Ecological Forecasting (M.Sc.) within the Elite Network of Bavaria (ENB). Each examiner grades the aptitude interview on a scale from 1 to 5 (1 = very good, 2 = good, 3 = satisfactory, 4 = sufficient, 5 = unsatisfactory). If the grades differ, their mean is calculated to one decimal place. A record of the interview must be prepared, stating the participants, date and time, place, duration, and an assessment under no. 5.2.3. The record must show the topics discussed with the applicant and the reasons for the assessment. The topics and reasons may be stated in bullet-point form. The record must be signed by both examiners.
 - 5.2.3 The singly weighted grade for prior academic performance under no. 5.1.1.1 and the singly weighted grade for the interview under no. 5.2.2 sentences 5 and 6 are added to produce a score calculated to one decimal place without rounding.
 - 5.2.4 The aptitude assessment procedure is completed successfully if the score under no. 5.2.3 does not exceed 4.0 points and the aptitude interview is graded at least 2 (good).

6. Determination and Notification of the Result

- 6.1 The aptitude assessment procedure must be documented; in particular, the Committee's decisions under these Regulations and the overall result must be recorded.
- 6.2 ¹Applicants are notified of the result of the aptitude assessment procedure in writing. ²Notices of rejection must state the reasons and provide information on legal remedies.
- 6.3 Admission granted through the aptitude assessment procedure for the Elite Master's Programme Ecological Forecasting (M.Sc.) within the Elite Network of Bavaria (ENB) remains valid for all subsequent applications to this programme unless its content and objectives have changed so substantially that aptitude for the programme can no longer be established on the basis of the aptitude assessment procedure conducted previously.

7. Repetition

Applicants who have not demonstrated aptitude for the international Elite Master's Programme Ecological Forecasting (M.Sc.) within the Elite Network of Bavaria (ENB) may apply to participate in the aptitude assessment procedure one further time.

8. Aptitude Assessment Procedure for Admission to a Higher Semester

Nos. 3 to 7 apply accordingly to applicants seeking admission to a higher semester, including transfer applicants and applicants changing programmes.