**These degree program and examination regulations have been worded carefully to be up to date; however, errors cannot be completely excluded. The official German text available from L1 – Legal Affairs and Academic Quality Management is the version that is legally binding.**

# Degree Program and Examination Regulations for the Bachelor's degree program in Physical Geography (Bsc) and the Master's degree program in Physical Geography: Climate and Environmental Sciences (MSc) at the Faculty of Sciences at Friedrich-Alexander-Universität Erlangen-Nürnberg (FAU) – FPO PhysGeo CES –

**dated August 27, 2020**

amended by statutes of
October 11, 2022

Based on Section 13 (1)(2), Section 43 (5)(2), Section 58 (1) and Section 61 (2)(1) of the Bavarian Higher Education Act (Bayerisches Hochschulgesetz, **BayHSchG**), FAU enacts the following General Degree Program and Examination Regulations:

**Contents:**

## Section 40 Scope

The degree program and examination regulations for the Bachelor's degree program in Physical Geography (BSc) and the Master's degree program in Physical Geography: Climate and Environmental Sciences (MSc) supplement the current version of the General Degree Program and Examination Regulations for Bachelor's and Master's Degree Programs at the Faculty of Sciences at FAU (**ABMPO/NatFak**) – dated October 28, 2019.

# Part I: General Provisions

## Section 41 Bachelor's Degree Program, Degree Title, Related Degree Programs

(1) [1]The Bachelor's degree program in Physical Geography consists of modules worth 180 ECTS credits distributed over six semesters. [2]This includes the period for working on the Bachelor's thesis.

(2) The degree of Bachelor of Science (BSc) is awarded in accordance with Section 2 (1) (1) **ABMPO/NatFak**.

(3) Related degrees within the meaning of Section 28 (1)(2) **ABMPO/NatFak** are Bachelor's degrees in Physical Geography.

## Section 42 Master's Degree Program, Start of Degree Program, Degree Title, Related Degree Programs, Teaching and Examination Language

(1) [1]The Master's degree program Physical Geography: Climate & Environmental Sciences (MSc) builds on the contents of the Bachelor's degree program in Physical Geography (BSc). [2]It consists of modules worth 120 ECTS credits including the Master's thesis, distributed over four semesters.

(2) The Master's degree program may be started in the winter semester or in the summer semester.

(3) The degree of Master of Science (MSc) is awarded in accordance with Section 2 (1) (2) **ABMPO/NatFak**.

(4) Degree programs in a related subject within the meaning of Section 35 (2) (2) **ABMPO/NatFak** are Diplom or Master's degrees in scientific or technical subjects which cover physical geography, including an individual specialization relating to geography for which at least 40 ECTS credits have been awarded.

(5) Section 4 (4) **ABMPO/NatFak** applies with the proviso that the teaching and examination language is English and that individual teaching units and examinations may be held in German; otherwise, Section 4(4) **ABMPO/NatFak** shall remain unaffected.

### Section 43 Examinations Committee

[1]A joint examinations committee is formed for the Bachelor's degree program in Physical Geography and the Master's degree program in Physical Geography: Climate & Environmental Sciences and the Bachelor's and Master's degrees in Cultural Geography in accordance with Section 9 (1) (4) **ABMPO/NatFak**. [2]The committee comprises five full members. [3]The chairperson, their deputy and the further members of the Examinations Committee shall be university lecturers involved in teaching Geography at the Faculty of Sciences and appointed by the Faculty Council of the Faculty of Sciences at the suggestion of the Geography teaching staff. [4]The Dean of Studies of the Department of Geography has an advisory role on the Examinations Committee.

### Section 44 Grades Required to Pass Multiple Choice Examinations

Notwithstanding Section 17 (5) (1) **ABMPO/NatFak**, multiple-choice examinations shall be deemed to have been passed if

1. The examinee answered at least 60 percent of the examination questions correctly/achieved at least 50 percent of the attainable points, or
2. the examinee answered at least 50 percent of the examination questions correctly/achieved at least 50 percent of the attainable points and the number of correct answers/points obtained is no more than 17 percent below the average number of correct answers/points obtained by all examinees sitting the examination for the first time.

### Section 44a Minimum Number of Participants for Lectures and Seminars

[1]The seminars and field seminars in the (compulsory) elective modules of the Bachelor's and Master's degree programs are held subject to a sufficient number of students registering to participate; further details about the minimum number of participants are stipulated in the relevant module description. [2]If individual teaching units cannot be held due to a lack of participants, a sufficient range of alternatives shall be offered to students.

## Part II: Special Provisions

## 1. Bachelor's Examination

### Section 45 Structure of the Bachelor's Degree Program

(1) [1]The Bachelor's examination shall have been passed when the modules allocated to it in **Appendix 1** including the Bachelor's thesis module have been passed (180 ECTS credits). [2]Modules have to be taken from the compulsory subjects relating to geography and at least two electives. [3]The compulsory subjects together with the key qualifications (Section 49) and the Bachelor's thesis (Section 50) account for 140 ECTS credits, the electives account for a total of 40 ECTS credits pursuant to Section 48. [4]Elective 1 must account for at least 20 ECTS credits, further electives must account for at least 10 ECTS credits each. [5]The distribution across the semesters, the type and duration of the examinations in the modules and the required number of ECTS credits are set forth in **Appendix 1**.

(2) Taking additional modules or participating in teaching units with a limited number of participants is only possible if capacity allows; students who require these modules as proof of gaining the 180 ECTS credits required for completing their degree are given priority.

(3) [1]Students may decide the order in which they take modules themselves, unless **Appendix 1** stipulates a requirement for a particular semester. [2]Freedom of choice is in particular restricted in those instances where participation in the examination for one module is dependent on the student having successfully completed another module.

## Section 46 Grundlagen- und Orientierungsprüfung (GOP)

(1) The Grundlagen- und Orientierungsprüfung (GOP) comprises the modules Foundations of physical geography 1 (PG 1), Foundations of physical geography 2 (PG 2), Foundations of cultural geography 1 (PG 3), Foundations of cultural geography 2 (PG 4) and the basic seminar in geography (PG 5) (a total of 25 ECTS credits) and one module from an elective.

(2) The GOP shall have been passed when all modules listed in (1) have been evaluated as ‘bestanden’ (passed) or given a grade of at least ‘ausreichend’ (sufficient).

## Section 47 Compulsory Modules

[revoked]

## Section 48 Electives

(1)The following subjects are available as electives within the meaning of Section 45 (1) in the Bachelor’s degree program Physical Geography:

1. Biology
2. Chemistry
3. Geosciences
4. Computer science
5. Mathematics
6. Physics
7. Business and Economics
8. Cultural Geography.

(2) [1]The first learning outcome of the elective modules is to give students the opportunity to explore the theory of at least one specialist field. [2]The second learning outcome is methodological, training students in interdisciplinary approaches, extending scientific perspectives and those from the social sciences to other fields of study and gathering experience in interdisciplinary scientific methods. [3]Thirdly, the element of choice gives students the opportunity to create their own individual profile in view of their future career. [4]The remaining learning outcomes of individual electives can be found in the **degree program and examination regulations**. [5]The elective modules are listed in a module catalog, which is announced in accordance with local practice at the latest one week before the semester begins.

(3) The type and scope of teaching units and course and examination achievements depend on the specific manner in which the respective module is taught and are regulated by the applicable **(degree program and) examination regulations** and/or the module handbook.

(4) [1]The Examinations Committee shall decide on any deviations or accept electives other than those stated in (1) upon request. [2]An elective can only be admitted if it is compatible with the learning outcome of the Bachelor's degree program in Physical Geography.

### Section 49 Key Qualifications

[1]At least 20 ECTS credits for career-oriented key qualifications are distributed across various modules and are taught in the context of subject-related content. [2]A further 10 ECTS credits are awarded for an external placement related to a professional field, lasting at least 6 weeks.

### Section 50 Bachelor's Thesis

(1) Students are required to have achieved at least 140 ECTS credits in order to be allocated a subject for the Bachelor's thesis.

(2) [1]The Bachelor's thesis module accounts for a total of 15 ECTS credits, with 12 ECTS allocated to the written Bachelor's thesis and 3 ECTS credits to the oral examination. [2]Requirements for the Bachelor's thesis module shall be such that it can be completed within 12 weeks. [3]Notwithstanding Section 31 (4) (3) **ABMPO/NatFak**, the Examinations Committee can extend the period for the Bachelor's thesis by a maximum of two weeks in exceptional cases.

(3)[1] As a rule, the Bachelor's thesis shall be completed at the Institute of Geography. [2]The chairperson of the Examinations Committee may give approval for the Bachelor's thesis to be completed in departments not involved in the degree program upon request.

(4) Full-time university lecturers employed at the Institute of Geography (supervisors) shall be entitled to assign Bachelor's theses; the Examinations Committee may grant exceptions.

(5) Notwithstanding Section 31 (7) (1) **ABMPO/NatFak,** the Bachelor's thesis shall generally be evaluated by the supervisor; Section 17 (3) (2) **ABMPO/NatFak** shall remain unaffected.

## 2. Master's Examination

### Section 51 Admissions Committee for the Master's Degree Program

The admissions committee for the Physical Geography: Climate & Environmental Sciences (MSc) Master's degree program shall comprise at least one professor as the chairperson, a university lecturer, and a full-time research associate working for the University.

### Section 52 Qualification for a Master's Degree, Certificates and Admission Requirements

(1) [1]A subject-specific degree within the meaning of Section 34 (1)(1)(1) **ABMPO/NatFak** is a Bachelor's degree or a Diplom degree in the subject geography. [2]Qualifications in a related subject pursuant to Section 34 (1) sentence 1 no. 1 **ABMPO/NatFak** are in particular qualifications from scientific or technical degree programs with an individual specialization relating to physical geography for which at

least 40 ECTS credits have been awarded. [3]The minimum number of ECTS credits required in the event of a student not having yet completed their Bachelor's degree pursuant to Section 34 (3) **ABMPO/NatFak** is 150 ECTS credits.

(2) [1]Notwithstanding (2) (1) of the **Appendix to ABMPO/NatFak,** applications for admission to the Master's degree program in the summer semester must be made by January 31 of the same year at the latest. [2]The application for admission to the qualification assessment process according to (2)(2)(3) of the **Appendix to ABMPO/NatFak** shall include

1. A letter of application demonstrating the applicant's academic suitability and qualifications for the relevant degree program, and
2. Proof of English language proficiency at CEFR (Common European Framework of Reference for Languages) level B2 – Vantage or upper intermediate or equivalent evidence.

[3]Proof of English language proficiency pursuant to Sentence 1 No. 2 above may be provided in the form of proof of six years of English lessons at a German Gymnasium; applicants who completed their university entrance qualification or first degree in English shall not be required to provide proof of language proficiency.

(3) Notwithstanding (5)(3) of the **Appendix to ABMPO/NatFak**, the Admissions Committee shall deem the applicant qualified based on the submitted documents if the average of the final grade of the subject-specific or subject-related/equivalent degree is 2.3 (good) or higher.

(4) [1]In the oral admission examination according to (5)(3) et seq. of the **Appendix** to **ABMPO/NatFak**, applicants who have a final grade or current grade between 2.31 and 2.5 shall be evaluated according to the following equally weighted criteria:

1. Quality of subject-related knowledge relating to biological and soil geography, geoinformatics and climate research as well as fundamental scientific knowledge (physics, mathematics, statistics) (50%),
2. Applicant's ability to produce and analyze academic texts as well as to recognize and analyze sociological and ecological processes, fundamental knowledge of statistical analysis and visualization of spatial data (30%),
3. A positive prognosis based on improving progress during the applicant's course of studies so far which suggests that the applicant is able to carry out independent academic work in a more research-oriented degree program (discussion on the basis of graduation documents (in particular Transcript of Records) from their first degree program) (20%).

[2]Notwithstanding (5)(8) of the **Appendix to ABMPO/NatFak,** the duration of the oral admission examination is approximately 30 minutes. [3]If the oral admission examination is passed, the Admissions Committee shall decide whether admission is to be granted with conditions according to Section 34 (2)(2) **ABMPO/NatFak** based on the examiners' recommendation.

## Section 53 Scope and Structure of the Master's Degree Program, Specializations

(1) [1]The degree program consists of compulsory modules, elective modules (inter-/transdisciplinary perspectives pursuant to Section 54), compulsory elective modules (pursuant to Section 55) and specialization modules (pursuant to Section 56) and the Master's thesis. [2]The scope and type of examinations to be taken throughout the

degree program, the duration of examinations and the number of ECTS credits are stipulated below and in **Appendix 2**.

(2) To complete the Master's degree, students must pass all the following module examinations including the Master's thesis module, amounting to a total of 120 ECTS credits as stipulated in **Appendix 2**:
1. Compulsory modules worth 40 ECTS credits,
2. Elective modules worth 10 ECTS credits,
3. Compulsory elective modules worth 15 ECTS credits,
4. Modules worth 25 ECTS credits in the specialization modules and
5. 30 ECTS credits from the Master's thesis in the selected specialization.

(3) Modules no. 1 to 6 in **Appendix 2** are compulsory.

(4) [1]The Master's degree program Physical Geography: Climate & Environmental Sciences is offered with the following specializations:
- Climate Research
- Geoinformatics
- Environmental Analysis.

[2]Students select the specialization they wish to take by registering for the relevant examination module. [3]A change of specialization is possible on request at a later date.

(5) Taking additional modules or participating in teaching units with a limited number of participants is only possible if capacity allows; students who require these modules as proof of gaining the 120 ECTS credits required for completing their degree are given priority.

## Section 54 Learning Outcomes and Examinations in Electives in the Module Inter-/Transdisciplinary Perspectives

(1) [1]The overriding learning outcomes of the electives of the module Inter-/Transdisciplinary Perspectives that can be chosen pursuant to Section 53 (1) and (2) (2), are firstly to allow students to gain more advanced knowledge in an area that complements the Master's degree program in terms of content. [2]The second learning outcome is methodological, training students in interdisciplinary approaches, extending scientific and technical perspectives to other fields of study and gathering experience in interdisciplinary scientific and technical methods. [3]Thirdly, the element of choice gives students the opportunity to create their own particular profile in view of their future career.

(2) In the Inter-/Transdisciplinary Perspectives module, students can choose from modules worth a total of 10 ECTS credits from all the modules offered for Master's degree programs at the Faculty of Sciences and the Faculty of Engineering at FAU.

(3) The type and scope of teaching units and course and examination achievements in the modules accounting for 2.5, 5, or 7.5 ECTS credits respectively depend on the specific manner in which the respective module is taught and are regulated by the applicable **degree program and examination regulations** and/or the module handbook.

## Section 55 Compulsory Elective Modules

(1) [1]The compulsory elective modules pursuant to Section 53 (1), (2) (3) are listed in module catalogs that are updated each semester. [2]In the compulsory elective modules, students acquire skills for applying research-oriented methods and for developing strategies to solve problems related to physical geography and acquire the ability to carry out academic work independently. [3]The learning outcome has a research focus, with students learning subject-specific methods of research and exploring their subject in more depth. [4]The element of choice allows students to tailor their profile in view of their career plans.

(2) [1]From the compulsory elective modules, students can choose and of the modules comprising a total of 15 ECTS credits from the “Advanced Methods” modules that are announced in accordance with local practice at the latest one week before the semester begins. [2]The modules may not be part of the modules of the selected specialization modules. [3]One of the compulsory elective modules is ungraded and can be replaced by an external placement lasting at least six weeks.

(3) [1]The type and scope of the examination and the way in which the grade is determined for modules depend on the specific manner in which the respective module is taught; see module handbook for details. [2]Possible examination achievements are set out in Section 6 (3) and (4) **ABMPO/NatFak:**

1. Tutorial achievement (report (30–45 pages) or exercises (approx. 5 pages),
2. Report (5–15 pages),
3. Practical achievement (report approx. 5–15 pages or series of reports approx. 30-45 pages).

## Section 56 Specialization Modules

(1) [1]The specialization modules pursuant to Section 53 (1), (2) (4) are listed in module catalogs that are updated each semester. [2]In the specialization modules, students acquire skills for applying the latest research-oriented methods and for developing strategies to solve problems related to physical geography and acquire the ability to carry out academic work independently. [3]The learning outcome has a research focus, with students learning specialized subject-specific methods of research and exploring their subject in more depth. [4]The element of choice allows students to tailor their profile in view of their career plans. [5]The selected specializations are included on the degree certificate.

(2) Section 55 (2) shall apply accordingly.

(3) The specializations have the following subject-specific learning outcomes:

1. [1]In the Climate Research specialization module, students acquire methodological skills for dealing with, analyzing and interpreting climate data using field research, laboratory analyses, programming and numerical modeling. [2]The module focuses on the variability and changes in the Earth’s climate – both recent and paleoclimatic – from a modern systemic perspective with a focus on understanding the processes involved.
2. [1]In the Geoinformatics specialization module, students acquire in-depth methodological skills in geographic information systems, various data processing and data analysis methods, the set up and connection of geo-databases and the creation of scripts and programming within a GIS. [2]The focus is on the features

and characteristics of various recording systems and of complex evaluation processes and algorithms in Earth observation.

3. [1]In the Environmental Analysis specialization module, students acquire specialist methodological skills for collecting, evaluating and interpreting environmental data in the fields of soil science, landscape dynamics, vegetation ecology, biogeography and dendroecology using field research, laboratory analysis, statistical methods and geoinformation systems. [2]The focus is on the processes and interactions in the various compartments of terrestrial ecosystems.

## Section 57 Master's Thesis

(1) [1]30 ECTS credits shall be awarded for the Master's thesis. [2]The results of the written work (25 ECTS credits) shall be presented in a presentation (5 ECTS credits).

(2) Students are required to have achieved at least 60 ECTS credits in order to be allocated a subject for the Master's thesis.

(3) [1]The Master's thesis is intended to show that the student is capable of dealing with a problem from the field of the Master's degree program in Physical Geography: Climate & Environmental Sciences independently and according to scientific methods within a set period, presenting the results in accordance with the standards of the field and using the correct language, and putting them in relation to current specialist literature. [2]The Master's thesis must focus on the selected specializations and be research-oriented. [3]The work on the Master's thesis is preceded by one semester of subject specialization and project planning that prepare the student on the subject of the thesis (Project Planning and Preparation module).

(4) A written assignment suitable for use in the State Examination in teaching (Lehramt) pursuant to Section 29 of the examination regulations for teaching degree programs I (Lehramtsprüfungsordnung I – **LPO I**) can be submitted as a Master's thesis if the topic is explored in more depth from an academic point of view.

(5) The Master's thesis in the Master's degree program Physical Geography: Climate & Environmental Sciences shall be written in English.

(6) Full-time university lecturers employed at the Institute of Geography (supervisors) shall be entitled to assign Master's theses; the Examinations Committee may grant exceptions.

(7) Notwithstanding Section 37 (4) (2) **ABMPO/NatFak**, the Examinations Committee can extend the period for the Master's thesis by a maximum of three months in exceptional cases.

(8) [1]Notwithstanding Section Section 37 (6) (5) **ABMPO/NatFak**, two hard copies of the Master's thesis and two machine-readable, electronic copies (PDF document on CD-ROM) shall be submitted to the Examinations Office. [2]The supervisor shall be given one of the (stamped) hard copies. [3]The design of the title page shall follow the template provided by the Examinations Committee responsible. [4]The Master's thesis shall include a declaration by the student confirming that the thesis is an original work and that no other sources or materials than the ones listed were used.

## Section 58 Legal Validity, Transitory Provisions

(1) [1]These examination regulations shall come into effect on the day after their publication. [2]They shall apply to students starting a degree program from the winter semester 2020/2021 onwards. [3]Notwithstanding sentence 2, the provision stipulated in Section 52 in conjunction with Section 34 and the **Appendix to ABMPO/NatFak** shall apply for the first time to applications for admission to the Master's degree program in summer semester 2021; until then the provisions stipulated in the currently valid version of the degree program and examination regulations for the Bachelor's degree program in Physical Geography and the Master's degree program in Climate & Environmental Sciences as well as the Bachelor's and Master's degree programs in Cultural Geography at the Faculty of Sciences at Friedrich-Alexander-Universität Erlangen-Nürnberg (FAU) dated September 27, 2007, last amended by statute of 2 March 2017 shall apply in the latest version.

(2) [1]At the same time, the degree program and examination regulations for the Bachelor's degree program in Physical Geography and the Master's degree program in Climate & Environmental Sciences as well as the Bachelor's and Master's degree programs in Cultural Geography at the Faculty of Sciences at Friedrich-Alexander-Universität Erlangen-Nürnberg (FAU) from September 27, 2007, last amended by statute of 2 March, 2017 shall cease to be in force, subject to the provisions in (1) (2) as well as the provisions below. [2]Students already studying under the previously valid version of the degree program and examination regulations according to sentence 1 shall complete their studies under those degree program and examination regulations. [3]Examinations in accordance with the degree program and examination regulations in sentence 1 will be offered for the last time in summer semester 2025 for the Bachelor's degree program and in winter semester 2023/2024 for the Master's degree program.

(3) [1]The first amendment statute shall come into effect on October 1, 2022. [2]It applies to all students of the Master's degree program who are already studying in accordance with the valid version of these degree program and examination regulations as well as those who will commence their studies in winter semester 2022/23. [3]Notwithstanding sentence 2, the amendments in **Appendix 1** and **2** regarding the Bachelor's and Master's thesis apply to all students who are already studying in accordance with the valid version of FPO PhysGeo CES and who have not completed the Bachelor's or Master's thesis module (passed/failed at the final attempt). [4]Notwithstanding sentence 2 and 3, the amendments in Section 51 shall apply to all students starting a Master's degree program from winter semester 2023 onwards.

## Appendix 1: Degree Program Structure of the Bachelor's Degree Program in Physical Geography

| Module name | Teaching unit | SWS (semester hours) | | | | Total ECTS credits | Distribution of workload per semester in ECTS credits[1)] | | | | | | Type and scope of the examination[2)] | Grade factor |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | L | T | P | S | | 1st sem. | 2nd sem. | 3rd sem. | 4th sem. | 5th sem. | 6th sem. | | |
| **PG 1: Foundations of physical geography I** | Introductory lecture Physical Geography I | 2 | | | | **5** | 4 | | | | | | Written examination (45 min) | 1 |
| | Tutorial | | 1 | | | | 1 | | | | | | | |
| **PG 2: Foundations of physical geography II** | Introductory lecture Physical Geography II | 2 | | | | **5** | | 4 | | | | | Written examination (45 min) | 1 |
| | Tutorial | | 1 | | | | | 1 | | | | | | |
| **PG 3: Foundations of cultural geography I** | Introductory lecture Cultural geography I | 2 | | | | **5** | 4 | | | | | | Written examination (45 min) | 1 |
| | Tutorial | | 1 | | | | 1 | | | | | | | |
| **PG 4: Foundations of cultural geography II** | Introductory lecture Cultural geography II | 2 | | | | **5** | | 4 | | | | | Written examination (45 min) | 1 |
| | Tutorial | | 1 | | | | | 1 | | | | | | |
| **PG 5: Introduction to geography[3)]** | Basic seminar Geography | | | | 3 | **5** | 5 | | | | | | TA | 1 |
| **PG 6: GIS and Geovisualization[3)]** | Lecture: Cartography and spatial information | 2 | | | | **7.5** | 2.5 | | | | | | TA | 0 |
| | Seminar: Introduction to GIS | | | | 2 | | | 5 | | | | | | |
| **PG 7: Introduction to statistics[3)]** | Lecture: Methodology and statistics | 2 | | | | **7.5** | | 2.5 | | | | | TA | 0 |
| | Seminar: Multivariate statistics and geostatistics | | | | 2 | | | | 5 | | | | | |
| **PG 8: Field methods in geography** | Field placement | | | 3 | | **5** | | 5 | | | | | Report (5–10 pages) | 0 |
| **PG 9: Regional Geography I** | Minor field seminar/field trips (5 days total) | | | | 2.9 | **5** | | 2.5 | 2.5 | | | | Report (5-10 pages) | 0 |
| **PG 10: Advanced physical geography I** | Lecture Advanced physical geography | 2 | | | | **5** | | | 2.5 | | | | Written examination (90 min), 0 %, *or* [4)] Two written examinations (45 min each), 0 % | 0 |

| Module name | Teaching unit | SWS (semester hours) | | | | Total ECTS credits | Distribution of workload per semester in ECTS credits[1)] | | | | | | Type and scope of the examination[2)] | Grade factor |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | L | T | P | S | | 1st sem. | 2nd sem. | 3rd sem. | 4th sem. | 5th sem. | 6th sem. | | |
| | Lecture Advanced physical geography | 2 | | | | | | | | 2.5 | | | | |
| **PG 11: Advanced physical geography II** | Lecture Advanced physical geography | 2 | | | | **5** | | | | | 2.5 | | Written examination (90 min), 0 %, *or* [4)] Two written examinations (45 min each), 0 % | 0 |
| | Lecture Advanced physical geography | 2 | | | | | | | | | | 2.5 | | |
| **PG 12: Interdisciplinary geography** | Regional/ special lecture | 2 | | | | **5** | | | | 2.5 | | | Written examination (90 min), 0 %, *or* [4)] Two written examinations (45 min each), 0 % or written examination (45 min), 0%, and lab book (10–15 pages) | 0 |
| | Regional/ special lecture *Or* research colloquium[5)] | (2) | | | (2) | | | | | | 2.5 | | | |
| **PG 13: Regional Geography II** | Advanced seminar for major field seminar | | | | 2 | **10** | | | | 4 | | | SA *or* [6)] TA | 1 |
| | Major field seminar (minimum of 8 days) | | | | 4,6 | | | | | | 6 | | | |
| **PG 14: Special Physical Geography** | Advanced seminar Physical Geography | | | | 2 | **5** | | | 5 | | | | SA | 1 |
| **PG 15: Research methods of physical geography I** | Advanced seminar Special methods in physical geography | | | | 2 | **10** | | | | 5 | | | TA | 1 |
| | Advanced seminar Special methods in physical geography | | | | 2 | | | | | | 5 | | | |
| **PG 16: Research methods of physical geography II** | Lecture Remote sensing | 2 | | | | **7.5** | | | 2.5 | | | | E-examination pursuant to Section 21 **ABMPO/NatFak** (45 min., 100 %), and TA (0 %) | 1 |
| | Advanced seminar Special methods in | | | | 2 | | | | 5 | | | | | |

| Module name | Teaching unit | SWS (semester hours) | | | | Total ECTS credits | Distribution of workload per semester in ECTS credits[1)] | | | | | | Type and scope of the examination[2)] | Grade factor |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | L | T | P | S | | 1st sem. | 2nd sem. | 3rd sem. | 4th sem. | 5th sem. | 6th sem. | | |
| | physical geography | | | | | | | | | | | | | |
| **PG 17: Applied physical geography [3)]** | Project-oriented advanced seminar Physical geography | | | | 2 | **5** | | | | 5 | | | SA | 1 |
| **PG 18: Elective module in geography Analysis of society and the environment** | Advanced seminar *or* Method seminar *or* Project-oriented advanced seminar *or* Map interpretation | | | | 2 | **10** | | | | | 5 | | SA *or* [6)] TA | 1 |
| | Advanced seminar *or* Method seminar *or* Project-oriented advanced seminar *or* Map interpretation | | | | 2 | | | | | | 5 | | | |
| **PG 19: Qualification and professional practice[3)]** | Seminar Professional field Geography | | | | 2 | **12.5** | | | | | | 2.5 | placement report (3–5 pages) | 0 |
| | External placement | | | 6 weeks | | | | | | | | 10 | | |
| **Electives pursuant to Section 48[7)]** | see Section 48 (3) | | | | | **40** | 12.5 | 5 | 7.5 | 10 | 5 | | see Section 48 (3) | 1 |
| **PBA: Bachelor's thesis PG** | Bachelor's thesis PG | | | | | **15** | | | | | | 12 | Bachelor's thesis (approx. 50 pages) and oral examination (15 min.) (100 % + 0 %) | 2 |
| | Oral examination | | | | | | | | | | | 3 | | |
| **Total SWS and ECTS credits:** | | **26 (24)** | **4** | **3** | **32.5 (34.5)** | **180** | **30** | **30** | **29** | **31** | **30** | **30** | | |
| | | **46** | | | | | | | | | | | | |

TA = tutorial achievement pursuant to Section 6 (4) (1) **ABMPO/NatFak**
SA = seminar achievement pursuant to Section 6 (4) (1), (5) **ABMPO/NatFak**

1) The distribution shown is a recommendation.
2) Unless stated otherwise, these are graded course achievements.

[3] Key qualification pursuant to Section 32a **ABMPO/NatFak** are taught in the stipulated modules.
[4] Students may choose to obtain the examination achievement either by taking a 90 minute written examination or two partial examinations of 45 minutes each in the individual subject areas.
[5] The research colloquium offers various presentations about current research at the Institute of Geography at FAU, presentations by external researchers and the Franconian Geographical Society (FGG) and participation in the practical forum of the DVAG (German Association of Applied Geography). By participating in the colloquium, students gain additional insights into selected examples from the fields of research and work in the social and natural sciences. Participation is documented in a colloquium booklet.
[6] The type and scope of the examination depend on the specific manner in which the teaching unit chosen by the student is taught, see module handbook for details.
[7] See Section 45 (1) (4): At least 20 ECTS credits in the first elective, at least 10 ECTS credits in each further elective.

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## Appendix 2: Degree program structure of the Master's degree program Physical Geography: Climate & Environmental Sciences

| | No. | Module | Teaching unit | SWS (semester hours) | | | | Total ECTS credits | Workload per semester in ECTS credits[1)] | | | | Type and scope of the examination[2)] | Grade factor |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | L | T | P | S | | 1st sem. | 2nd sem. | 3rd sem. | 4th sem. | | |
| Compulsory Modules | 1 | **Scientific Working I** | Scientific Writing and Communication | | | | 2 | **5** | 5 | | | | ÜL (Exercises) | **0** |
| | 2 | **Scientific Working II** | Introduction to Climate & Environmental Sciences | | | | 2 | **5** | 5 | | | | Written examination, 45 min. | **1** |
| | 3 | **Advanced Physical Geography I** | Graduate Seminar Physical Geography I | | | | 2 | **5** | 5 | | | | SA (Written paper, 20–30 pages, with oral presentation, 45 min.) | **1** |
| | 4 | **Advanced Physical Geography II** | Graduate Seminar Physical Geography II | | | | 2 | **5** | | 5 | | | SA Written paper, 20–30 pages, with oral presentation, 45 min.) | **1** |
| | 5 | **RTC: Research Training Course** | Research Training Course | | | | 4 | **15** | | 10 | 5 | | Research report, 20–50 pages, with oral presentation, 30 min. (70 % + 30 %) | **1** |
| | 6 | **Field Course** | Field Course | | | | 2 | **5** | | 5 | | | PA | **1** |
| | | **Total for compulsory modules** | | | | | **14** | **40** | **15** | **20** | **5** | **0** | | |
| Optional Subjects | | **Inter-/Transdisciplinary Perspectives** | see Section 54 | | | | | **10** | 5 | | 5 | | see Section 54 (3) | **0** |
| | | **Total for Inter-/Transdisciplinary Perspectives** | | | | | | **10** | **5** | **0** | **5** | **0** | | |
| Compulsory Elective Modules | | **Compulsory Elective Modules** | see Section 55 (3) | | | | 6 | **15** | | | 10 | | see Section 55 (3) | **1** |
| | | | | | | | | | | 5 | | | | **0** |
| | | **Total for Compulsory Elective Modules** | | | | | **6** | **15** | **0** | **5** | **10** | **0** | | |
| Specialization Modules | | **Modules from the module catalog of the specialization** | see Section 56 (3) | | | | **8** | **20** | 10 | 5 | 5 | | see Section 56 (2) | **1** |
| | | **Project Planning and Preparation** | Project Planning and Preparation[5)] | | | | 2 | **5** | | | 5 | | Research report (20–50 pages) and Reflective discussion (15–30 min.) (0 % + 0 %) | **0** |

| | No. | Module | Teaching unit | SWS (semester hours) | | | | Total ECTS credits | Workload per semester in ECTS credits[1)] | | | | Type and scope of the examination[2)] | Grade factor |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | L | T | P | S | | 1st sem. | 2nd sem. | 3rd sem. | 4th sem. | | |
| | | | | | | | | | | | | | (Research report (20–50 pages) and Reflective discussion (15–30 min.) (0%0%) | |
| | | **Total for Specialization Modules** | | | | | **10** | **25** | **10** | **5** | **10** | **0** | | |
| **Master's Thesis** | | **MT: Master's Thesis** | Master's Thesis | | | | | **30** | | | | 25 | Master's thesis (approx. 80 pages) and oral examination (approx. 30 mins) (100 % + 0 %) (Master's Thesis (ca. 80 pages) and oral examination (approx. 30 min.) (100 % + 0 %)) | **2** |
| | | | Oral examination for Master's thesis | | | | | | | | | 5 | | |
| | | **Total for Master's thesis pursuant to Section 57** | | | | | | **30** | **0** | **0** | **0** | **30** | | |
| | | **Total** | | | | | **30** | **120** | **30** | **30** | **30** | **30** | | |

TA = tutorial achievement pursuant to Section 6 (4) (1) **ABMPO/NatFak**
SA = seminar achievement pursuant to Section 6 (4) (3), (5) **ABMPO/NatFak**
TA = tutorial achievement pursuant to Section 6 (4) (2) **ABMPO/NatFak**

1) The distribution shown is a recommendation.
2) Unless stated otherwise, these are graded course achievements.
3) Selection of specialization modules that are not part of the chosen specializations. The number of compulsory elective modules is can be extended.
4) One of the compulsory elective modules can be taken as an ungraded module. This module can be replaced by an external placement lasting at least six weeks.
5) The research colloquium offers various presentations about current research at the Institute of Geography at FAU, presentations by external researchers, the Franconian Geographical Society (FGG) and participation in the practical forum of the DVAG (German Association of Applied Geography). By participating in the colloquium, students gain additional insights beyond their Master's thesis into selected examples from the fields of research and work in the social and natural sciences. Participation is documented in a colloquium booklet.