

The only official and thus legally valid form of the subject-specific examination regulations in the Bachelor's program Geowissenschaften is in German. This translation is only an aid to understanding for persons who are not proficient in the German language and has no legally binding effect.

**Subject-specific examination regulations for the bachelor's degree
"Geowissenschaften" (full subject) at the University of Bremen**

of February 3, 2021

At its meeting on February 3, 2021, the Faculty Council of Faculty 5 (Geosciences), in accordance with Section 87 Clause 1 Number 2 of the Bremen University Act (BremHG) in conjunction with Section 62 BremHG in the version published on May 9, 2007 (Brem.GBl. P. 339), last amended by Article 1 of the law of February 24, 2021 (Brem.GBl. P. 216), has decided the following examination regulations:

These subject-specific examination regulations apply in conjunction with the general part of the Examination regulations for Bachelor courses (AT BPO) at the University of Bremen from January 27, 2010 in the currently valid version.

§ 1

Scope of study and degree

(1) For the successful completion of the Bachelor's degree "Geowissenschaften", a total of 180 credit points (CP) according to the European Credit Transfer and Accumulation System (ECTS) have to be acquired. This corresponds to a standard period of study of 6 semesters.

(2) Based on the Bachelor's examination, the degree

Bachelor of Science
(abbreviated B.Sc.)

will be awarded.

§ 2

Course structure, modules and credits

(1) The Bachelor's degree "Geowissenschaften" is studied as a full-subject Bachelor's degree in accordance with Section 4 Paragraph 1 Item 1 AT BPO. The General Studies area according to § 4 Paragraph 1 Number 1 AT BPO comprises 18 CP, 6 of which can be freely selected as part of a module from the complementary studies at the University of Bremen. For more details, see module description.

(2) The course is structured as follows:

a) Compulsory modules with a total of 126 CP, divided into:

- i. Bachelor Thesis, 12 CP;
- ii. Principles in Geosciences, 54 CP
- iii. Principles in Mathematics and Science, 36 CP
- iv. Practical Professional Competences in Geosciences, 24 CP, including 18 CP General Studies

- b) Elective modules, namely “Specializations”, with a total of 54 CP. Three main subjects according to Appendix 2.5 must be completed in full, each amounting to 18 CP. A change of focus is only possible upon a justified request to the examination board. The examination board decides on the recognition of the achievements in the area of specialization in the event of a change of focus based on the individual situation.

(3) Annex 1 shows the recommended course of study; Annex 2 regulates the examinations to be performed.

(4) Modules are carried out as compulsory or compulsory elective modules.

(5) The compulsory and compulsory elective modules provided in the curriculum are offered at least once a year.

(6) Modules in the compulsory area will be conducted in German and in the compulsory elective area in German and English.

(7) The courses assigned to the modules are shown in the module descriptions.

(8) Courses are carried out in accordance with Section 6 (1) AT BPO. In addition, courses are held in the following modes:

- project exercises,
- off-road exercises.

(9) The course includes an obligatory internship with a total of 6 CP. The internship regulations regulate further details.

(10) Studying abroad is optional. The admission of achievements abroad has to be coordinated with the responsible counselling centre in advance.

§ 3

Examinations

(1) Examinations are carried out in accordance with §§ 8 ff. AT BPO: In addition, examinations can be carried out as listed in Appendix 3. In individual cases, the examination board can allow other modes of examination at the request of an examiner.

(2) According to § 20 Paragraph 4 AT BPO, an examination can be repeated in another mode than the one originally carried out.

(3) The students will be informed about deadlines and scopes of examinations at the beginning of the module.

(4) Examinations can be carried out as multiple choice or electronic exams. Annex 4 regulates further details.

(5) For compulsory elective courses that are held in English, the exam may also be in English.

(6) The compensation principle according to § 5 Paragraph 8 AT BPO will not be applied.

§ 4

Recognition and crediting

The recognition or crediting of achievements takes place in accordance with § 22 AT BPO in the currently valid version.

§ 5

Admission requirements for modules

Except for the context of § 6 paragraph 2, there are no admission requirements for modules.

§ 6

Module Bachelor thesis (including colloquium)

- (1) The module bachelor thesis (12 CP) includes the bachelor thesis and the colloquium.
- (2) The prerequisite for registering the bachelor thesis (including colloquium) is a proof of at least 120 CP.
- (3) The processing time for the bachelor thesis is 9 weeks. The examination board can approve a one-time extension of a maximum of 3 weeks upon justified request.
- (4) The bachelor thesis has to be done as an individual work.
- (5) The bachelor thesis can be written either in German or in English.
- (6) A colloquium is part of the bachelor thesis. A joint module grade is formed for the bachelor thesis and the colloquium. The grade of the bachelor thesis is included in the joint grade with 75%, the grade of the colloquium with 25%.

§ 7

Overall grade of the Bachelor examination

Graded modules from the first to third semesters (according to the course plan) are incorporated into the overall grade according to credit points achieved and the weighting of the grades. All graded modules of the fourth to sixth semester (according to the course plan) are included in the overall grade with double grade weighting. Ungraded modules are not included in the calculation

§ 8

Scope and coming into effect

- (1) These examination regulations come into force on October 1, 2021 after being approved by the Rector. They will be published in the official gazette of the Free Hanseatic City of Bremen. They apply to students who start their studies in the bachelor's degree "Geowissenschaften" (full subject) for the first time from the winter semester 2021/22.
- (2) Students who started their studies in the Bachelor's degree in "Geowissenschaften" (full subject) before the winter semester 2021/22 can switch to these examination regulations upon request. The application has to be submitted to the responsible examination office by

November 15, 2021. The examination board depending on the individual situation will acknowledge already achieved performances.

(3) The examination regulations "Geowissenschaften" (full subject) of November 24, 2011 will expire on September 30, 2024. Students who started their studies in accordance with these examination regulations and do not finish their studies by September 30, 2024, switch to these examination regulations. The examination board decides on the acknowledgement of achievements based on the individual situation.

Approved, Bremen, February 22, 2021
The rector of the University of Bremen

Annexes:

Annex 1: Course plan of the bachelor's degree "Marine Geosciences" (full subject)

Annex 2: Modules and examination requirements

Annex 3: Further types of examinations

Annex 4: Execution of examinations as multiple-choice examinations and "e-exams" (electronic examinations)

	Compulsory Modules											Compulsory Elective Modules	Σ 180 CP				
	Basics in Geosciences, 54 CP					Basics in Mathematics and Science, 36 CP			Practical Professional Competences in Geosciences, 24 CP					Bachelor Thesis, 12 CP	Specializations, 54 CP		
									Field Competence, 6 CP	General Studies, 18 CP							
4. Sem.											BGW-GF1 Geoscientific Field Competences, 6 CP	BGW-GS1 Digital Competences, 6 CP			Depending on the choice of focus, 3 modules of 6 CP each from Appendix 2.5	30	
5. Sem.												BGW-GS2 Professional Competences, 6 CP	BGW-GS3 Interdisciplinary Skills, 6 CP			Depending on the choice of focus, 3 modules of 6 CP each from Appendix 2.5	30
6. Sem.														BGW-BT1 Module Bachelor Thesis (incl. Colloquium), 12 CP		Depending on the choice of focus, 3 modules of 6 CP each from Appendix 2.5	30

CP = Credit Points, Sem. = Semester

Annex 2: Modules and examination requirements

2.1: Bachelor Thesis, Compulsory Module, 12 CP

Ref.-No.	Title of Module	Type of Module P/WP/W	CP	MP/TP/KP	Distribution of CP for TP	PL/SL (Amount)
BGW-BT1	Module Bachelor Thesis (incl. Colloquium)	P	12	MP		PL: 2 SL: 0

Ref.-No. = Reference Number; P: Compulsory Module, WP: Compulsory Elective Module, W: Elective Module; CP = Credit Points; MP = Module Exam, TP = Partial Exam, KP = Combined Exam; PL = Exam Achievement (= graded), SL = Course Achievement (= not graded)

2.2: Principles in Geosciences, Compulsory Modules, 54 CP

Ref.-No.	Title of Module	Type of Module P/WP/W	CP	MP/TP/KP	Distribution of CP for TP	PL/SL (Amount)
BGW-EE1	Structure and Dynamics of the Earth	P	6	KP		PL: 1 SL: 1
BGW-EE2	Evolution of Earth and Life	P	6	MP		PL: 1 SL: 0
BGW-ME1	From Atoms to Minerals - Mineralogy and Crystallography	P	6	MP		PL: 1 SL: 0
BGW-ME2	Structural Geology and Tectonics	P	6	KP		PL: 1 SL: 1
BGW-ME3	Principles and Practice of Sedimentology	P	6	MP		PL: 1 SL: 0
BGW-CP3	Principles of Petrology and Petrography	P	6	TP	Petrology (3 CP)	PL: 1; SL: 0
					Polarized-Light Microscopy (3 CP)	PL: 1; SL: 0
BGW-PP3	Principles of Applied Geophysics	P	6	KP		PL: 2 SL: 0
BGW-MP3	Principles of Applied Geology	P	6	MP		PL: 1 SL: 0
BGW-EE3	Geoscientific Mapping	P	6	MP		PL: 1 SL: 0

Ref.-No. = Reference Number; P: Compulsory Module, WP: Compulsory Elective Module, W: Elective Module; CP = Credit Points; MP = Module Exam, TP = Partial Exam, KP = Combined Exam; PL = Exam Achievement (= graded), SL = Course Achievement (= not graded)

2.3: Principles in Mathematics and Science, Compulsory Modules, 36 CP

Ref.-No.	Title of Module	Type of Module P/WP/W	CP	MP/TP/KP	Distribution of CP for TP	PL/SL (Amount)
BGW-CP1	Chemical Principles of Geosciences I	P	6	MP		PL: 1 SL: 0
BGW-CP2	Chemical Principles of Geosciences II	P	6	KP		PL: 1 SL: 1
BGW-PP1	Physical Principles of Geosciences I	P	6	KP		PL: 2 SL: 1
BGW-PP2	Physical Principles of Geosciences II	P	6	KP		PL: 2 SL: 1
BGW- MP1	Mathematical Principles of Geosciences I	P	6	MP		PL: 1 SL: 0
BGW- MP2	Mathematical Principles of Geosciences II	P	6	MP		PL: 1 SL: 0

Ref.-No. = Reference Number; P: Compulsory Module, WP: Compulsory Elective Module, W: Elective Module; CP = Credit Points; MP = Module Exam, TP = Partial Exam, KP = Combined Exam; PL = Exam Achievement (= graded), SL = Course Achievement (= not graded)

2.4: Practical and Professional Competences in Geosciences, Compulsory Modules, 24 CP

2.4.1 Field Competences, 6 CP

Ref.-No.	Title of Module	Type of Module P/WP/W	CP	MP/TP/KP	Distribution of CP for TP	PL/SL (Amount)
BGW-GF1	Geoscientific Field Competence	P	6	KP		PL: 2 SL: 0

Ref.-No. = Reference Number; P: Compulsory Module, WP: Compulsory Elective Module, W: Elective Module; CP = Credit Points; MP = Module Exam, TP = Partial Exam, KP = Combined Exam; PL = Exam Achievement (= graded), SL = Course Achievement (= not graded)

2.4.2 General Studies, 18 CP

Ref.-No.	Title of Module	Type of Module P/WP/W	CP	MP/TP/KP	Distribution of CP for TP	PL/SL (Amount)
BGW-GS1	Digital Competences	P	6	KP		PL: 0 SL: 1
BGW-GS2	Professional Competences	P	6	MP		PL: 0 SL: 1
BGW-GS3	Interdisciplinary Competences	P	6	KP (LV)		PL: 0 SL: usually 3

Ref.-No. = Reference Number; P: Compulsory Module, WP: Compulsory Elective Module, W: Elective Module; CP = Credit Points; MP = Module Exam, TP = Partial Exam, KP = Combined Exam; PL = Exam Achievement (= graded), SL = Course Achievement (= not graded)

2.5: Specializations, Compulsory Elective Modules, 54 CP

There are three main areas with 18 CP each, i.e. a total of 54 CP to be completed in full; please note the regulations in § 2 paragraph 2 letter b.

2.5.1 Exploration Geophysics, 18 CP

Ref.-No.	Title of Module	Type of Module P/WP/W	CP	MP/TP/KP	Distribution of CP for TP	PL/SL (Amount)
BMG-EG1	Marine Geophysics	WP	6	KP		PL: 2 SL: 0
BMG-EG2	Material Properties & Structural Imaging	WP	6	MP		PL: 1 SL: 0
BMG-EG3	Magnetic Exploration	WP	6	MP		PL: 1 SL: 0

Ref.-No. = Reference Number; P: Compulsory Module, WP: Compulsory Elective Module, W: Elective Module; CP = Credit Points; MP = Module Exam, TP = Partial Exam, KP = Combined Exam; PL = Exam Achievement (= graded), SL = Course Achievement (= not graded)

2.5.2 Geodynamics, 18 CP

Ref.-No.	Title of Module	Type of Module P/WP/W	CP	MP/TP/KP	Distribution of CP for TP	PL/SL (Amount)
BGW-GD1	Geodynamic and Plate Tectonic Principles	WP	6	MP		PL: 1 SL: 0
BGW-GD2	Seismology and Geomagnetism	WP	6	KP		PL: 2

						SL: 0
BGW-GD3	Geodynamic Modelling	WP	6	KP		PL: 2 SL: 0

Ref.-No. = Reference Number; P: Compulsory Module, WP: Compulsory Elective Module, W: Elective Module; CP = Credit Points; MP = Module Exam, TP = Partial Exam, KP = Combined Exam; PL = Exam Achievement (= graded), SL = Course Achievement (= not graded)

2.5.3 Hydrogeology and Engineering Geology, 18 CP

Ref.-No.	Title of Module	Type of Module P/WP/W	CP	MP/TP/KP	Distribution of CP for TP	PL/SL (Amount)
BGW-HI1	Principles of Hydro- and Engineering Geology	WP	6	KP		PL: 3 SL: 1
BGW-HI2	Methods of Hydro- and Engineering Geology	WP	6	KP		PL: 2 SL: 0
BGW-HI3	Regional and Applied Hydrogeology	WP	6	KP		PL: 2 SL: 0

Ref.-No. = Reference Number; P: Compulsory Module, WP: Compulsory Elective Module, W: Elective Module; CP = Credit Points; MP = Module Exam, TP = Partial Exam, KP = Combined Exam; PL = Exam Achievement (= graded), SL = Course Achievement (= not graded)

2.5.4 Crystalline Materials, 18 CP

Ref.-No.	Title of Module	Type of Module P/WP/W	CP	MP/TP/KP	Distribution of CP for TP	PL/SL (Amount)
BGW-KM1	Understanding Crystalline Materials	WP	6	MP		PL: 1 SL: 0
BGW-KM2	Investigating Crystalline Materials	WP	6	MP		PL: 1 SL: 0
BGW-KM3	Processing Crystalline Materials	WP	6	MP		PL: 1 SL: 0

Ref.-No. = Reference Number; P: Compulsory Module, WP: Compulsory Elective Module, W: Elective Module; CP = Credit Points; MP = Module Exam, TP = Partial Exam, KP = Combined Exam; PL = Exam Achievement (= graded), SL = Course Achievement (= not graded)

2.5.5 Petrology and Reservoir Deposits, 18 CP

Ref.-No.	Title of Module	Type of Module P/WP/W	CP	MP/TP/KP	Distribution of CP for TP	PL/SL (Amount)
BGW-PL1	Petrology and Volcanology	WP	6	KP		PL: 3

						SL: 0
BGW-PL2	Geochemistry and Metamorphism	WP	6	MP		PL: 1 SL: 0
BGW-PL3	Magmatic Systems and Reservoir Deposits	WP	6	KP	Reservoir Deposits	PL: 2 SL: 0

Ref.-No. = Reference Number; P: Compulsory Module, WP: Compulsory Elective Module, W: Elective Module; CP = Credit Points; MP = Module Exam, TP = Partial Exam, KP = Combined Exam; PL = Exam Achievement (= graded), SL = Course Achievement (= not graded)

2.5.6 Sedimentology, 18 CP

Ref.-No.	Title of Module	Type of Module P/WP/W	CP	MP/TP/KP	Distribution of CP for TP	PL/SL (Amount)
BGW-SE1	Sedimentology of Coast and Shelf	WP	6	MP		PL: 1 SL: 0
BGW-SE2	Deep Sea Sedimentology	WP	6	KP		PL: 2 SL: 0
BGW-SE3	Sedimentary Processes	WP	6	KP		PL: 2 SL: 0

Ref.-No. = Reference Number; P: Compulsory Module, WP: Compulsory Elective Module, W: Elective Module; CP = Credit Points; MP = Module Exam, TP = Partial Exam, KP = Combined Exam; PL = Exam Achievement (= graded), SL = Course Achievement (= not graded)

2.5.7 Palaeontology, 18 CP

Ref.-No.	Title of Module	Type of Module P/WP/W	CP	MP/TP/KP	Distribution of CP for TP	PL/SL (Amount)
BGW-PA1	Introduction to Paleontology and Paleoecology	WP	6	TP	Introduction to Paleontology, 3 CP	PL: 1 SL: 0
					Introduction to Paleoecology, 3 CP	PL: 1 SL: 0
BGW-PA2	Marine Micropaleontology	WP	6	MP		PL: 1 SL: 0
BGW-PA3	Paleontological Methods	WP	6	KP		PL: 2 SL: 0

Ref.-No. = Reference Number; P: Compulsory Module, WP: Compulsory Elective Module, W: Elective Module; CP = Credit Points; MP = Module Exam, TP = Partial Exam, KP = Combined Exam; PL = Exam Achievement (= graded), SL = Course Achievement (= not graded)

2.5.7 Geochemistry, 18 CP

Ref.-No.	Title of Module	Type of Module P/WP/W	CP	MP/TP/KP	Distribution of CP for TP	PL/SL (Amount)
BGW-GC1	Geochemical Processes and Cycles, Isotope Geochemistry	WP	6	MP		PL: 1 SL: 0
BGW-GC2	Principles and Methods of Organic Geochemistry	WP	6	KP		PL: 2 SL: 0
BGW-GC3	Applied Geochemistry	WP	6	MP		PL: 1 SL: 0

Ref.-No. = Reference Number; P: Compulsory Module, WP: Compulsory Elective Module, W: Elective Module; CP = Credit Points; MP = Module Exam, TP = Partial Exam, KP = Combined Exam; PL = Exam Achievement (= graded), SL = Course Achievement (= not graded)

Annex 3: Further types of examinations

- a) Excursion report: detailed written report for an entire or parts of a field exercise or excursion. There is a deadline for submission. An excursion report can be prepared as a group work
- b) Mapping report: detailed written report on geoscientific mapping with a self-created geological map and, if necessary, several geological profile sections through the mapping area. A mapping report can be prepared as a group work. There is a deadline for submission.
- c) Portfolio in form of processing exercises: written elaboration of several exercises that were given out during the course. The exercises have to be passed at least 50% in order to pass the exam. The performance is summarized in accordance with § 8 Paragraph 8 AT BPO.

Annex 4: Execution of examinations as multiple-choice examinations and "e-exams" (electronic examinations)

§ 1

Execution of examinations as multiple-choice examinations

(1) A multiple-choice examination exists if the candidate's minimum performance required to pass the examination can only be achieved by marking or assigning the correct or incorrect answers. Multiple-choice exams are only permitted if they are suitable to provide evidence that the candidate has mastered the content and methods of the module in the essential contexts and can apply the knowledge and skills acquired. An examiner must prepare a multiple-choice exam in accordance with Section 27 AT BPO. The examiner selects the examination material, the questions and determines the possible answers. Furthermore, he or she creates the evaluation scheme according to paragraph 4 and applies it after the examination. The deduction of points within an examination task in the multiple-answer voting procedure is permitted.

(2) The questions must be clearly understandable, clearly answerable and suitable for determining the knowledge of the candidates to be tested in accordance with paragraph 1, sentence 2. The examiner can also create a pool of equivalent questions. In the exam, students from this pool receive different exam questions to answer. The assignment is done by random selection. The equivalence of the questions must be ensured. The prerequisites for passing the exam must be specified in advance. For each exam

- the selected questions,
- the sample solution and
- the evaluation scheme according to paragraph 4

have to be determined.

(3) The examination is passed if the candidate has achieved at least 50 percent of the total achievable points. If the total average of all candidates of the points achieved in an examination is lower than 50 percent of the total achievable points, the examination is also passed if the number of points achieved by the candidate is not more than 15 Percent below this average. An evaluation scheme that only defines an absolute pass limit is not permitted.

(4) The achievements are to be valued as follows: If the minimum number of achievable points required to pass the examination according to paragraph 3 has been achieved, the grade will be

„Very good“ ,	if at least 75 percent,
„Good“ ,	if at least 50 but less than 75 percent,
„Satisfactory“ ,	if at least 25 but less than 50 percent,
„Sufficient“ ,	if none or less than 25 percent

of the achievable points beyond that were achieved.

(5) If the valuation of multiple-choice examinations reveals a conspicuous accumulation of errors in answering individual examination questions, the examiner will this immediately and before the announcement of the examination results, whether they are defective in terms of the requirements according to paragraph 2 sentence 1.

If the review reveals that individual examination questions are incorrect, these examination questions must be reassessed or not taken into account when determining the examination result. The number of questions to be taken into account for the determination of the result is reduced accordingly. The reduction in the number of examination tasks must not be detrimental to the students. If the number of points attributable to the examination tasks to be eliminated exceeds 20 percent of the total achievable points, the examination must be repeated in total; this also applies to an examination, which is only partly offered as a multiple-choice exam.

(6) If only part of a written exam consists of multiple-choice questions, this annex applies, with the exception of paragraph 5, sentence 5, 2nd half-sentence, only to the multiple-choice answer.

§ 2

Execution of examinations as „E-Exams“

(1) An “e-exam” is an examination that is created, carried out and evaluated (with the exception of the open questions) with the help of a computer. An “e-exam” is permitted if it is capable of proving that the candidate has mastered the content and methods of the module in the essential contexts and can apply the knowledge and skills acquired; if necessary, it can be supplemented by other forms of examination.

(2) The "e-exam" must be carried out in the presence of a professionally competent person (keeper of the minutes). Minutes must be made of the course of the examination, in which at least the names of the person taking the minutes and the examination candidates, the beginning and end of the examination and any special occurrences must be recorded. It must be ensured that the electronic data can be clearly and permanently assigned to the candidates. In accordance with the provisions of § 24 Paragraph 6 AT BPO, the candidates must be given the opportunity to inspect the computer-aided examination and the result they have achieved. The task including the sample solution, the assessment scheme, the individual test results and the minutes must be archived in accordance with the statutory provisions.