



Welcome to our new students in Geowissenschaften and Marine Geosciences

Orientation Week

General information

Bremen, October 6, 2025



Orientierungswoche

2025

Bachelor of Science Geowissenschaften				Start O-Woche 6.10.2025	Ende O-Woche 10.10.2025	Start Vorlesungen 13.10.2025
Montag	10:00	10:30	11:15	11:45	13:30	
	Begrüßung in den Geowissenschaften (Studiendekanin Prof. Dr. Huhn-Frehers, Dr. Ventura)	Begrüßungsvortrag (Studiendekanin Prof. Dr. Huhn-Frehers)	Vorstellung StugA + Vorbesprechung der angebotenen Aktivitäten (StugA GEO)	Das Studium der Geowissenschaften (Dr. Ventura)	Geo-, Campus- & Marum- Führung (StugA GEO)	
	GEO Hörsaal 1550	GEO Hörsaal 1550	GEO Hörsaal 1550	GEO Hörsaal 1550	GEO Foyer + draußen	
Dienstag	09:30 Uhr bis open end					
	Exkursion (Mehr Infos bei der Vorstellung StugA)					
	Treffpunkt wird kommuniziert, sei wetterfest gekleidet!					

Orientierungswoche

2025

Bachelor of Science Geowissenschaften				Start O-Woche 6.10.2025	Ende O-Woche 10.10.2025	Start Vorlesungen 13.10.2025
Mittwoch	9:00	10:00	11:30	12:00	15:00	17:00
	Berufsfelder der Geowissenschaften (Dr. Ventura)	Kurs- und Prüfungsmanagement-System (Lafferty, Dr. Ventura)	Geophysikalische Methoden in der Praxis - ein Einblick (Prof. Dr. Uhlemann)	Berufspraktikum (Prof. Dr. Schulz)	Führung 'Bremer Steine' (Dr. Wolf-Brozio)	Stadtrallye und Kneipentour (StugA GEO)
	GEO Hörsaal 1550	GEO Hörsaal 1550	GEO Hörsaal 1550	GEO Hörsaal 1550	Treffpunkt Domtreppen	Treffpunkt Domtreppen
Donnerstag	9:00	14:00	14:45	15:00 bis open End		
	Vorstellung zentrale Einrichtungen Uni Bremen, z.B. Sprachenzentrum, Bibliothek, Career Center, International Office, Familienservicebüro, Kontaktstelle für Menschen mit Beeinträchtigungen (KIS) usw.	Exkursionen und Geländeübungen, General Studies, Digitale Kompetenzen (Dr. Ventura)	Abschlussdiskussion	bei gutem Wetter: Grillen (StugA GEO)		
	Glashalle + GW2	GEO Hörsaal 1550	GEO Hörsaal 1550	GEO Foyer / draußen		
Freitag	12:00-16:00	Alternative Termine !!!Sicherheits- und Brandschutz- unterweisung!!! Vortrag & Feuerlöschübung Mittwoch, 22.10.2025 9:45 – ca.13:00 Nur auf Deutsch! Keksdose, HS 2010 Dienstag, 14.10.2025 9:45 – ca.13:00 Nur auf Deutsch! Keksdose, HS 2010 Mittwoch, 5.11.2025 7:45 – ca.11:00 Nur auf Englisch! Keksdose, HS 2010				
	MINT-Campus-Rallye (StugA GEO)					
	GEO Foyer und draußen					



Fachbereich 05
Geowissenschaften

2025

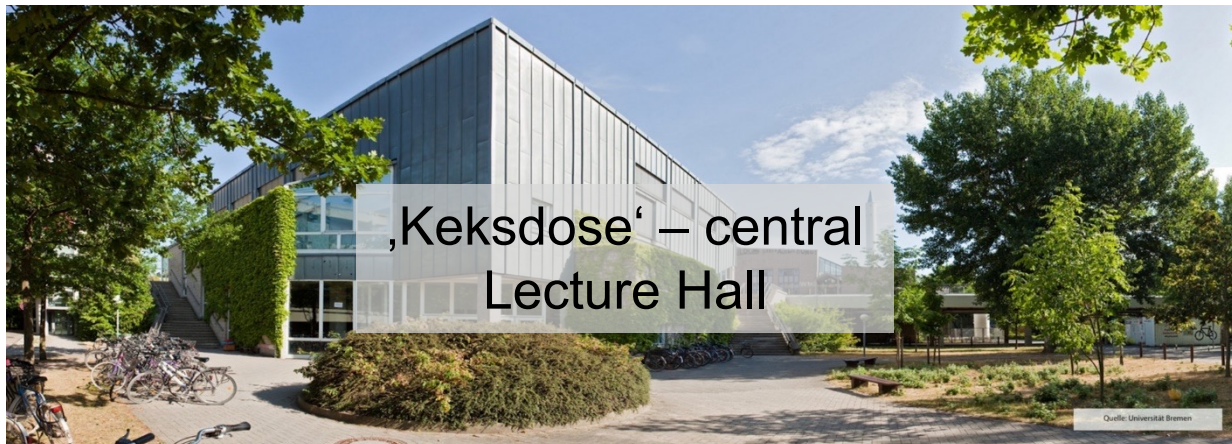
Bachelor of Science Marine Geosciences				O-Week Start October 6, 2025	O-Week End October 10, 2025	Start Lecture Period October 13, 2025
Monday	10.00 am	10.30 am	11.15 am	12.30 am	1.30 pm	
	Welcome to the Geosciences Faculty (Dean of Studies Prof. Dr. Huhn-Frehers, Dr. Ventura)	Welcome talk (Dean of Studies Prof. Dr. Huhn-Frehers)	Presentation StugA + preliminary discussion of the orientation activities (StugA GEO)	The study program Marine Geosciences (Dr. Ventura)	Geo-, Campus- & Marum-Tour (StugA GEO)	
	GEO Lecture Hall 1550	GEO Lecture Hall 1550	GEO Lecture Hall 1550	GEO Foyer + outside	GEO Lecture Hall 1550	
Tuesday	9.30 am until open end					
	Excursion (More information will be provided at the StugA presentation)					
Meeting point will be announced, bring all-weather clothes!						

Orientation Week

2025

Bachelor of Science Marine Geosciences				O-Week Start October 6, 2025	O-Week End October 10, 2025	Start Lecture Period October 13, 2025			
Wednesday	10.30 am	11.30 am	12.30 am	13.00 pm	3.00 pm	5.00 pm			
	Course- and Exam- Management-System (Lafferty, Dr. Ventura)	Geophysical methods in practice - an insight (Prof. Dr. Uhlemann)	Professional Internship (Prof. Dr. Schulz)	Professional fields of marine Geosciences (Dr. Ventura)	Guided tour 'Bremer Steine' (Dr. Bickert)	City rallye and Pub crawl (StugA GEO)			
	GEO Lecture Hall 1550	GEO Lecture Hall 1550	GEO Lecture Hall 1550	GEO Lecture Hall 1550	Meeting point: Cathedral steps	Meeting point: Cathedral steps			
Thursday	9.00		3.00 pm	3.45 pm	3.00 pm until open end				
	Presentation of central facilities at the University of Bremen, e.g. Language Center, Library, Career Center, International Office, Family Service Office, Contact Point for People with Disabilities (KIS), etc.		Field trips + field exercises, GS, Digital Competences (Dr. Ventura)	Concluding discussion	Weather permitting: Barbecue (StugA GEO)				
	Glas Hall + GW2		GEO Lecture Hall 1550	GEO Lecture Hall 1550	outside the GEO Building				
Friday	12.00 am-4.00 pm		Alternative Dates						
	MINT-Campus-Rallye (StugA GEO)					!!!Lab security instructions and fire drill!!! Presentation & Fire Drill outdoor	Wednesday, November 5, 2025 7.45 am – about 11.00 am Only in English!	Tuesday, October 14, 2025 9.45 am – about 1.00 pm Only in German!	Wednesday, October 22, 2025 9.45 am – about 1.00 pm Only in German!
	GEO Foyer and outside						Cooky Box, HS 2010	Cooky Box, HS 2010	Cooky Box, HS 2010

Important places on campus





Useful contacts

ADE

Counseling in Cases of
Discrimination and Conflict

Career Center

Career Orientation and
Counseling

FSB

Family Care Office

KIS

Office for Students with
Disabilities or Chronic
Diseases

PBS

Psychological-Therapeutic
Counseling Center

Student finance and jobs

Studierendenwerk Bremen (Student
Services Bureau)/BAFöG

Social Counseling of Student
Services Bureau Bremen

BAFöG and Social Counseling of
AStA

International Office

ZSB

Central Student Advisory Service

Important Websites

GEO Homepage

Uni Start Portal

Uni Bremen Course Calendar

StudIP



Messages



2023-09-06

**Relaunch of the FB5 Web Portal
in UB Look**

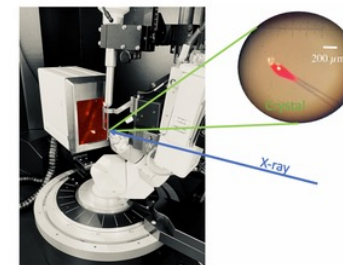
Oops, you may have thought, did I ac-



2023-08-27

**Professorships for Mineralogy
and Environmental Geophysics**

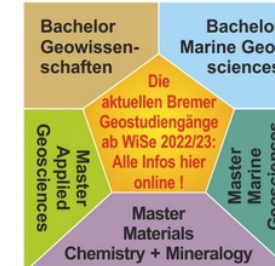
The following position is available in



2023-07-26

**MAPEX Core Facility Workshop
Diffraction**

September 4 - 6, 2023



2023-07-20

**Application for Bachelor Degree
Programs is still possible**

The application window opens again

Information portal GEO-Homepage
www.geo.uni-bremen.de

[more »](#)

The deadline for submitting applicati-
ons is 29 September 2023

[more »](#)

[more »](#)

[more »](#)

All messages

The screenshot displays the top navigation bar of the University of Bremen website with links: **Fachbereich**, **Studium**, **Forschung**, **Organisation**, **Öffentlichkeit**, **Intern**, and **+ Infos für**. Below this, a secondary menu highlights **Studium** and includes links for **Start**, **Bachelorstudiengang Geowissenschaften**, and **Studienaufbau**.

A sidebar on the left lists various study programs: **8 Grundstudien**, **Bachelorstudiengang Geowissenschaften**, **Einführung Studiengang**, **Bewerbung**, **Orientierungswoche**, **Studienaufbau**, **Lehrveranstaltungen**, **Geländeausbildung**, **Berufsberatung**, **Bachelorarbeit**, **Prüfungen**, **Best Thesis Award**, **Bachelorstudiengang Marine Geosciences**, **Masterstudiengang Applied Geosciences**, **Masterstudiengang Marine Geosciences**, and **Masterstudium Materials Chemistry**.

The main content area features three large, semi-transparent boxes with arrows pointing to specific program details:

- Studium Bachelorstudiengang Geowissenschaften Studienaufbau**: Includes a yellow arrow pointing right.
- Studies Bachelor Marine Geosciences Program structure**: Includes a grey arrow pointing right.

On the right side, there are two sections:

- Downloads**: Lists several documents for download, including "Studienaufbau pdf-Datei (25.17 KB)", "Studienverlauf detailliert pdf-Datei (102.95 KB)", "Modulhandbuch, Stand 02.20 pdf-Datei (3.43 MB)", "Formblatt Verhaltenskodex pdf-Datei (83.17 KB)", "Formblatt Code of Conduct (Englisch) pdf-Datei (82.52 KB)", and "Formular Schwerpunktfachwahl docx-Datei (25.85 KB)".
- Kontakt**: Features a photo of Dr. Ulrike Wolf-Brozio and contact information: "Studien- und Praxisbüro", "Dr. Ulrike Wolf-Brozio", "GEO 1330", "Tel.: +49 421 218 - 65004", and "wolfbroz@uni-bremen.de".



Information Portal GEO-Homepage

Course list & underlying module handbook

Bachelorstudiengang
Geowissenschaften

Einführung
Studiengang

Bewerbung

Orientierungswoche

Studienaufbau

Lehrveranstaltungen

Geländeausbildung

Berufspraktikum

Bachelorarbeit

Prüfungen

Best Thesis Award

Bachelorstudiengang
Marine Geosciences

Masterstudiengang
Applied Geosciences

Masterstudiengang
Marine Geosciences

Masterstudium
Materials Chemistry
and Mineralogy

Nebenfach
Geowissenschaften

Studium International

Promotion in den
Geowissenschaften

Bachelor Geowissenschaften

1. Studienjahr

Wintersemester

05-BGW-EE1	Aufbau und Dynamik der Erde			6 CP 6 SWS
05-BGW-EE1-1	Dynamik der Erde		V	2 CP 2 SWS
05-BGW-EE1-2	Gesteinsbestimmung		Ü	2 CP 2 SWS
05-BGW-EE1-3	Einführung in die Geländearbeit		GÜ	2 CP 2 SWS

05-BGW-ME1	Vom Atom zum Mineral - Mineralogie und Kristallographie			6 CP 4 SWS
05-BGW-ME1-1	Vom Atom zum Mineral - Mineralogie und Kristallographie: Vorlesung		V	3 CP 2 SWS
05-BGW-ME1-2	Vom Atom zum Mineral - Mineralogie und Kristallographie: Übung		Ü	3 CP 2 SWS

05-BGW-CP1	Chemische Grundlagen der Geowissenschaften I			6 CP 6 SWS
02-03-1-ALC-13	Allgemeine Chemie für Biologen und Geowissenschaftler		V	4 CP 4 SWS
02-03-1-ALC-8	Übungen zur Allgemeinen Chemie für Geowissenschaftler		Ü	2 CP 2 SWS

05-BGW-PP1	Physikalische Grundlagen der Geowissenschaften I			6 CP 5 SWS
01-Phy-BA-PhyN-V/-Ü/G-P/-EPhyN	Physik für Naturwissenschaftler*innen I		V+Ü	4 CP 3 SWS
05-BGW-PP1-1	Physik der Erde I		V	2 CP 2 SWS

05-BGW-MP1	Mathematische Grundlagen der Geowissenschaften I			6 CP 4 SWS
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Sommersemester
 Kursprache deutsch
 Kursprache englisch

Semesterzeiten

Veranstaltungszeit
Wintersemester
16. Okt. 2023 - 02. Feb. 2024

Sommersemester
02. Apr. 2024 - 05. Juli 2024

Weihnachtsferien

23. Dez. 2023 - 05. Jan. 2024

Osterferien

keine Osterferien

Feiertage

03.10., 31.10., 25. + 26.12.,
01.01., 29.03., 31.03.+01.04.,
01.05., 09.05., 19.+20.05.

Stundenplan

[Kursanmeldung in StudIP](#)

[Raumbelegungsplan GEO](#)

[Stundenplan WS 2023/24](#)

Kontakt

Studien- und Praxisbüro
Dr. Ulrike Wolf-Brozio
GEO 1330
Tel.: +49 421 218 - 65004

Uni-Start-Portal

Welcome

We are very happy to welcome you to the University of Bremen and to the Uni-Start Portal! The Uni-Start-Portal is especially designed for freshmen and is intended to help you find your way around the University during the introductory phase. You will find comprehensive information about the orientation week and the campus, including helpful tips for creating your timetable and a German dictionary of the vocabulary commonly used at the university. Please do not hesitate to contact us, if you have any further questions.

www.uni-bremen.de/uni-start-portal/



© Michael Ihle/Universität Bremen

Contact

Central Student Advisory Service

Telephone advisory hours:
Mon, Tue, Thu 9-12 a.m., Wed 2-4 p.m.

+49 (0) 421 218-61160

Online Counseling: [book a date](#)


zsb@uni-bremen.de 
www.uni-bremen.de/zsb



The screenshot shows the homepage of the University of Bremen. The browser's address bar displays <https://www.uni-bremen.de>. The website's navigation bar includes links for 'Universität', 'Studium', 'Forschung', and 'Kooperationen'. A yellow arrow points to the 'Direkt zu' dropdown menu. A large yellow rectangular overlay is centered on the page, containing the text www.uni-bremen.de and 'Quicklinks' below it. At the bottom of the page, there is a section titled 'Aktuelles' with three small image thumbnails: a person speaking into a microphone, a sign for 'Sportbad Uni', and hands working with colorful blocks.

Startseite × FBS Bachelorstudium Geowiss... × FBS Studienaufbau × +

https://www.uni-bremen.de 90% Search

Most Visited marum - home Home - Geowissensch... marum - IT Education - Geoscienc... FB Geowissenschaften Stellenausschreibungen Stellenangebote des G...

DE EN DGS Intern Sitemap

Universität Bremen

Universität Studium Forschung Kooperationen Infos für Direkt zu

www.uni-bremen.de

Quicklinks

© Ertan_Göklü

Aktuelles

Sportbad Uni



Universität

Studium

Forschung

Kooperationen

Infos für ▼

Direkt zu ▼



Studium > Starten & Studieren > Veranstaltungsverzeichnis

Nach Lehrveranstaltungen suchen >

Lehrveranstaltungen WiSe 2023/2024

Semesterauswahl

Semesterbeginn: 01. Okt

Vorlesungsbeginn: 16. Okt

Veranstaltungsfrei: 23.12.2

www.uni-bremen.de
Quicklinks
Course calendar

Fachergänzende Studien

[Studium Generale / interdisziplinäre Angebote aus den Fachbereichen / Sachkompetenzen](#) (71)

[Schlüsselkompetenzen](#) (149)

[Sprachenzentrum der Hochschulen im Land Bremen](#) (180)

[Studium und Beruf](#) (36)

Fachbereich 01: Physik/Elektrotechnik

[General Studies - FB 01 Physik/Elektrotechnik](#) (3)

[Communication and Information Technology M.Sc.](#) (27)



STUD.IP Universität Bremen

Herzlich willkommen!

Benutzername:

wolfbroz

Passwort:

.....

☒ Anmelden

[Passwort vergessen](#)

Course management portal StudIP

Communication tool teachers/students

- course registration
- time schedule tool
- up- & download function
- file folders etc.



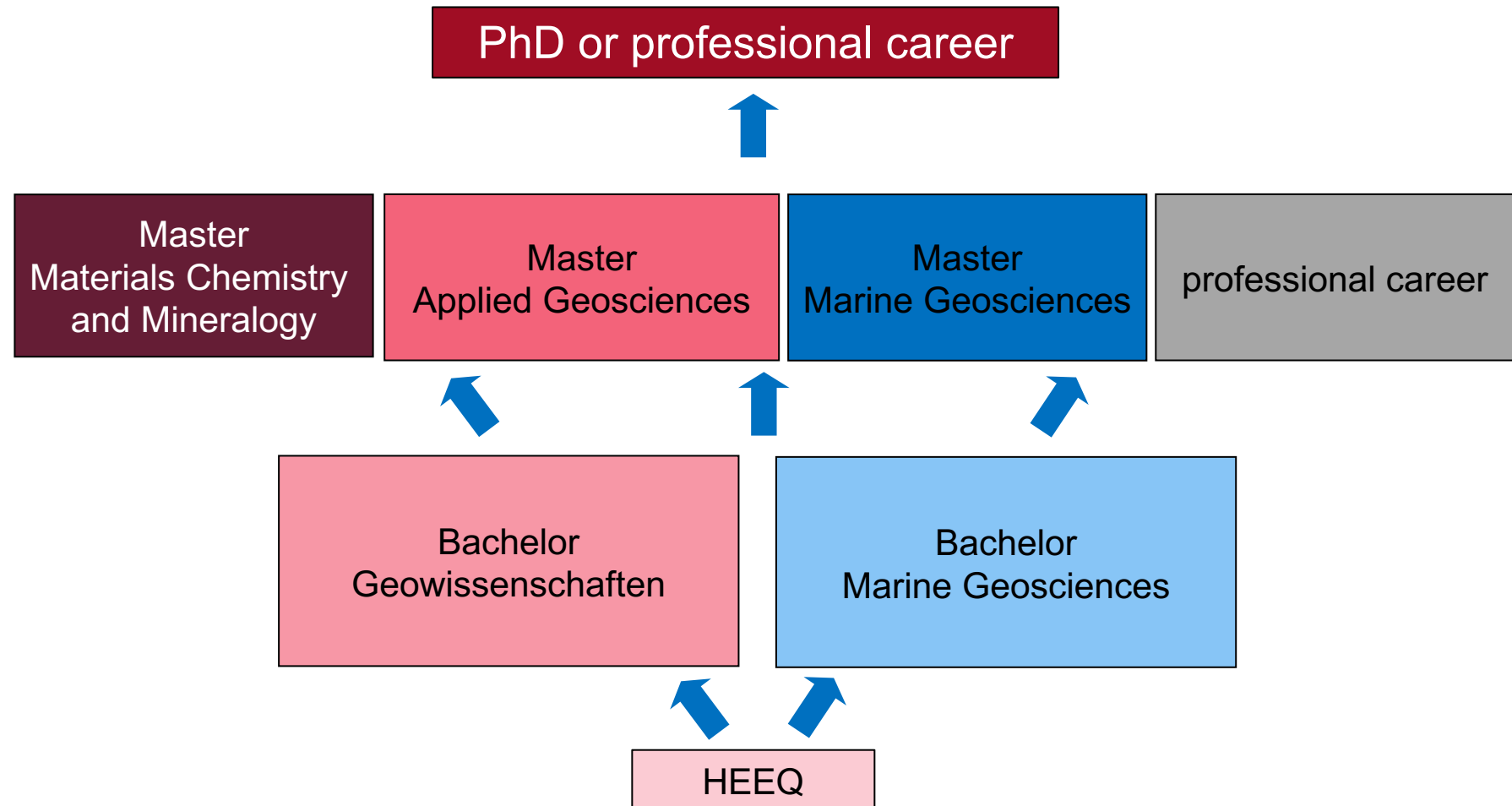
Bachelor Marine Geosciences

Introduction to Studies
2025/26

Dr. Barbara Ventura
Bremen, October 6, 2025



Geoscientific education pathways at University of Bremen





B.Sc. Marine Geosciences

3-year undergraduate, vocational study program

3 areas of specialization (3 out of 10 major subjects)

language of instruction: English

degree: Bachelor of Science (B.Sc.) Marine Geosciences

Academic year

1st semester = winter semester (October 1 – March 31)

2nd semester = summer semester (April 1 – September 30)

Lecture Period 2025/26 (14 weeks/semester)

winter semester (October 13, 2025 – January 30, 2026)

winter break (December 22, 2025 – January 2, 2026)

summer semester (April 7 – July 10, 2026)

Exams Period

within semester: last teaching week + 1st week lecture-free period

exams repetitions: 1st + 2nd teaching week of semester

No „bridging days“! University is closed on public holidays and Sundays.



Study progress: credits and grades

Study Structure

the study program is divided into modules

modules are subdivided into courses

Study Plan/progression Plan

contains all modules of the study program

is structured according to semesters

is based on the standard period of study

Module Handbook

contains all module descriptions

shows contents, competences, forms and number of examinations

Course details on www.geo.uni-bremen.de

Modules, Course Types, Credit Points

Introduction to Earth Dynamics	
Earth Dynamics	L 2
Identification of Rocks	E 2
Introduction to Geoscientific Fieldwork	F 2
	6 SWS

Introduction to Earth Dynamics =
module title

Earth Dynamics = *course title*

L = lecture

E = exercise

F = field trip

2 = *amount of credits*

SWS = teaching hours per week

Modules, Course Types, Credit Points

Credit Point (CP)

= a measurement tool for the workload

1 CP = 30 h (attendance time courses + self-learning time
+ exam preparation time)

30 CP = 900 h (1 semester), i.e. approx. 8 h / working day

module sizes: 6 or 12 CP: 180 or 360 h working time

Bachelor's degree with 3 years standard period of study:
6 semesters à 30 CP = **180 CP**



Modules, Course Types, Credit Points

How to gain Credit Points

You start with a target of 180 points.

For each successfully completed module from the study plan you earn points.

If you have collected 180 points according to the study plan, the Bachelor's degree is completed.

Grading System

Each passed exam counts for the final grade (in the ratio of the CP number to 180 CP).

Passed means: grade is better than or equal to 4.0

Failed: course must be passed within the next 4 semesters.

Universität Bremen			
Prozent	Note	Interpretation	
100 – 98	1.0	ausgezeichnet excellent	
97 – 95	1.0	sehr gut	very good
94 – 90	1.3	sehr gut	very good
89 – 85	1.7	gut good	
84 – 80	2.0	gut good	
79 – 75	2.3	gut good	
74 – 70	2.7	befriedigend satisfactory	
69 – 65	3.0	befriedigend satisfactory	
64 – 60	3.3	befriedigend satisfactory	
59 – 55	3.7	ausreichend sufficient	
54 – 50	4.0	ausreichend sufficient	
< 50		nicht ausreichend	fail

Grade Weighting

Each module you pass will be submitted with the grade in PaBo (Prüfungsamt Bremen online).

Each examination counts towards your final grade:

up to the 3rd semester: single weighted grades according to CP number

4th - 6th semester: double weighted grades according to CP number

! Examination regulations !

Curriculum of Studies: Modules and Courses



BSc Marine Geosciences University of Bremen, FB 5

	6 CP	6 CP	6 CP	6 CP	6 CP
1. Year WiSe	Introduction Earth Dynamics Earth dynamics Rock identification Field trip 1: Intro	From Atoms to Minerals From atoms to minerals - L From atoms to minerals - E	Chemical Principles I General chemistry General chemistry exercise	Physical Principles I Physics for natural sciences I Physics of the solid Earth I	Mathematical Principles I Mathematical principles for geosciences I
1. Year SuSe	Evolution of Earth and Life Earth and life history Basics biology Introduction to fossils	Struct Geology + Tectonics Structural geology - L, E, F Geological maps Regional geology	Chemical Principles II Introduction to geochemistry General chemistry lab	Physical Principles II Physics for natural sciences II Physics of the solid Earth II	Mathematical Principles II Mathematical principles for geosciences II
2. Year WiSe	Ph, Ch, Biol Oceanography Climate and Ocean	Marine Geol. & Sedimentol. Intro marine geology Ship-based survey sediments Principles of sedimentology	Rock-forming Processes Principles of petrology Polar. light microscopy	Princ Applied Geophysics Fund applied geophysics Geophysical field exercise	Sediment Core Project Sediment core project Stratigraphy mar. sediments
2. Year SuSe	Core field MarGeo 1-1 Core fields, choose 3 out of 10*, some are taught in German (DE)	Core field MarGeo 2-1	Core field MarGeo 3-1	Geoscientific Competences 2x 7 day field camps	General Studies 1 Digital competences e.g. GIS, GMT, Matlab, etc.
3. Year WiSe	Core field MarGeo 1-2 Core fields (continue)	Core field MarGeo 2-2	Core field MarGeo 3-2	General Studies 2 Professional competences 4 week internship	General Studies 3 Interdisciplinary skills e.g. soft skills, language, economics, etc.
3. Year SuSe	Core field MarGe 1-3 Core fields (continue)	Core field MarGeo 2-3	Core field MarGeo 3-3	Bachelor thesis + defense	

*10 core fields are offered: Exploration Geophysics (EN), Geochemistry (EN), Geodynamics (EN), Geoinformatics (EN), Hydro- + Ingenieurgeologie (DE), Kristalline Materialien (DE), Paleoceanography (EN), Paleontology (EN), Petrologie und Lagerstättenkunde (DE), Sedimentology (EN)



B.Sc. Marine Geosciences (BMG) - starting WiSe 2021/22

Principles	Evolutionary Processes of Earth and Ocean		Materials and Structures of the Earth		Chemical Principles of Geosciences		Physical Principles of Geosciences		Mathematical Principles of Geosciences	
Language	English/German		English/German		English/German		English/German		English/German	
Modules Sem. 1	Introduction to Earth Dynamics		From Atoms to Minerals - Mineralogy and Crystallography		Chemical Principles of Geosciences I		Physical Principles of Geosciences I		Mathematical Principles of Geosciences I	
Title, Form, CP Lect. 1	Earth Dynamics	L 2	From Atoms to Minerals	L+E 6	General Chemistry for Geoscientists	L 4	Physics f. Natural Science I	L+E+P 4	Fundamentals of Mathematical for Geosciences I	L+E 6
Title, Form, CP Lect. 2	Identification of Rocks	E 2			General Chemistry for Geoscientists Exercise	E 2	Physics of the Solid Earth I	L 2		
Title, Form, CP Lect. 3	Introduction to Geoscientific Fieldwork	F 2								
	6 SWS		4 SWS		6 SWS		6 SWS		4 SWS	
Modules Sem. 2	Evolution of Earth and Life		Structural Geology and Tectonics		Chemical Principles of Geosciences II		Physical Principles of Geosciences II		Mathematical Principles of Geosciences II	
Title, Form, CP Lect. 1	Earth and Life History	L 2	Structural Geology	L+F 3	Introduction to Geochemistry	L 4	Physics for Natural Science II	L+E+P 4	Fundamentals of Mathematics for Geosciences II	L+E 6
Title, Form, CP Lect. 2	Basics of Biology	L 3	Regional Geology	L 1	General Chemistry Lab Practice	E 2	Physics of the Solid Earth II	L 2	(Huhn, Kasemann)	
Title, Form, CP Lect. 3	Introduction to Fossils	E 1	Geological Maps	E 2						
	5 SWS		6 SWS		6 SWS		6 SWS		4 SWS	
Modules Sem. 3	Physical, Chemical and Biological Oceanography		Geology and Stratigraphy of Marine Sediments		Rock-Forming Processes		Principles of Applied Geophysics		Multidisciplinary Sediment Core Project	
Title, Form, CP Lect. 1	Climate and Ocean	L+E 6	Introduction to Marine Geology	L+E+S 1	Principles of Petrology	L+E 3	Fundamentals of Applied Geophysics	L+E 3	Multidisciplinary Sediment Core Project	PE 6
Title, Form, CP Lect. 2			Ship-based Survey for Marine Sediments	F 1	Polarized-light Microscopy	L+E 3	Geophysical Field Exercise	F 3		
Title, Form, CP Lect. 3			Stratigraphy in Marine Sediments	L+E 4						
	5 SWS		5 SWS		5 SWS		4 SWS		4 SWS	

B.Sc. Marine Geosciences – 1st Year of Study

- Maths and Science Basics: Mathematics, Physics, Chemistry
(2 modules each)

- Geoscientific Basics

Introduction to Earth Dynamics

From Atoms to Minerals - Mineralogy and Crystallography

Evolution of Earth and Life

Structural Geology and Tectonics

- Practical and professional competences

Digital Competences, General Studies



Minor Subjects in Maths and Science

Chemical Principles of Geosciences I		Physical Principles of Geosciences I		Mathematical Principles of Geosciences I	
General Chemistry for Geoscientists	L 4	Physics f. Natural Science I	L+E+P 4	Fundamentals of Mathematics for Geosciences I	L+E 6
General Chemistry for Geoscientists Exercise	E 2	Physics of the Solid Earth I	L 2		
6 SWS		6 SWS		4 SWS	
Chemical Principles of Geosciences II		Physical Principles of Geosciences II		Mathematical Principles of Geosciences II	
Introduction to Geochemistry	L 4	Physics for Natural Science II	L+E+P 4	Fundamentals of Mathematics for Geosciences II	L+E 6
General Chemistry Lab Practice	E 2	Physics of the Solid Earth II	L 2		
6 SWS		6 SWS		4 SWS	



Geoscientific Basics

Introduction to Earth Dynamics		From Atoms to Minerals - Mineralogy and Crystallography	
Earth Dynamics	L 2	From Atoms to Minerals	L+E 6
Identification of Rocks	E 2		
Introduction to Geoscientific Fieldwork	F 2		
6 SWS		4 SWS	
Evolution of Earth and Life		Structural Geology and Tectonics	
Earth and Life History	L 2	Structural Geology	L+F 3
Basics of Biology	L 3	Regional Geology	L 1
Introduction to Fossils	E 1	Geological Maps	E 2
5 SWS		6 SWS	

B.Sc. Marine Geosciences – 2nd Year of Study

- Geoscientific Basics (3rd & 4th semester)
oceanography, geology and stratigraphy of marine sediments,
geophysics, petrology, sediment core project (4th sem.)
- Geoscientific Major Subjects (from 4th semester onwards)
choice of 3 out of 10 major subjects
- Practical and Professional Competences
Digital Competences, General Studies, Field Competences

B.Sc. Marine Geosciences – 3rd Year of Study

- Geoscientific Major Subjects (follow from 4th sem.)

Exploration Geophysics (En), Geochemistry (En), Geodynamics (En), Geoinformatics (En), Hydro- und Ingenieurgeologie (D), Kristalline Materialien (D), Paleoceanography (En), Paleontology (En), Petrologie und Lagerstättenkunde (D), Sedimentology (En)

- Practical and Professional Competences

professional internship, General Studies

- Bachelor Thesis (9 weeks)

1st Semester: Course Details



Bachelor Marine Geosciences

1st academic year

 Summer term
 German course language
 English course language

Fachbereich 05
Geowissenschaften

Winter term

05-BMG-EE1	Introduction to Earth Dynamics			6 CP 6 SWS
05-BMG-EE1-1	Earth Dynamics		L	2 CP 2 SWS
05-BMG-EE1-2	Identification of Rocks		E	2 CP 2 SWS
05-BMG-EE1-3	Introduction to Geoscientific Fieldwork		F	2 CP 2 SWS
05-BMG-ME1	From Atoms to Minerals - Mineralogy and Crystallography			6 CP 4 SWS
05-BMG-ME1-1	From Atoms to Minerals - Mineralogy and Crystallography: Lecture		L	3 CP 2 SWS
05-BMG-ME1-2	From Atoms to Minerals - Mineralogy and Crystallography: Exercise		E	3 CP 2 SWS
05-BMG-CP1	Chemical Principles of Geosciences I			6 CP 6 SWS
05-BMG-CP1-1	General Chemistry for Geoscientists		L	4 CP 4 SWS
05-BMG-CP1-2	General Chemistry for Geoscientists – Exercises		E	2 CP 2 SWS
05-BMG-PP1	Physical Principles of Geosciences I			6 CP 5 SWS
01-00-04-PhyNMG2-V/ -Ü,				
01-01-	Physics for Natural Science I		L+E+P4	CP 3 SWS
05-BMG-PP1-1	Physics of the Solid Earth I		L	2 CP 2 SWS
05-BMG-MP1	Mathematical Principles of Geosciences I			6 CP 4 SWS
05-BMG-MP1-1	Fundamentals of Mathematics for Geosciences I		L+E	6 CP 4 SWS



Physics for Natural Science I

Lecturers: Kathrin Sebald, Thorsten Warneke

Content:

This lecture teaches the basics in physics, which are needed for the understanding of many geoscientific processes. Within the framework of the "Physics for Natural Scientists I" course, the physical foundations of classical mechanics and optics will be taught. The lecture is accompanied by tutorials, where problem sets are discussed. The course is complemented by 3 physics lab experiments (2 mechanics, 1 optics) as part of "Physics Practicals I".

Mechanics:

distance, velocity, acceleration, and the relationships between them, circular motion, Newton's laws, conservation of momentum and angular momentum, forces, work and energy, energy conservation, Newton's law of gravitation, accelerated reference frames, inertial forces, rigid body, hydrostatics and hydrodynamics, vibrations and waves

Optics:

interference, diffraction, scattering, refraction

Competences:

- 1) Understanding of the main concepts of classical mechanics and optics
- 2) Knowledge of the main physics laws in classical mechanics and optics
- 3) Ability to solve problems (exercise sheets)
- 4) Apply the physical principles of mechanics and optics within 3 experiments as part of the physics lab experiments.

Assessment:

Written exam, Exercise sheets, Lab experiment protocols

Exam Form:

written exam

Physics for Natural Scientists

- lecture, exercise + laboratory course
- partly together with students from other study programs
- location GEO- & NW1-building
- lecture on Wednesday 12 am – 2 pm (NW1 S1270)
- one-hour exercise in groups on Wednesday 4 – 5 pm + 5 – 6 pm (GEO 1490)
- practical training on Thursday 11 am – 2 pm (NW1, 3 experiments)
- introduction to laboratory course (L), Friday, first 3 weeks,
2 – 4 pm (NW1 S1260)



Physics for Natural Science

Lecture

01-Phy-BA-PhyNMG-V **Physics for Natural Science I**

Exercises

01-Phy-BA-PhyNMG-Ü **Exercises for Physics for Natural Science I**

Laboratory Course

01-Phy-BA-PhyNMG-P **Laboratory Course for Physics for Natural Science I**
with **Preparatory Course** 01-PHY-BA-EPhyNMG-V (first 3 weeks)



Universität
Bremen

The screenshot shows a web browser with multiple tabs. The active tab is titled 'Physikalische Praktika' and displays the URL 'https://www.uni-bremen.de/physika/'. The browser's address bar shows the full URL. The website header includes the University of Bremen logo and the text 'Physikalische Praktika'. Below the header is a navigation menu with links: 'Versuche', 'Termine', 'Schülerlabor', 'Allg. Infos', and 'Wir über uns'. A search icon is also present. The main content area features a large yellow box with the URL 'https://www.uni-bremen.de/physika/' and the text 'Instructions for experiments and information registration in StudIP'. Below this, a grey box contains the text 'Hier finden Sie alle notwendigen Informationen, die die physikalischen Praktika betreffen.' and '© C.Windzio / PHYSIKA'. At the bottom, a light blue box titled 'Anmeldung zum Praktikum' states: 'Die Anmeldung zum physikalischen Praktikum und das Eintragen in Ihre Praktikumsgruppe erfolgt über Stud.IP' with an external link icon.

Veranstungsverzeichnis x FBS Lehrveranstaltungen x Physikalische Praktika und Sch... x Physikalische Praktika x +

https://www.uni-bremen.de/physika/ 90% Search

Most Visited marum - home Home - Geowissensch... marum - IT Education - Geoscienc... FB Geowissenschaften Stellenausschreibungen Stellenangebote des G...

DGS Intern Sitemap

PHYSIKA Physikalische Praktika der Universität Bremen

Physikalische Praktika

Versuche Termine Schülerlabor Allg. Infos Wir über uns

Universität Bremen > Physikalische Praktika

<https://www.uni-bremen.de/physika/>
Instructions for experiments and information
registration in StudIP

Hier finden Sie alle notwendigen Informationen, die die physikalischen Praktika betreffen.

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Anmeldung zum Praktikum

Die Anmeldung zum physikalischen Praktikum und das Eintragen in Ihre Praktikumsgruppe erfolgt über Stud.IP



Universität
Bremen

Physikalische Praktika und Sch... x Physikalische Praktika x (!) Praktikum: Praktikum zu Phy x +

https://elearning.uni-bremen.de/dispatch.php/course/details/?send_from... Search

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STUD.IP Universität Bremen Veranstaltungen suchen

Home 5 Refresh Mail 1 People Calendar 42 Search Tools Groups People

ZMML

Praktikum: Praktikum zu Physik für Naturwissenschaftler*innen (Geo) - Details



Aktionen

- Drucken
- Zugang zur Veranstaltung



Die Anmeldung zu dieser Veranstaltung folgt speziellen Regeln. Lesen Sie den Hinweistext.

Allgemeine Informationen

Untertitel	für Geowissenschaften (VF)
Veranstaltungsnummer	01-01-04-PhvNG-P

Laboratory course for Physics for Natural Scientists".
Registration rules:

the following condition must be fulfilled for registration:
Course of study is Marine Geosciences, B. Sc.

Interpretersprache(n)

Laboratory course for Physics for Natural Scientists

Lehrende

PD Dr. Kathrin Sebold

Veranstaltungsort / Veranstaltungszeiten

NW1, S3040

Studienbereiche

Fachbereich 05: Geowissenschaften > Geowissenschaften, B. Sc. > 05-BA-1-N2 Physik I



05-BMG-CP1, Chemical Principles of Geosciences I

Lecture:

05-BMG-CP1-1 **General Chemistry for Geoscientists**

Dates:

weekly on Monday 8 – 10 am & Wednesday 10 – 12 am, GEO 1550

Teacher: Mohammad Mangir Murshed

Exercise

05-BMG-CP1-2 **General Chemistry for Geoscientists - Exercise**

Dates:

weekly on Monday 10 – 12 am, GEO 1550

Teacher: NN



Most Important!

Lab Security and Safety Instruction for first semester students including Fire Drill

Date:

Wednesday, November 5, 7:45 am – 11 am, HS 2010 (Keksdose, big lecture hall) + outside (behind SFG) fire drill (in English)

Alternative dates:

Wednesday, October 22, 9:45 am – 1:00 pm, HS 2010 (Keksdose, big lecture hall) + outside (behind SFG) fire drill (in German)

Tuesday, October 14, 9:45 am – 1:00 pm, HS 2010 (Keksdose, big lecture hall) + outside (behind SFG) fire drill (in German)

JOINING is ABSOLUTELY NECESSARY (otherwise no access to the labs)

please register in StudIP TODAY!



Professionalization Area Practical & Professional Competences

Professional Internship

Field Competences

Digital Competences

General Studies - Interdisciplinary Competences

Bremen, October 8. & 9, 2025

Practical Professional Competences in Geosciences			
German/English		German/English	
Geoscientific Field Competence		Digital Competences	
12 Days in the Field (2 one-week Field Exercises in Central Europe)	F 6	3 three-day Computercourses in Programming (Excel, Matlab, Python, QGIS) + 3 one-day Blockcourses in Drawing Programs (Corel, GMT, Grapher/Surfer)	BC 6
6 SWS		6 SWS	
Professional Competences		Interdisciplinary Skills	
Four-Week Professional Internship	P 6	e.g. Language, Economy or Law Courses or another Professional Internship, Tutorial	GS 6
6 SWS		6 SWS	

Professional Internship: key facts

- mandatory module
- duration at least 4 weeks
- individual choice of internship employer
- semester assignment (5th semester) not fixed
- individual scheduling
- achievement: internship certificate and report (no grade)
- extension option/ second internship: see General Studies

Professional Internship: Which? Where?

What are my interests?

core fields
professional area
experience abroad

General conditions

financial situation
mobility
individual circumstances

Finding the right address?

using contacts/networking
internet search
databases
professional associations

Professional Internship: formalities

What do I have to do before and afterwards?

- agree with the internship advisor before starting the internship
- organize internship contract
- afterwards: internship certificate and report
- follow the guidelines
www.geo.uni-bremen.de/page.php?pageid=1062&langid=EN

Internship Abroad

Potential benefits

- enhance your professional qualification
- deepen your language skills
- gain transcultural competence

→ special scholarships + consulting organizations

2 to 6-month break of your studies possible



Exkursion: Modul Exkursionen x Praktika im Ausland x

arten-studieren/studium-international/praktika-im-ausland/ 90% Search

Most Visited marum - home Home - Geowissensch... marum - IT Education - Geoscienc... FB Geowissenschaften Stellenausschreibungen Stellenangebote des G...

DE EN DGS Intern Sitemap

Universität Bremen

Universität Studium Forschung Kooperationen Infos für Direkt

Universität Bremen > Studium > Starten & Studieren > Studium international > Praktika im Ausland

Praktika im Ausland

Auslandspraktika sind mehr als nur...

<https://www.uni-bremen.de/en/studies/starting-your-studies/international-studies/internships-abroad>

Beratung

Sprechzeiten im Beratungs- und Servicebüro des International Office:

VWG 0580
Montag, Dienstag und Donnerstag:
9.00 - 12.00 Uhr
Mittwoch:
14.00 - 16.00 Uhr

Kontakt

Mathias Bücken
Tel.: +49 421 218-60374

Internship Approach

- search for potential internship employers in good time
- send applications plenty in advance (1/2 year)
- Recommendation: Do not start the internship before the end of the 3rd semester
- keep an eye on your study schedule

- plan **internship abroad** even earlier: at least 1 year in advance
- pay attention to funding deadlines
- don't miss the information events

Internship Advisor

Prof. Dr. Michael Schulz

E-Mail: internship-fb5@uni-bremen.de

Homepage Internship

**(www.geo.uni-bremen.de, Studies, Bachelor Marine Geosciences,
Professional Internship):**

www.geo.uni-bremen.de/page.php?pageid=1062&langid=EN



Professionalization Area Practical & Professional Competences

Professional Internship
Field Competences
Digital Competences
Interdisciplinary Competences

Bremen, October 9, 2025

Practical Professional Competences in Geosciences			
German/English		German/English	
Geoscientific Field Competence		Digital Competences	
12 Days in the Field (2 one-week Field Exercises in Central Europe)	F 6	4 five-day computer courses Programming software (Excel, Matlab, QGIS, Python) + 3 block courses in graphic design software (Corel, GMT, ParaView/Blender)	BC 6
6 SWS		6 SWS	
Professional Competences		Interdisciplinary Skills	
Four-Week Professional Internship	P 6	e.g. Language, Economy or Law Courses or another Professional Internship, Tutorial	GS 6
6 SWS		6 SWS	

mandatory modules, partly with elective options

semester assignment (4th & 5th FS) not fixed

partially semester overlapping courses

partly individual scheduling

geoscientific core
competence

Field Work



Working in the field means...

Get to know
each other

See impressive
sceneries

Teambuilding

Intercultural
skills

Easy learning
by touching,
grasping and
looking

Experts say

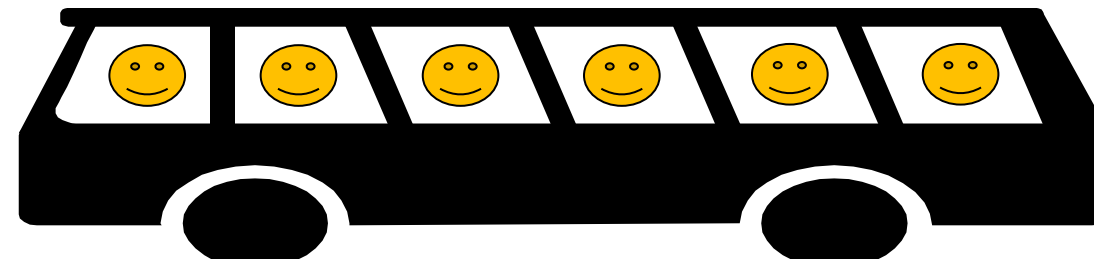
- Graduates must: 'Address' rocks
- Determine bedding conditions
- interpret landscapes geologically
- be able to create geological maps

... and last but not least (social skills)

- be 'weatherproof'
- work and live in a team
- be able to work independently

Field-training

- necessary and important for career
- costs money
- takes place in the lecture-free time





Precaution

Field exercises require to be able to move for hours in open terrain away from restrooms, fast food stores, cell phone networks.



It is important to keep the following in mind:

- appropriate clothing (sun protection, rain protection, sturdy shoes)
- food (self-supply, especially drinks!)
- equipment (field book, hammer, magnifying glass, possibly geological compass, hydrochloric acid, backpack or similar)
- Emergency precautions (wound disinfection set, tick tongs)
- Health precaution (tick vaccination! 6 months before!, first aid course)

Field-Training in Bachelor Marine Geosciences



module ‚Field Competences‘
other field exercises
information/websites
timing of studies
costs

Module ‚Geoscientific Field Competence‘

mostly in lecture-free period of the 4th semester

offer: 2 to 4 field exercises per year

each: 7-8 days duration

destination: mostly in Germany

announcement of destinations in Nov.

registration via StudIP

selection of participants in December

costs per week: 30-400 €

Geoscientific Field Competence	
12 Days in the Field (2 one-week Field Exercises in Central Europe)	F 6
	6 SWS

05-BMG-EE1	Introduction to Earth Dynamics			6 CP 6 SWS
05-BMG-EE1-1	Earth Dynamics		L	2 CP 2 SWS
05-BMG-EE1-2	Identification of Rocks		E	2 CP 2 SWS
05-BMG-EE1-3	Introduction to Geoscientific Fieldwork		F	2 CP 2 SWS
05-BMG-ME2	Structural Geology and Tectonics			6 CP 6 SWS
05-BMG-ME2-1	Structural Geology		L	2 CP 2 SWS
05-BMG-ME2-2	Field Exercise Structural Geology		F	1 CP 1 SWS
05-BMG-ME2-3	Geological Maps		E	2 CP 2 SWS
05-BMG-ME2-4	Regional Geology		L	1 CP 1 SWS
05-BMG-ME3	Geology and Stratigraphy of Marine Sediments			6 CP 5 SWS
05-BMG-ME3-1	Introduction to Marine Geology		L+E+S1 CP	1 SWS
05-BMG-ME3-2	Ship-based Survey for Marine Sediments		F	1 CP 1 SWS
05-BMG-ME3-3	Stratigraphy in Marine Sediments		L+E	4 CP 3 SWS
05-BMG-PP3	Principles of Applied Geophysics			6 CP 4 SWS
05-BMG-PP3-1	Fundamentals of Applied Geophysics		L+E	3 CP 3 SWS
05-BMG-PP3-2	Geophysical Field Exercise		F	3 CP 1 SWS

Where are field exercises still embedded in the curriculum?

Further field exercises as F or BK in the modules of the major subjects.

Course overview:
Geo Homepage



How many days in the field belong to the study program?

- introduction to geoscientific fieldwork 4 days
 - field exercise structural geology 3 days
 - ship-based survey for marine sediments 2 days
 - module ‚Field Competences‘ 12 days
 - geophysical field exercise 2 days
 - **depending on your majors** 0-10 days
- min. 23 days



Field Education

Introduction

Field courses are an essential part for geosciences. They last one to several days and aim at an in-field-visualisation of the material discussed in lectures. During field courses, including ship-based expeditions - students learn the application of geoscientific methods and become active participants in the research process.

Excursions

At least 2 modules in geology (notification)

www.geo.uni-bremen.de

Studies Bachelor Marine Geosciences Field-Education

Contact



Field courses representative
Dr. Torsten Bickert
MARUM13070
Phone: +49 421 218 - 65535
tbickert@marum.de

05-BMG							SWS
05-BMG							SWS
05-BMG-ME3-2	Ship-based Survey for Marine Sediments	WS	F	1 CP	1		SWS
05-BMG-PP3-2	Geophysical Field Exercise	WS	F	3 CP	1		SWS
05-MAG-PG2-1	Schottland, GB (30.09.-14.10.2023)	SS	F	6 CP	6		SWS
05-BMG-GF1-1	Marine geophysical field exercise (3-4 days within 16-30 Sep 2023)	SS	F	6 CP	5		SWS





Costs

The Department of Geosciences pays a small subsidy per day (5-8 €) for each excursion place.

The following costs have to be paid by each student:

- contribution to travel costs (FB bus, coach, flight)
- catering (self-catering)
- accommodation (tent, YH, apartments)
- equipment (one-time: field book, hammer, magnifying glass, possibly compass, hydrochloric acid, suitable clothing)

Depending on the destination, the costs per field trip vary.

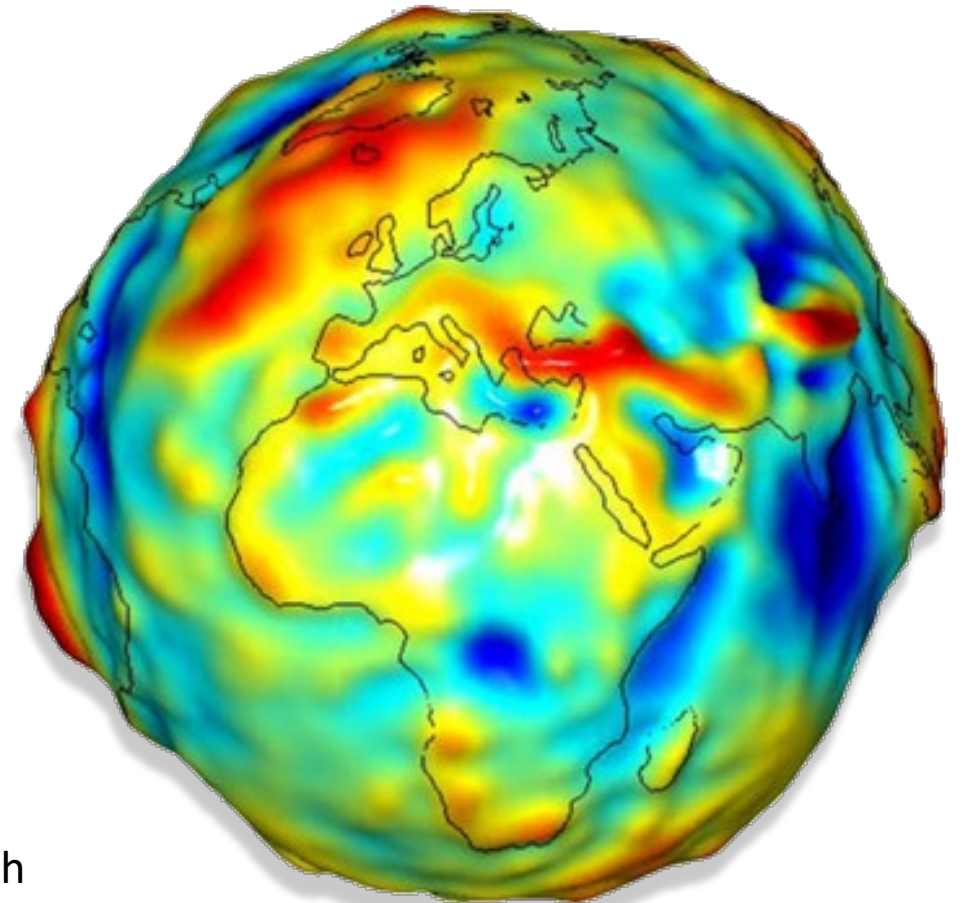
For 2 weeks abroad in the field it can be 400-700 €, inland less.



...for most students, the field exercises are much fun and the best part of the program

Digital Skill Courses in the BSc. Marine Geosciences

- Module Digital Competences
- Block courses and certificates
- Course information in Stud.IP
- Time planning
- Personal hardware and software



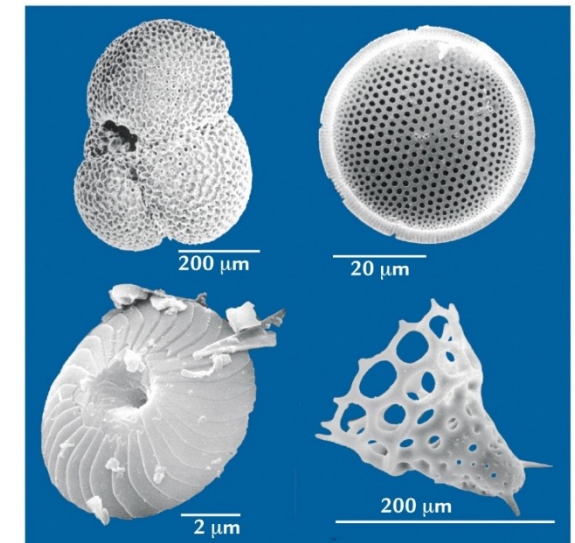
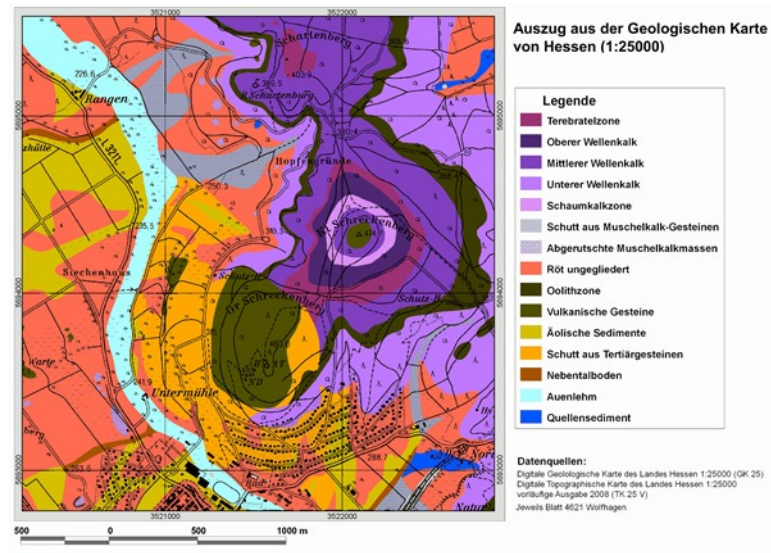
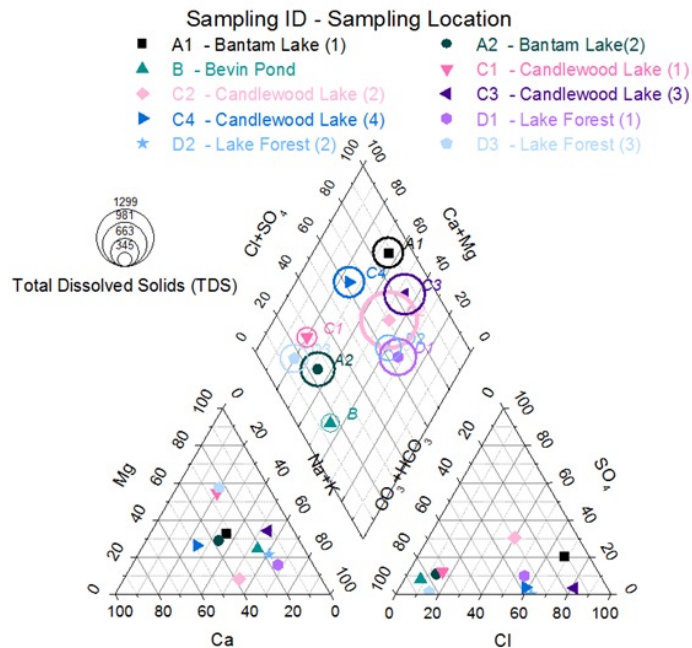
Gravity field of the earth
in spherical projection with MATLAB

Some digital core competences in geosciences

Acquire digital measurement data in the field or laboratory; import, process and visualize data from databases

Create, interpolate, map, statistically analyze and/or numerically model spatial data

Digitally image and process geological processes and macro- and microstructures



Experts say:

Graduates should be able to

- independently generate, process, visualize, analyze, interpret, and present data using digital methods.
- master standard software such as word processing, spreadsheets, PowerPoint, GIS and 3D graphics routinely and creatively
- understand program code (e.g. Matlab or Python) and be able to write it themselves
- apply industry-specific software (e.g. in seismics) and have the ability to quickly familiarize themselves with new software

Digital Competences:

- are expected and universally used in earth and environmental science jobs



- require active learning and practice
- are taught as block courses
- are assumed, deepened and supplemented by the elective modules

Prerequisites

To gain digital proficiency you must be able to spend hours on your computer with conflicting data and stubborn programs. Problems may be many, but fortunately, WCs, fast-food outlets, cell phone networks and the internet are readily available in this situation.

Here's what you should definitely have yourself:



- Own notebook (Windows), good battery and USB interface
- Office package (MS Word, Excel, Powerpoint for compatibility)
- Routine usage of operating system and browser, programs for text editing (reports), presentation (seminary talks), e-mailing and messaging (communication), Acrobat Reader
- up-to-date virus protection software is essential for safe data exchange between students.

Module „Digital Competences“ (now credited in 3. semester!)

Schwerpunkte 2	Praxiskompetenzen für Geoberufe			
Sprache	Deutsch/Englisch		Deutsch/Englisch	
	21 SWS		15 SWS	
Module 4. Sem.	Kompetenz in Geländearbeit		Digitale Kompetenzen	
Titel und Form LV 1	12 Geländetage (2x 7-Tage Exkursionen) (Bickert et al.)	GÜ 6	4 bewertete Computerkurse 1.5 CP (Excel, Matlab, QGIS, Python)	BK 6
Titel und Form LV 2	jeweils mit bewerteten Exkursionsberichten		3 bestandene Computerkurse 1.5 CP (Corel, GMT, Paraview/Blender)	
	6 SWS		6 SWS	
Module 5. Sem.	Berufspraktische Kompetenzen		Allgemeine Kompetenzen	
Titel und Form LV 1	4 Wochen geowissenschaftliches Berufspraktikum	P 6	z.B. Sprachen, Wirtschaft, Recht	GS 6
Titel und Form LV 2				
	6 SWS		6 SWS	
Module 6. Sem.	Bachelorarbeit und -prüfung (12 CP)			
Titel und Form LV 1	Bachelor Thesis	BT 9	Bachelor Prüfung	BP 3
Titel und Form LV 2	Experimenteller Teil ggfs. Vorgezogen		Umfassendere mündliche Prüfung	
Titel und Form LV 3				
	9 SWS		3 SWS	

05-BMG-GS1	Digital Competences		6 CP 6 SWS
05-BMG-GS1-1	Data Processing with EXCEL		BK 1.5 CP 1.5 SWS
05-BMG-GS1-2	Programming with Matlab		BK 1.5 CP 1.5 SWS
05-BMG-GS1-3	Geographic Information System QGIS		BK 1.5 CP 1.5 SWS
05-BMG-GS1-4	Geoscientific Vector Graphics with COREL		BK 0.5 CP 0.5 SWS
05-BMG-GS1-5	Topographic Mapping with GMT		BK 0.5 CP 0.5 SWS
05-BMG-GS1-6	3D Computervisualisierung mit Paraview und Blender		BK 0.5 CP 0.5 SWS
05-BMG-GS1-7	Programming with Python		BK 1.5 CP 1.5 SWS
05-BGW-GS1	Digitale Kompetenzen		6 CP 6 SWS
05-BGW-GS1-1	Geodatenverarbeitung mit EXCEL		BK 1.5 CP 1.5 SWS
05-BGW-GS1-2	Programmierung mit Matlab		BK 1.5 CP 1.5 SWS
05-BGW-GS1-3	Geographisches Informationssystem QGIS		BK 1.5 CP 1.5 SWS
05-BGW-GS1-4	Geowissenschaftliche Vektorgrafik mit COREL		BK 0.5 CP 0.5 SWS
05-BGW-GS1-5	Topographische Kartendarstellung mit GMT		BK 0.5 CP 0.5 SWS
05-BGW-GS1-6	3D Computer visualization with Paraview and Blender		BK 0.5 CP 0.5 SWS
05-BGW-GS1-7	Programmierung mit Python		BK 1.5 CP 1.5 SWS

The new digital module is organized like the excursion module.



Courses, Lecturers, Schedule, Licensed Software vs. Freeware

Digital Competence	Form / duration	Lecturers	Best moment	Next course offer
Geodata processing with EXCEL (OS alternatives: Open bzw. Libre Office)	BC 1.5 CP 1.5 SWS	Yann Marcon	after 1. Sem.	March 2026
Programming with MatLab (OS alternatives: Octave)	BC 1.5 CP 1.5 SWS	Marta Pérez Gussinyé	after 2. Sem.	September 2026
Geographic Information System QGIS (as alternative for commercial ArcGIS)	BC 1.5 CP 1.5 SWS	Antonie Haas, Elda Miramontes García	after 3. Sem.	February 2026
Geoscientific vector graphics with COREL (OS Alternative e.g. Inkscape)	BC 0.5 CP 0.5 SWS	Gerhard Bartzke	In 1. or 3. Sem.	January 2026
Topographic mapping with GMT (Freeware)	BC 0.5 CP 0.5 SWS	Vera Schlindwein	in 3. Sem.	November 2025
3D Computervisualisation with Paraview and Blender (Freeware)	BC 0.5 CP 0.5 SWS	Gerhard Bartzke	In 1. or 3. Sem.	Dezember 2025
Programming with Python (Freeware)	BC 1.5 CP 1.5 SWS	Paul Benjamin Klar	after 1. or 3. Sem.	March 2026



How many block course days does the Digital Competences Module require?

• Geodata processing with EXCEL	5 days
• Programming with MatLab / Python	5 days
• Geographical Information System QGIS	5 days
• Geoscientific vector graphics with COREL	2 days*
• Mapping with GMT	2 days*
• 3D Computer visualization	2 days*
	total 21 days
(21 days * 8 h/day = 168 h, 6 CP * 30 h/CP = 180 h)	

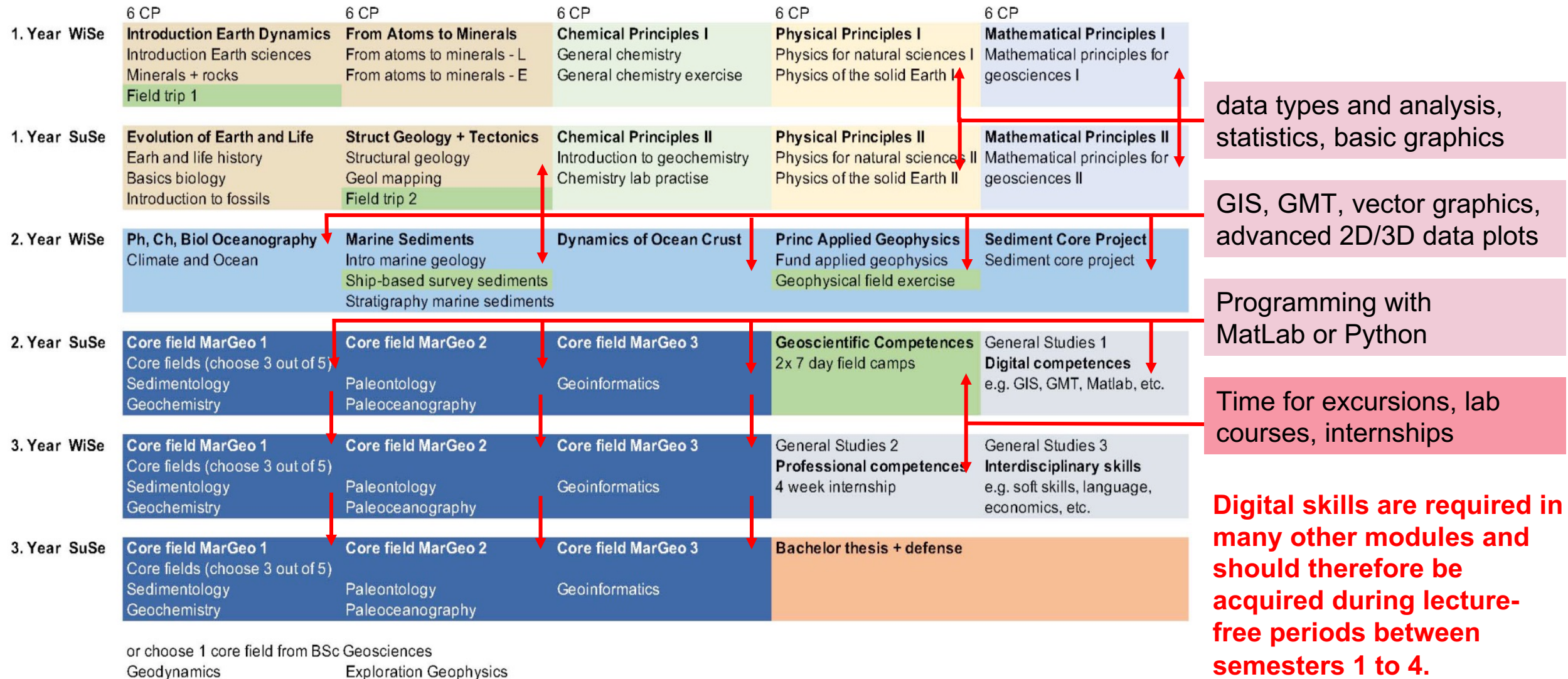
* Dates are distributed over the Semester

additional specialized software training
maybe related to chosen elective modules

0-10 days



Curricular and Didactic Integration in BSc Marine Geosciences



Course enrollment, evaluation and certification

Students can enroll anytime in the free course places of courses that are advertised under >participants > groups in Stud.IP

- Before begin, all participants are imported from Stud.IP as a group
- Names, presence and passes are communicated via a transfer file
- Digital Skill Certificates are distributed as pdf by serial email
- Transfer to and accounting of all acquired CPs is in master file

Students receive a **digital pdf course certificate** via email for each course they pass successfully

The certificate contains:

- Course name and description of its main contents
- Name of the participant(s) and certification code
- Time frame of the course and date of course completion
- Signature and name of the course organizer(s)

The (grade-free) certificate can be attached to applications and also be used in case of abandoning or change of study program
Authenticity is confirmed online by entering name + code

Module Digital Competences

Chiara Brümmer

has successfully completed a block course on

Geodata Processing with EXCEL
(VAK 05-BMG-GS1-1)

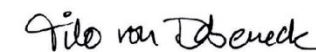
*from March 7th to March 11th 2022,
amounting to 45 working hours*

The course taught the following skills:

- **Data processing by spreadsheet calculation:** syntax, data types, references, functions, formulas, formats
- **Data import:** Import external data into EXCEL tables including data conversion, formatting and sorting
- **Visualize data optimally:** Select, apply and design EXCEL chart types appropriately and appealingly
- **Calculate formulas case-dependently:** Use of conditional, logical, and information functions in EXCEL
- **Select and analyze data:** Correct use of lookup, reference, and statistical functions in EXCEL
- **Process geoscientific data:** Develop flexible strategies to process geodata optimally within EXCEL

Bremen, June 6th 2022

Course instructor:



Prof. Dr. Tilo von Döbeneck

Certificate:

<https://www.geo.uni-bremen.de/cert>

Code:

SDEK 43YN 9PKU 1UWC



05-BGW-GS1/05-BMG-GS1 Blockveranstaltung: Digitale Kompetenzen/Digital Competences - Participants



Participants

Groups

Actions

Message to all (circular e-mail)

insert Tutor

insert Students

Import participant list

Export

Export list as csv document

Export list as rtf document

Settings

Allow circular mails from students

Lecturers

Last name, first name		Action
01	 Dobeneck, von, Tilo, Prof. Dr.	⋮
02	 Haas, Antonie Johanna	⋮
03	 Miramontes Garcia, Elda, Prof. Dr.	⋮
04	 Gussinyer Perez, Marta	⋮
05	 Huhn-Frehers, Katrin, Prof. Dr.	⋮

Please register already in the 1st semester in Stud.IP for the block courses Digital Competences! Here you can find upcoming course offerings under groups, in which you can register.

Tutor

☐	Last name, first name	Date of enrolment	Course of study	Action
☐ 01	 Braun, Martina	23/09/21 16:11:29		⋮
☐ 02	 Wolf-Brozio, Ulrike, Dr.	28/09/21 16:07:29		⋮
☐ 03	 Braun, Martina	29/09/21 08:59:47		⋮
☐ 04	 Paul, Andre, Dr.	05/10/21 15:43:23		⋮
☐ 05	 Mülitz, Stefan	05/10/21 15:43:23		⋮
☐ 06	 Pälke, Heiko, Prof. Dr.	05/10/21 15:43:48		⋮

- Select action

Execute

Preliminary enroled participants

Orientation Week BSc Marine Geosciences

General Studies
Module „Interdisciplinary Skills“

Bremen, October 9, 2025

Module „Interdisciplinary Skills“ (Achievement 5. Semester)

Practical Professional Competences in Geosciences			
German/English		German/English	
Geoscientific Field Competence		Digital Competences	
12 Days in the Field (2 one-week Field-Exercises in Central Europe)	F 6	4 five-day computer courses: Programming programs (Excel, Matlab, QGIS, Python) + 3 block courses in drawing programs: Corel, GMT, Paraview/Blender	BC 6
6 SWS		6 SWS	
Professional Competences		Interdisciplinary Skills	
Four-Week Professional Internship	P 6	e.g. Language, Economy or Law Courses or another Professional Internship, Tutorial	GS 6
6 SWS		6 SWS	

3. Studienjahr

Wintersemester

05-BMG-GS2	Professional Competences	 	6 CP 0 SWS
05-BMG-GS3	Interdisciplinary skills	 	6 CP 0 SWS
05-BMG-SE2	Deep-Sea Sedimentology		6 CP 4 SWS
 05-BMG-SE2-1	Deep-Water Depositional Systems	 L	4.5 CP 3 SWS
 05-BMG-SE2-2	Deep-Water Sediments Exercise	 E	1.5 CP 1 SWS
05-BMG-PA2	Marine Micropaleontology		6 CP 5 SWS
 05-BMG-PA2-1	Marine Micropaleontology	 L+E	6 CP 5 SWS

The module "Interdisciplinary Competencies" is organized similarly to the digital and excursion module: the courses take place continuously and can be taken at **any point** in the study program. The courses may and should be **freely** chosen by the students from the „**Fachergänzenden Studien**“ of the Uni Bremen. .



Fachergänzende Studien

[Studium Generale / interdisziplinäre Angebote aus den Fachbereichen / Sachkompetenzen](#) (90)

[Schlüsselkompetenzen](#) (163)

[Sprachenzentrum der Hochschulen im Land Bremen](#) (163)

[Studium und Beruf](#) (58)

Beispiele:

- **General Studies:** open offers of the Faculties, Economics, Business, Entrepreneurship, Project Management, interdisciplinary lecture series, gender and diversity studies, sustainability, theater and music,
- **Generic competences:** studying, teaching and learning competences, personal and inter-personal skills, Communication, conflict management, intercultural competence, leading and accompanying groups, Potenzialentwicklung, Karrieremanagement, Zeitmanagement
- **Foreign languages:** language courses offered by the Language Centre SZHB
- **Studying and career:** vocational orientation and preparation, career management, time management

Mehr unter:

https://www.uni-bremen.de/studium/starten-studieren/veranstaltungsverzeichnis?tx_hbulvp_pi1%5Bmodule%5D=93fdb6be384979f7300d263ba0c094be&tx_hbulvp_pi1%5Bsem%5D=35



05-BMG-GS3 INTERDISCIPLINARY SKILLS

Representative Barbara Ventura

Alternative performances in the module Interdisciplinary Competencies:

- Tutorial
- Additional internship /traineeship

Important:

Consulting strongly recommended!

Alternative performance: **ONLY** after consulting!

Contact

Contact

Dr. Barbara Ventura

GEO 1350

Tel.: +49 421 218 - 65005

bventura@uni-bremen.de

- Take courses of your own choice
- 1 to 6 courses, depending on effort/CP of the chosen courses
- A total of 6 CP must be acquired
- Only ungraded coursework
- Submit certificates of achievement to the person responsible for the module
- The person responsible for the module informs the examination office as soon as the 6 CP are complete