

# Module Catalogue

for the Subject

# Geography

with the degree "Exchange Austauschprogramm" (ECTS credits)

Examination regulations version: 2025

Responsible: Faculty of Arts, Historical, Philological, Cultural and Geographical

, Studies

Responsible: Institute of Geography and Geology

Responsible:



## **Contents**

The subject is divided into	3
Abbreviations used, Conventions, Notes, In accordance with	4
EAGLE	5
Applications of Earth Observation	6
Digital Image Analysis and GIS	7
Introduction to Spatial Data Analysis Software	8
Cloud Computing in Remote Sensing	9
Earth Observation Cloud Computing	10
Active Remote Sensing Systems	11
Introduction to Active remote sensing systems	12
Scientific Publishing and Writing in Earth Observation	13
Scientific Writing	1/
Introduction to Spatial Python	15
Innovative Earth Observation Methods	16
Global to local Earth Observation of Urbanization	17
Urban Remote Sensing	18
Urban Remote Sensing	19
Remote Sensing of Urban Areas	20
Risk and Disaster Earth Observation	21
Risk and Disaster Earth Observation	22
Science Communication	23
GEOSPHERE	24
Environmental challenges I	25
Earth surface processes and landforms in a changing world	26
Human-environmental interactions	27
Man-made climate change, implications and mitigation	28
Interdisciplinary Courses	29



## The subject is divided into

section / sub-section	ECTS credits	starting page
EAGLE		5
GEOSPHERE		24
Interdisciplinary Courses		29



#### **Abbreviations used**

Course types:  $\mathbf{E} = \text{field trip}$ ,  $\mathbf{K} = \text{colloquium}$ ,  $\mathbf{O} = \text{conversatorium}$ ,  $\mathbf{P} = \text{placement/lab course}$ ,  $\mathbf{R} = \text{project}$ ,  $\mathbf{S} = \text{seminar}$ ,  $\mathbf{T} = \text{tutorial}$ ,  $\ddot{\mathbf{U}} = \text{exercise}$ ,  $\mathbf{V} = \text{lecture}$ 

Term: **SS** = summer semester, **WS** = winter semester

Methods of grading: **NUM** = numerical grade, **B/NB** = (not) successfully completed

Regulations: **(L)ASPO** = general academic and examination regulations (for teaching-degree programmes), **FSB** = subject-specific provisions, **SFB** = list of modules

Other: A = thesis, LV = course(s), PL = assessment(s), TN = participants, VL = prerequisite(s)

#### **Conventions**

Unless otherwise stated, courses and assessments will be held in German, assessments will be offered every semester and modules are not creditable for bonus.

#### **Notes**

Should there be the option to choose between several methods of assessment, the lecturer will agree with the module coordinator on the method of assessment to be used in the current semester by two weeks after the start of the course at the latest and will communicate this in the customary manner.

Should the module comprise more than one graded assessment, all assessments will be equally weighted, unless otherwise stated below.

Should the assessment comprise several individual assessments, successful completion of the module will require successful completion of all individual assessments.

#### In accordance with

the general regulations governing the degree subject described in this module catalogue:

#### unknown

associated official publications (FSB (subject-specific provisions)/SFB (list of modules)):

#### unknown

This module handbook seeks to render, as accurately as possible, the data that is of statutory relevance according to the examination regulations of the degree subject. However, only the FSB (subject-specific provisions) and SFB (list of modules) in their officially published versions shall be legally binding. In the case of doubt, the provisions on, in particular, module assessments specified in the FSB/SFB shall prevail.



## **EAGLE**

(ECTS credits)



Module title					Abbreviation
Applica	ations	of Earth Observation		04-GEO-TB2-162-m01	
Module coordinator				Module offered by	
holder	of the	Professorship of Remote	Sensing	Institute of Geography and Geology	
ECTS	Meth	od of grading	Only after succ. con	mpl. of module(s)	
5	nume	rical grade			
Duratio	on	Module level	Other prerequisites		
1 semester graduate					
Contents					
The lecture addresses applications of remote sensing of the atmosphere, the oceans, and particularly the land					

The lecture addresses applications of remote sensing of the atmosphere, the oceans, and particularly the land surface. The presented materials include among others applications in geography, environmental planning, ecology, biology, oceanology, soil science, geology, atmospheric science, but also e.g. pollution control (monitoring) and natural resource management. Which research questions can be answered by the means of Earth Observation and geoanalysis? The lecture comprises commonly used methodological approaches for the derivation of the different parameters. The covers the issue of implementation of the remote sensing technology into practice, e.g. the implementation of information systems. It outlines at selected examples, how remote sensing based results can be transferred to the workplace of professionals also beyond science.

#### **Intended learning outcomes**

The lecture gives a broad overview about the applications of remote sensing. The participants will learn how the different disciplines of environmental sciences and studies utilize the potentials of active and passive sensors for quantification and assessment.

Courses (type, number of weekly contact hours, language - if other than German)

V (2)

Module taught in: English

**Method of assessment** (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

written examination (approx. 45 minutes)

Language of assessment: English or German (assessment will be held in English; in addition, the examiner may, where possible, decide to hold assessment in German)

#### **Allocation of places**

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#### **Additional information**

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#### Workload

150 h

#### **Teaching cycle**

--

 $\textbf{Referred to in LPO I} \ \ (\text{examination regulations for teaching-degree programmes})$ 



Module title					Abbreviation	
Digital	Image	Analysis and GIS			04-GEO-MB1-162-m01	
Module coordinator				Module offered by		
holder	of the	Professorship of Remote	Sensing	Institute of Geograp	ohy and Geology	
ECTS	Meth	od of grading	Only after succ. con	mpl. of module(s)		
5	nume	rical grade				
Duratio	on	Module level	Other prerequisites	Other prerequisites		
1 seme	ster	graduate				
Contents						
The module comprises the following practical topics: Managing and geoprocessing of raster and vector data including digitization and analysis/visualization of geodata / preprocessing of optical remote sensing data (geometric and atmospheric corrections, dimension reduction) / different approaches, algorithms, sampling and va-						

#### **Intended learning outcomes**

The seminar aims at improving the methodological skills of the participants in digital image processing and the use of Geographical Information Systems.

lidation strategies for validation / change detection, vegetation indices / basics in the derivation of geophysical and biophysical parameters (e.g. LAI, FAPAR, Chlorophyll content of leafs, Land Surface Temperature, Surface Al-

**Courses** (type, number of weekly contact hours, language — if other than German)

Ü (2)

bedo

Module taught in: English

**Method of assessment** (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

- a) presentation (approx. 30 minutes) or
- b) preparing a poster (approx. 10 hours total) or
- c) term paper (approx. 15 pages)

Language of assessment: English or German (assessment will be held in English; in addition, the examiner may, where possible, decide to hold assessment in German)

creditable for bonus

#### **Allocation of places**

--

#### **Additional information**

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#### Workload

150 h

#### Teaching cycle

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 $\textbf{Referred to in LPO I} \ \ (\text{examination regulations for teaching-degree programmes})$ 



Module title				Abbreviation		
Introduction to Spatial Data Analysis Software					04-GEO-MB1-242-m01	
Module coordinator				Module offered by	1	
holder	of the	Professorship of Rer	note Sensing	Institute of Geogra	Institute of Geography and Geology	
ECTS	Meth	od of grading	Only after succ.	er succ. compl. of module(s)		
5	nume	erical grade				
Duratio	on	Module level	Other prerequisi	Other prerequisites		
1 semester graduate						
Conter	nts					

The module comprises the following practical topics: Managing and geoprocessing of raster and vector data including digitization and analysis/visualization of geodata / preprocessing of optical remote sensing data (geometric and atmospheric corrections, dimension reduction) / different approaches, algorithms, sampling and validation strategies for validation / change detection, vegetation indices / basics in the derivation of geophysical and biophysical parameters (e.g. LAI, FAPAR, Chlorophyll content of leafs, Land Surface Temperature, Surface Albedo

#### **Intended learning outcomes**

The seminar aims at improving the methodological skills of the participants in digital image processing and the use of Geographical Information Systems.

**Courses** (type, number of weekly contact hours, language — if other than German)

Ü (2)

Module taught in: English

**Method of assessment** (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

- a) presentation (approx. 30 minutes) or
- b) preparing a poster (approx. 10 hours total) or
- c) term paper (approx. 15 pages)

Language of assessment: English or German (assessment will be held in English; in addition, the examiner may, where possible, decide to hold assessment in German)

creditable for bonus

#### **Allocation of places**

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#### **Additional information**

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#### Workload

150 h

#### Teaching cycle

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 $\textbf{Referred to in LPO I} \ \ (\text{examination regulations for teaching-degree programmes})$ 



Module title					Abbreviation	
Cloud Computing in Remote Sensing					04-GEO-MET5-212-m01	
Module coordinator				Module offe	Module offered by	
holder	of the	Professorship of Rer	note Sensing	Institute of G	Institute of Geography and Geology	
ECTS	Meth	od of grading	Only after succ.	Only after succ. compl. of module(s)		
5	nume	erical grade				
Duratio	on	Module level	Other prerequis	Other prerequisites		
1 semester graduate						
Contents						
Coords Forth Fusing is a gloud based geometric proposition platform allowing for planeton, scale analysis. Next						

Google Earth Engine is a cloud-based geospatial processing platform allowing for planetary-scale analysis. Next to a large amount of raw processing power provided by Google's computational infrastructure, Earth Engine offers a rich data catalog which stores several petabytes of publically available and analysis ready geospatial data sets. Topics covered are vector and raster data manipulation, working with ImageCollections, time-series analysis, classification, iteration, visualization and animation of spatial data.

#### **Intended learning outcomes**

Students will be introduced to the platform and gain fundamental knowledge about the usage of Google Earth Engines processing power and data offer.

Courses (type, number of weekly contact hours, language - if other than German)

 $S(1) + \ddot{U}(1)$ 

Module taught in: English

**Method of assessment** (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

- a) presentation (approx. 30 minutes) or
- b) preparing a poster (approx. 10 hours total) or
- c) term paper (approx. 15 pages)

Language of assessment: English or German (assessment will be held in English; in addition, the examiner may, where possible, decide to hold assessment in German)

Assessment offered: Once a year, summer semester

creditable for bonus

#### **Allocation of places**

--

#### **Additional information**

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#### Workload

150 h

#### Teaching cycle

--

 $\textbf{Referred to in LPO I} \ \ (\text{examination regulations for teaching-degree programmes})$ 



Module title					Abbreviation		
Earth Observation Cloud Computing					04-GEO-OMA11-242-m01		
Module	coord	inator		Module offered by			
				Institute of Geograp	ohy and Geology		
ECTS	Metho	od of grading	Only after succ. com	ıpl. of module(s)			
5	nume	rical grade					
Duratio	n	Module level	Other prerequisites				
1 seme	ster						
Conten	ts						
Intende	ed learı	ning outcomes					
Course	<b>S</b> (type, n	number of weekly contact hours, l	anguage — if other than Ger	man)			
S (1) + l Module		t in: English					
		<b>sessment</b> (type, scope, langua le for bonus)	ge — if other than German, e	examination offered — if no	ot every semester, information on whether		
b) prep c) term Langua	aring a paper ge of a possibl	e, decide to hold assessi	s total) or erman (assessment w	vill be held in English	n; in addition, the examiner may,		
Allocat	ion of p	olaces					
Additio	nal inf	ormation					
Workload							
150 h							
Teaching cycle							
Referred to in LPO I (examination regulations for teaching-degree programmes)							



VV	UKZBI	UKG P	15 (3) (3) (3)	33 <b>9 - 19</b>	, ECTS credits			
Module	Module title Abbreviation							
Active	Remot	e Sensing Systems			04-GEO-MET8-212-m01			
Module	e coord	linator		Module offered by	I.			
holder	of the	Professorship of Remote	Sensing	Institute of Geogra	phy and Geology			
ECTS	Meth	od of grading	Only after succ. con	npl. of module(s)				
5	nume	erical grade						
Duratio	on	Module level	Other prerequisites	1				
1 seme	ster	graduate						
Conten	its	,	`					
basics studies	of data s. Using	a collection, processing	and interpretation will	be discussed and c	OAR and SAR, are presented. The demonstrated on selected case using appropriate software will			
Intend	ed lear	ning outcomes						
of sele	cted ac			•	cessing and possible applications erespective methods will be ex-			
Course	<b>S</b> (type,	number of weekly contact hours	, language — if other than Ge	rman)				
S (1) + Ü (1) Module taught in: English								
<b>Method of assessment</b> (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)								
a) presentation (approx. 30 minutes) or b) preparing a poster (approx. 10 hours total) or								

c) term paper (approx. 15 pages)

Language of assessment: English or German (assessment will be held in English; in addition, the examiner may, where possible, decide to hold assessment in German)

Assessment offered: Once a year, summer semester

creditable for bonus

#### Allocation of places

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#### **Additional information**

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#### Workload

150 h

#### Teaching cycle

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**Referred to in LPO I** (examination regulations for teaching-degree programmes)



Module	e title		Abbreviation			
Introdu	ıction t	o Active remote sensing	04-GEO-OMA2-242-m01			
Module	Module coordinator			Module offered by	•	
				Institute of Geograp	ohy and Geology	
ECTS	Metho	od of grading	Only after succ. com	npl. of module(s)		
5	nume	rical grade				
Duratio	n	Module level	Other prerequisites			
1 seme	ster					
Conten	ts					
Intend	ed lear	ning outcomes				
Course	<b>S</b> (type, r	number of weekly contact hours, l	anguage — if other than Ger	rman)		
S (1) + Module		t in: English				
		<b>sessment</b> (type, scope, langua le for bonus)	ge $-$ if other than German, $\epsilon$	examination offered — if no	ot every semester, information on whether	
b) prep c) term Langua	aring a paper age of a possibl	e, decide to hold assessi	s total) or erman (assessment w	vill be held in English	n; in addition, the examiner may,	
Allocat	ion of p	olaces				
Additio	nal inf	ormation	•			
Worklo	Workload					
150 h	150 h					
Teachi	Teaching cycle					
Referre	Referred to in LPO I (examination regulations for teaching-degree programmes)					



Module title					Abbreviation		
Scienti	Scientific Publishing and Writing in Earth Observation				04-GEO-TB3-242-m01		
Module	coord	inator		Module offered by	l.		
	,			Institute of Geograp	phy and Geology		
ECTS	Metho	od of grading	Only after succ. con	npl. of module(s)			
5	(not)	successfully completed					
Duratio	n	Module level	Other prerequisites				
1 seme	ster						
Conten	ts						
Intende	ed lear	ning outcomes					
Course	<b>S</b> (type, r	number of weekly contact hours,	anguage — if other than Ge	man)			
V (2) Module	e taugh	t in: English					
		sessment (type, scope, langua le for bonus)	ge — if other than German,	examination offered — if no	ot every semester, information on whether		
Langua	ge of a	oprox. 15 pages) ssessment: English or Go e, decide to hold assess		vill be held in English	n; in addition, the examiner may,		
Allocat	ion of p	olaces	,				
Additio	nal inf	ormation					
Workload							
150 h							
Teaching cycle							
Referre	Referred to in LPO I (examination regulations for teaching-degree programmes)						



Module title					Abbreviation
Scientific Writing					04-GEO-SOS5-212-m01
Modul	e coord	inator		Module offered by	
holder	of the I	Professorship of Remo	te Sensing	Institute of Geogra	phy and Geology
ECTS	Meth	od of grading	Only after succ. con	npl. of module(s)	
5	nume	rical grade			
Durati	on	Module level	Other prerequisites		
1 seme	ester	graduate			
Conte	nts				
will be	discus		ovided. Individual traini		d writing. Moreover the structure will be part of it as well. Relevant
Intend	led lear	ning outcomes			
Article	s will be	e discussed with regar	d to its scientific conter	nt and goal to ensure	e high quality articles.
Course	<b>es</b> (type, r	number of weekly contact hou	rs, language — if other than Ge	rman)	
S (2) Modul	e taugh	t in: English			
		<b>sessment</b> (type, scope, landle for bonus)	guage — if other than German,	examination offered — if no	ot every semester, information on whether
term paper (approx. 15 pages) Language of assessment: English or German (assessment will be held in English; in addition, the examiner may, where possible, decide to hold assessment in German) Assessment offered: Once a year, winter semester					
Allocation of places					
Additional information					
Workload					
150 h					

150 h

Teaching cycle

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 $\textbf{Referred to in LPO I } \ (\text{examination regulations for teaching-degree programmes})$ 



Module title					Abbreviation	
Introdu	Introduction to Spatial Python				04-GEO-OMA7-242-m01	
Module	e coord	inator		Module offered by	<u> </u>	
				Institute of Geograp	ohy and Geology	
ECTS	Meth	od of grading	Only after succ. con	npl. of module(s)		
5	<u> </u>	rical grade				
Duratio	on .	Module level	Other prerequisites			
1 seme	ster					
Conten	its					
Intend	ed lear	ning outcomes				
Course	S (type, ı	number of weekly contact hours,	language — if other than Ge	rman)		
S (1) + Module		t in: English				
		<b>sessment</b> (type, scope, langu ble for bonus)	age — if other than German,	examination offered — if no	ot every semester, information on whether	
b) prep c) term Langua	paring a paper age of a possib	le, decide to hold assess	rs total) or Terman (assessment v	vill be held in English	n; in addition, the examiner may,	
Allocat	ion of	places				
	-					
Additional information						
Workload						
150 h						
Teaching cycle						
Referred to in LPO I (examination regulations for teaching-degree programmes)						



Module title Abbreviation					Abbreviation	
Innovative Earth Observation Methods 04-GEO-OMA24-242-mo1						
Module	coord	inator		Module offered by		
				Institute of Geograp	ohy and Geology	
ECTS	Metho	od of grading	Only after succ. com	ıpl. of module(s)		
5	nume	rical grade				
Duratio	n	Module level	Other prerequisites			
1 seme	ster					
Conten	ts					
Intende	ed learı	ning outcomes				
Course	<b>S</b> (type, n	number of weekly contact hours, l	anguage — if other than Ger	man)		
S (1) + Module		t in: English				
		<b>sessment</b> (type, scope, langua le for bonus)	ge — if other than German, o	examination offered — if no	ot every semester, information on whether	
b) prep c) term Langua	aring a paper ge of a possibl	e, decide to hold assessi	s total) or erman (assessment w	vill be held in English	n; in addition, the examiner may,	
Allocat	ion of p	olaces				
Additio	nal inf	ormation				
Workload						
150 h						
	Teaching cycle					
Referre	d to in	LPO I (examination regulations	s for teaching-degree progra	mmes)		



Module	Module title Abbreviation						
Global	Global to local Earth Observation of Urbanization 04-GEO-URB1-242-mo1						
Module	Module coordinator Module offered by						
				Institute of Geograp	ohy and Geology		
ECTS	Metho	od of grading	Only after succ. com	ıpl. of module(s)			
5	nume	rical grade					
Duratio	n	Module level	Other prerequisites				
1 seme	ster						
Conten	ts		•				
Intende	ed lear	ning outcomes					
Course	<b>S</b> (type, r	number of weekly contact hours, l	anguage — if other than Ger	man)			
V (2)							
Module	taugh	t in: English					
		sessment (type, scope, langua ble for bonus)	ge — if other than German, e	examination offered — if no	ot every semester, information on whether		
b) prep c) writte Langua	aring a en exa ge of a	on (approx. 30 minutes) on poster (approx. 10 hours mination (approx. 45 minussessment: English or Gele, decide to hold assess	s total) or utes) erman (assessment w	vill be held in English	n; in addition, the examiner may,		
Allocat	ion of <sub>l</sub>	places					
Additio	nal inf	ormation					
Workload							
150 h							
Teachi	ng cycl	e	-				
Referre	d to in	LPO I (examination regulation:	s for teaching-degree progra	mmes)			



Module title		Abbreviation
Urban Remote Sensing		04-GEO-RE4-212-m01
Module coordinator	Module offered by	
holder of the Professorship of Geodynamics and Geomate-	Institute of Geography and Geology	

ECTS	ECTS Method of grading		Only after succ. compl. of module(s)
5	numerical grade		
Duratio	n	Module level	Other prerequisites
1 seme	ster	graduate	

#### **Contents**

rials Research

Urban space as human living space is discussed and urban spaces are characterized. The special surface properties in the settlement area as well as their representation in satellite image data are learned. The classification of settlement areas and their surrounding areas are practiced.

#### **Intended learning outcomes**

The students learn remote sensing methods that are particularly relevant for the characterization of urban spaces. You will be able to select and use suitable image data for processing urban issues in remote sensing.

 $\textbf{Courses} \ (\text{type, number of weekly contact hours, language} - \text{if other than German})$ 

S (2)

Module taught in: English

**Method of assessment** (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

- a) presentation (approx. 30 minutes) or
- b) preparing a poster (approx. 10 hours total) or
- c) written examination (approx. 45 minutes)

Language of assessment: English or German (assessment will be held in English; in addition, the examiner may, where possible, decide to hold assessment in German)

Assessment offered: Once a year, winter semester

#### **Allocation of places**

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#### **Additional information**

-

#### Workload

150 h

#### **Teaching cycle**

--

Referred to in LPO I (examination regulations for teaching-degree programmes)



Module title Abbreviation					Abbreviation		
Urban	Remot	e Sensing			04-GEO-URB2-242-m01		
Module coordinator Module offered by							
		-		Institute of Geogra	phy and Geology		
ECTS	Meth	od of grading	Only after succ. con	npl. of module(s)			
5	nume	erical grade					
Durati	on	Module level	Other prerequisites	;			
1 seme	ester						
Conte	nts	•					
Intend	ed lear	ning outcomes					
			·				
Course	es (type,	number of weekly contact l	nours, language — if other than Ge	rman)			
S (1) + Modul		nt in: English					
		<b>sessment</b> (type, scope, ble for bonus)	language $-$ if other than German,	examination offered — if no	ot every semester, information on whether		
b) prep c) writt Langua	oaring a ten exa age of a		hours total) or 5 minutes)	vill be held in Englisl	h; in addition, the examiner may,		
Alloca	tion of	places					
			-				
Additio	onal in	formation					
Workload							
150 h							
Teachi	ng cyc	le					
Referre	ed to in	LPO I (examination reg	ulations for teaching-degree progra	ammes)			
	-						



Module	Module title Abbreviation						
Remote	Remote Sensing of Urban Areas 04-GEO-URB12-242-mo1						
Module coordinator Module offered by							
	,			Institute of Geograp	ohy and Geology		
ECTS	Meth	od of grading	Only after succ. com	ipl. of module(s)	<u>-</u> ,		
5		rical grade					
Duratio		Module level	Other prerequisites				
1 seme	ster						
Conten	ts						
Intende	ed lear	ning outcomes					
Course	S (type, i	number of weekly contact hours, l	anguage — if other than Ger	man)			
S (1) +	Ü (1)						
Module	e taugh	t in: English					
		<b>sessment</b> (type, scope, langua ole for bonus)	ge — if other than German, e	examination offered — if no	ot every semester, information on whether		
b) prep c) writt Langua	aring a en exa ige of a	on (approx. 30 minutes) on a poster (approx. 10 hours mination (approx. 45 min assessment: English or Gelle, decide to hold assess	s total) or utes) erman (assessment w	vill be held in English	n; in addition, the examiner may,		
Allocat	ion of	places					
Additio	nal inf	ormation					
Worklo	Workload						
150 h	150 h						
Teachi	ng cycl	e					
Referre	d to in	LPO I (examination regulation	s for teaching-degree progra	mmes)			



Module title Abbreviation						
Risk and Disaster Earth Observation 04-GEO-URB13-242-mo1						
Modul	Module coordinator Module offered by					
				Institute of Geogra	ohy and Geology	
ECTS	Meth	od of grading	Only after succ. con	npl. of module(s)		
5	nume	erical grade				
Duratio	on	Module level	Other prerequisites	i		
1 seme	ster					
Conten	its	,				
Intend	ed lear	ning outcomes				
Course	<b>S</b> (type,	number of weekly contact hour	rs, language — if other than Ge	rman)		
S (1) + Module		nt in: English				
Metho	d of as		guage — if other than German,	examination offered — if no	ot every semester, information on whether	
b) prep c) writt Langua	oaring a en exa age of a	on (approx. 30 minutes) a poster (approx. 10 hou mination (approx. 45 m assessment: English or le, decide to hold asses	urs total) or iinutes) German (assessment v	vill be held in Englisl	n; in addition, the examiner may,	
Allocat	ion of	places				
Additio	nal inf	formation				
Worklo	Workload					
150 h						
150 h						
150 h Teachi	ng cycl	le				
	ng cycl	le				
Teachi		LPO I (examination regulati	ons for teaching-degree progra	ammes)		



**Teaching cycle** 

 $\textbf{Referred to in LPO I} \ \ (\text{exa}\underline{\text{mination regulations for teaching-degree programmes})}$ 

Modul	e title				Abbreviation		
Risk a	nd Disa	ster Earth Observation			04-GEO-RE5-212-m01		
Modul	e coord	inator		Module offered by			
1	of the l esearch	Professorship of Geodyna	amics and Geomate-	Institute of Geograp	ohy and Geology		
ECTS	Meth	od of grading	Only after succ. con	npl. of module(s)			
5	nume	rical grade					
Duration	on	Module level	Other prerequisites				
1 seme	ester	graduate					
Conter	ıts						
The mo	dule fo	ocuses the georisks and e	environmental disast	ers.			
Intend	ed lear	ning outcomes					
The stu		learn synthesis and integ	ration of their knowle	edge on georisks. Th	ey are able to consider risks and		
Course	<b>es</b> (type, r	number of weekly contact hours,	anguage — if other than Ge	rman)			
S (2) Modul	e taugh	t in: English					
		<b>sessment</b> (type, scope, langua ole for bonus)	ge — if other than German,	examination offered — if no	ot every semester, information on whether		
b) prep c) writt Langua where	a) presentation (approx. 30 minutes) or b) preparing a poster (approx. 10 hours total) or c) written examination (approx. 45 minutes) Language of assessment: English or German (assessment will be held in English; in addition, the examiner may, where possible, decide to hold assessment in German) Assessment offered: Once a year, winter semester						
Alloca	Allocation of places						
Additio	Additional information						
Worklo	oad						
150 h							



Module	Module title Abbreviation					
Science	Science Communication 04-GEO-SOS12-242-mo1					
Module	e coord	linator		Module offered by	<u> </u>	
	,			Institute of Geograp	ohy and Geology	
ECTS	Meth	od of grading	Only after succ. con	ipl. of module(s)	<u> </u>	
5	(not)	successfully completed				
Duratio	on .	Module level	Other prerequisites			
1 seme	ster					
Conten	its					
Intend	ed lear	ning outcomes				
Course	S (type, i	number of weekly contact hours,	anguage — if other than Ger	man)		
S (2)						
Module	e taugh	t in: English				
		<b>sessment</b> (type, scope, langua ole for bonus)	ge — if other than German, o	examination offered — if no	ot every semester, information on whether	
b) prep c) term Langua	aring a paper age of a	on (approx. 30 minutes) on a poster (approx. 10 hours (approx. 15 pages) assessment: English or Go le, decide to hold assess	s total) or erman (assessment w	vill be held in English	n; in addition, the examiner may,	
Allocat	ion of	places				
Additio	nal inf	ormation				
Workload						
150 h						
Teaching cycle						
Teachi	ng cycl	e				
Teachi	ng cycl	e				
		<b>LPO I</b> (examination regulation	s for teaching-degree progra	mmes)		



### **GEOSPHERE**

(ECTS credits)



Module title Abbreviation						
Environmental challenges I 04-Geo-GS-RV1-252						
Module	e coord	inator		Module offered by		
				Institute of Geograp	ohy and Geology	
ECTS	Meth	od of grading	Only after succ. con	npl. of module(s)		
5	nume	rical grade				
Duratio	on	Module level	Other prerequisites			
1 seme	ster					
Conten	ts					
Intend	ed lear	ning outcomes				
Course	<b>S</b> (type, r	number of weekly contact hours,	anguage — if other than Ger	man)		
V (2) Module	e taugh	t in: English				
		sessment (type, scope, langua ole for bonus)	ge — if other than German, o	examination offered — if no	ot every semester, information on whether	
		nation (approx. 45 minut ssessment: English	es)			
Allocat	ion of <sub> </sub>	places	,			
Additio	nal inf	ormation				
Worklo	Workload					
150 h	150 h					
Teachi	Teaching cycle					
Referre	ed to in	LPO I (examination regulation	s for teaching-degree progra	mmes)		



Modul	e title				Abbreviation		
Earth s	Earth surface processes and landforms in a changing world 04-Geo-GS-PG1-252-mo1						
Modul	e coord	linator		Module offered by			
				Institute of Geogra	phy and Geology		
ECTS	Meth	od of grading	Only after succ. con	npl. of module(s)			
5	nume	erical grade					
Duratio	on	Module level	Other prerequisites				
1 seme	ester						
Conter	nts	•	•				
Intend	ed lear	ning outcomes					
Course	es (type,	number of weekly contact h	ours, language — if other than Ge	rman)			
S (2)							
Modul	e taugh	nt in: English					
		<b>sessment</b> (type, scope, lole for bonus)	anguage — if other than German,	examination offered — if n	ot every semester, information on whether		
b) writt Langua	ten exa	on (approx. 30 minuto mination (approx. 45 assessment: English offered: once a year, v	•	er (approx. 20 pages	s) or		
Allocat	tion of	places					
20 places. Places will be allocated according to the number of subject semesters. Among applicants with the same number of subject semesters, places will be allocated by lot. A waiting list will be maintained and places re-allocated by lot as they become available.							
Additio	onal inf	formation					
Worklo	Workload						
150 h							
Teachi	ng cyc	le					
Referre	ed to in	LPO I (examination regu	lations for teaching-degree progra	ımmes)			



Module title Abbreviation					Abbreviation	
Human-environmental interactions 04-Geo-GS-PG2-252-mo1						
Modul	e coord	linator		Module offered by		
				Institute of Geogra	phy and Geology	
ECTS	Meth	od of grading	Only after succ. con	npl. of module(s)		
5	nume	rical grade				
Duratio	on	Module level	Other prerequisites			
1 seme	ester					
Conter	ıts					
Intend	ed lear	ning outcomes				
Course	S (type, i	number of weekly contact hours,	language — if other than Ger	rman)		
S (2)						
Modul	e taugh	t in: English				
		<b>sessment</b> (type, scope, languable for bonus)	age — if other than German,	examination offered — if n	ot every semester, information on whether	
b) writt	ten exa age of a	on (approx. 30 minutes) v mination (approx. 45 min assessment: English offered: once a year, wint	nutes)	er (approx. 20 pages	s) or	
Allocat	tion of	places				
20 places. Places will be allocated according to the number of subject semesters. Among applicants with the same number of subject semesters, places will be allocated by lot. A waiting list will be maintained and places re-allocated by lot as they become available.						
Additional information						
Worklo	oad					
150 h						
Teachi	ng cycl	e				

 $\textbf{Referred to in LPO I} \ \ (\text{examination regulations for teaching-degree programmes})$ 



Module title  Man-made climate change, implications and mitigation					Abbreviation 04-Geo-GS-Clim1-252-m01	
						Module coordinator
				Institute of Geography and Geology		
ECTS	Meth	od of grading	Only after succ. cor	Only after succ. compl. of module(s)		
5	nume	erical grade				
Duration		Module level	Other prerequisites	Other prerequisites		
1 semester						
Contents						
Intended learning outcomes						
Courses (type, number of weekly contact hours, language — if other than German)						
V (2) Module	e taugl	nt in: English				
Metho	d of as		language — if other than German,	examination offered — if r	not every semester, information on whether	
written examination (approx. 45 minutes) Language of assessment: English Assessment offered: once a year, winter semester						
Allocation of places						
of subj	will be ject sei				applicants with the same numbe tained and places re-allocated by	
Additio	onal in	formation				
			,			
Worklo	oad					
150 h						
Teachi	ng cyc	le	,			
Referre	ed to ir	LPO I (examination regu	ulations for teaching-degree progr	ammes)		



# **Interdisciplinary Courses**

(ECTS credits)