Julius-Maximilians-
UNIVERSITÄT
WÜRZBURG

Annex SFB

Studienfachbeschreibung (subject description, SFB) for the subject Applied Earth Observation and Geoanalysis (EAGLE) as a Master's with 1 major

with the degree "Master of Science" (120 ECTS credits)

Responsible: Faculty of Arts, Historical, Philological, Cultural and Geographical Studies — Examination regulations version: 2016
Responsible: Institute of Geography and Geology — Examination regulations version: 2016

Abbreviations used:

Course types: **E** = field trip, **K** = colloquium, **O** = conversatorium, **P** = placement/lab course, **R** = project, **S** = seminar, **T** = tutorial, **Ü** = exercise, **V** = 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 for the modules in this SFB:

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

Information on assessment procedures:

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 a 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:

ASPO2015

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

01-Jun-2016 (2016-79)

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.

Every module will be described using the following form:

Abbreviation	**Module title**							
	ECTS		Duration	(in semesters)	Method of grading		Module level	
	Courses	To be specified in the form X (y) with course type X abbreviated as specified above and number of weekly contact hours y						
	Method of assessment							
	Only after successful completion of	if applicable						
	Other prerequisites	if applicable						
	Participants and allocation of places	if applicable						
	Additional information	if applicable						
	Referred to in LPO I	if applicable (examination regulations for teaching-degree programmes)						

Compulsory Courses (55 ECTS credits)								
Theoretical Basics (10 ECTS credits)								
04-GEO-TB1-162-m01	**Introduction to Remote Sensing and Geoanalysis**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		V (2) Module taught in: English					
	Method of assessment		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)					
04-GEO-TB2-162-m01	**Applications of Earth Observation**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		V (2) Module taught in: English					
	Method of assessment		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)					
Methodological Basics (15 ECTS credits)								
04-GEO-MB1-162-m01	**Digital Image Analysis and GIS**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		Ü (2) Module taught in: English					
	Method of assessment		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					
04-GEO-MB2-162-m01	**Introduction to Programming and Geostatistics**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		Ü (2) Module taught in: English					
	Method of assessment		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					

04-GEO-MB3-162-m01	**From Field Measurements to Geoinformation**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		Ü (2) Module taught in: English					
	Method of assessment		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					
Internship (15 ECTS credits)								
04-GEO-INT-162-m01	**Internship**							
	ECTS	15	Duration	1 semester	Method of grading	(not) successfully completed	Modul level	graduate
	Courses		P (0) Module taught in: English or German					
	Method of assessment		report in the form of a presentation (approx. 15 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)					
	Additional Information		Additional information on module duration: 8 weeks.					
Step towards Master Thesis (15 ECTS credits)								
04-GEO-TMT1-162-m01	**Innovation Laboratory**							
	ECTS	10	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		P (3) Module taught in: English					
	Method of assessment		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)					
04-GEO-TMT2-162-m01	**Project Seminar**							
	ECTS	5	Duration	1 semester	Method of grading	(not) successfully completed	Modul level	graduate
	Courses		S (1) Module taught in: English					
	Method of assessment		presentation (approx. 30 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)					

Compulsory Electives (35 ECTS credits)								
Applications of Earth Observation (10-15 ECTS credits)								
04-GEO-APP1-162-mo1	**Land Surface Dynamics**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S (2) Module taught in: English					
	Method of assessment		a) presentation (approx. 30 minutes) or b) preparing a poster (approx. 10 hours total) or c) term paper (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					
04-GEO-APP2-162-mo1	**Land and Water Management**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S (1) + Ü (1) Module taught in: English					
	Method of assessment		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					
04-GEO-APP3-162-mo1	**Exploration of Mineral Deposits**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S (1) + Ü (1) Module taught in: English					
	Method of assessment		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					

04-GEO-APP4-162-mo1	**Selected Applications**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S (1) + Ü (1) Module taught in: English					
	Method of assessment		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					
Advanced Methods and Modeling (5-10 ECTS credits)								
04-GEO-MET1-162-mo1	**Spatial Modeling and Prediction**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S (1) + Ü (1) Module taught in: English					
	Method of assessment		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					
04-GEO-MET2-162-mo1	**Advanced Spatial Analysis for Geoscientists**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S (1) + Ü (1) Module taught in: English					
	Method of assessment		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					

04-GEO-MET3-162-m01	**Special Methodological Issues**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S (1) + Ü (1) Module taught in: English					
	Method of assessment		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					
Resources and Environment (5-10 ECTS credits)								
04-GEO-RE1-162-m01	**Selected Topics in Geography I**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		V (2) Module taught in: English					
	Method of assessment		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					
04-GEO-RE2-162-m01	**Selected Topics in Geography II**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		V (2) Module taught in: English					
	Method of assessment		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					
04-GEO-RE3-162-m01	**Mineral Resources in Space and Time**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		V (2) Module taught in: English					
	Method of assessment		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					

Soft Skills (5 ECTS credits)								
04-GEO-SOS1-162-m01	**Advanced applied Project management / Scientific presentation / Scientific Writing**							
	ECTS	5	Duration	1 semester	Method of grading	(not) successfully completed	Modul level	graduate
	Courses		S (2) Module taught in: English					
	Method of assessment		a) presentation (approx. 30 minutes) or b) preparing a poster (approx. 10 hours total) or c) term paper (approx. 15 pages) or d) log (2 to 3 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					
04-GEO-SOS2-162-m01	**Advanced skills on the Master's level**							
	ECTS	5	Duration	1 semester	Method of grading	(not) successfully completed	Modul level	graduate
	Courses		S (2) Module taught in: English					
	Method of assessment		a) presentation (approx. 30 minutes) or b) preparing a poster (approx. 10 hours total) or c) term paper (approx. 15 pages) or d) log (2 to 3 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					
04-GEO-SOS3-162-m01	**Advanced Instructions on Scientific Working**							
	ECTS	5	Duration	1 semester	Method of grading	(not) successfully completed	Modul level	graduate
	Courses		S (2) Module taught in: English or German					
	Method of assessment		a) presentation (approx. 30 minutes) or b) preparing a poster (approx. 10 hours total) or c) term paper (approx. 15 pages) or d) log (2 to 3 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					

Thesis (30 ECTS credits)								
04-GEO-MA1-162-m01	**Master-Thesis EAGLE**							
	ECTS	28	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		No courses assigned to module					
	Method of assessment		Master's thesis (approx. 60 pages) Language of assessment: English					
	Additional Information		Time to complete: 6 months.					
04-GEO-MA2-162-m01	**Final Colloquium on Master Thesis**							
	ECTS	2	Duration		Method of grading	numerical grade	Modul level	graduate
	Courses		K (0) Module taught in: English					
	Method of assessment		talk (approx. 30 minutes) with subsequent discussion (approx. 15 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)					