

Module title		Abbreviation
Methods for Analysing Remote Sensing Data		04-Geo-MFD-152-m01
Module coordinator		Module offered by
holder of the Professorship of Remote Sensing		Institute of Geography and Geology
ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
This module essentially conveys methodological basics: geometric corrections / radiometric corrections (calculation of reflectances, atmospheric correction and correction of viewing and illumination angles) / spatial and spectral filters / image enhancement for visual image interpretation / analysis of spectral profiles / information extraction (rationing, indices, transformations) / classification of remote sensing data and accuracy assessment / pixel based vs. object-oriented analysis / multi-temporal data analysis (time series generation, change detection) / joint usage of remote sensing data with other geoinformation in geographical information systems (raster and vector data).		
Intended learning outcomes		
The students apply fundamental methods for the processing and analysis of mainly optical earth observation data. They create maps from remotes sensing data self-reliantly and interpret the results.		
Courses (type, number of weekly contact hours, language — if other than German)		
S (2) + T (2) Module taught in: German and/or 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)		
presentation (approx. 45 minutes) with related term paper (approx. 15 pages) Language of assessment: German and/or English Assessment offered: Once a year, winter semester		
Allocation of places		
max. 20 places. Should the number of applications exceed the number of available places, places will be allocated according to the number of subject semesters with the individual student's progression through their degree programme being taken into account. 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		
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Workload		
150 h		
Teaching cycle		
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Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module appears in		
Bachelor's degree (1 major) Geography (2015) Module studies (Bachelor) Geography (2020) Bachelor's degree (1 major) Computer Science und Sustainability (2021) Bachelor's degree (1 major) Geography (2023)		