### Module title
Methods for Analysing Remote Sensing Data

### Abbreviation
04-Geo-MFD-152-m01

### Module coordinator
holder of the Professorship of Remote Sensing

### Module offered by
Institute of Geography and Geology

### ECTS
5

### Method of grading
numerical grade

### Only after succ. compl. of module(s)
--

### Duration
1 semester

### Module level
undergraduate

### Other prerequisites
--

### 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 remote sensing data self-reliantly and interpret the results.

### Courses
**S (2) + T (2)**
Module taught in: German and/or English

### Method of assessment
presentation (approx. 45 minutes) with related term paper (approx. 15 pages)
Assessment offered: Once a year, winter semester
Language of assessment: German and/or English

### 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
--

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

### Module appears in
Bachelor' degree (1 major) Geography (2015)