### Department
08 Geoinformatics

### Course title
Remote Sensing

### Hours per week (SWS)
4

### Number of ECTS credits
5

### Course objective
Learn about current developments in the context of Remote Sensing, especially: innovative methods and algorithms for digital image processing, information extraction from special remote acquisitions, visualization of remote sensing data, sensor fusion for the optimization of the results, and the temporal and financial effort for the implementation of remote sensing based projects.

### Prerequisites

### Recommended reading

### Teaching methods
Discussion, Excursion, Explorative Learning, Seminar, Practice.

### Assessment methods
Project Thesis (admission requirement) & Written Exam

### Language of instruction
English

### Name of lecturer
Prof. Dr. Andreas Schmitt & MSc. Ymeh Zarit Ulloa Torrealba

### Email
andreas.schmitt@hm.edu & ymeh_zaritulloa_torrealba@hm.edu

### Link

### Course content
- Color space transformations, Image enhancement, Special methods and algorithms for the classification of high-resolution remote sensing data, Object-oriented classification of raster data
- Special methods for the classification of hyperspectral data, methods of image fusion, Combination of remote sensing with other geodata, Inclusion of remote sensing in geoinformation systems, possibilities and limits of the visualization of remote sensing data, methods and procedures of radar remote sensing, and excursions to research institutions or companies (if applicable).

### Remarks
Mandatory subject in the first semester of the master program.