Identifier	INF- GI-B-VFG-y
Module title	Advanced Remote Sensing and Geoinformatics y
Qualification objectives	Acquisition of special knowledge and practical skills in a selected area of remote sensing or geoinformatics.
Exemplary contents	Selected topics of remote sensing or geoinformatics. Different module contents are distinguished by distinct sub-indicators $y \in \{A,B,C,\ldots,Z\}$.
ECTS	6 ECTS
Contact hours	60 h

Bachelor – Winter term

Identifier	INF-GI-M-GDA
Module title	Geo Data Analysis
Qualification objectives	The students are able to analyse spatial data using different methodological approaches.
Exemplary contents	Processes of spatial analysis, geostatistical approaches, spatial modelling
ECTS	6 ECTS
Contact hours	60 h

Identifier	INF-GI-M-MFE
Module title	Advanced Methods of Remote Sensing
Qualification objectives	The students will acquire theoretical and practical skills in selected topics of remote sensing. The students have the required advanced methodological knowledge and competences in data analysis in further depth. This includes the ability to independently apply and implement the knowledge. Furthermore, the students are able to conduct scientific discussions as well as transferring learned methods and tools to other applications including its discussion and presentation of results.
Exemplary contents	Based on selected geoscientific examples, the students will acquire skills in specific remote sensing methods (e.g. machine learning, time series analysis, SAR, hyperspectral remote sensing). Besides the required and necessary theoretical background knowledge of methods, the students will learn to practically implement these methods using common programming languages (e.g. Python or R). The selected topics will be discussed whilst the current state of the art in remote sensing science is reflectively comprised.
ECTS	9 ECTS
Contact hours	90 h

Identifier	INF-GI-M-RFE
Module title	Regional Topics of (Applied) Earth Observation
Qualification objectives	The students are able to transfer and adapt the acquired remote sensing knowledge, including content, theories and models, to region-specific issues and research questions. Therewith, the students are able to handle specific spatial phenomena based on acquired competencies in a selected region. Additionally, the students are familiar with the latest research topics regarding theory and praxis. The students are able to conduct scientific discussions and critically and constructively dispute relevant topics.
Examplary contents	The students acquire knowledge in advanced methods of remote sensing, including the processing of region-specific issues and research questions of selected case studies. Complex, region-specific patterns and processes in space and time will be focused and discussed. The students will acquire basic and advanced knowledge in selected regional topics and questions as well as advanced skills in analysis, transfer, discussion and presentation of results.
ECTS	9 ECTS
Contact hours	90 h

Identifier	INF-GI-M-TFG-y
Module title	Selected Topics of Remote Sensing and Geoinformatics y
Qualification objectives	Acquisition of advanced theoretical knowledge and practical skills in a selected area of remote sensing or geoinformatics.
Exemplary contents	Advanced topics of remote sensing or geoinformatics. Different module contents are distinguished by distinct sub-indicators $y \in \{A,B,C,\dots,Z\}$.
ECTS	6 ECTS
Contact hours	60 h