**Remote Sensing in Resource Management**

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<th>Module title</th>
<th>Abbreviation</th>
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<td>Remote Sensing in Resource Management</td>
<td>04-Geo-FIR-152-m01</td>
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**Module coordinator**
holder of the Professorship of Remote Sensing

**Module offered by**
Institute of Geography and Geology

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<tr>
<th>ECTS</th>
<th>Method of grading</th>
<th>Only after succ. compl. of module(s)</th>
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<tr>
<td>5</td>
<td>numerical grade</td>
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**Duration**
1 semester

**Module level**
undergraduate

**Other prerequisites**
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**Contents**
Against the background of geographical questions, the spectrum of opportunities for remote sensing technologies is developed within this module. According to the student's topic choices, different aspects of remote sensing for the monitoring of environmentally relevant processes in the oceans, the atmosphere and on the land surface are examined, including: Urban applications such as urban growth and urban climate, whereby land surface parameters such as imperviousness and thermal extinction of surfaces are further deepened / remote sensing for environmental monitoring, such as assessment and long-term observation of conventions, support of tasks of nature conservation like habitat designation by modelling of species distributions / remote sensing in health management / hydrological applications of remote sensing such as parameters for modelling run-off in drainage areas or flood mapping and water masks / agricultural applications from crop mapping through extensive growth monitoring and drought forecasts to precision farming. For the respective fields of application, relevant parameters are presented in detail and the spectrum of methods is deduced.

**Intended learning outcomes**
The students describe, illustrate, explain, and question third party's research results in remote sensing for the first time and evaluate the value of earth observation for answering geographical research questions.

**Courses**
(type, number of weekly contact hours, language — if other than German)

S (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)
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**
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**Referred to in LPO I**
(examination regulations for teaching-degree programmes)
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**Module appears in**
Bachelor' degree (1 major) Geography (2015)