

Module description

Module title					Abbreviation	
Remote Sensing					10-l=RRS-232-m01	
Module coordinator				Module offered by	Module offered by	
holder of the Chair of Computer Science VIII				Institute of Compu	Institute of Computer Science	
ECTS	Meth	od of grading	Only after succ. o	Only after succ. compl. of module(s)		
5	nume	erical grade				
Duration		Module level	Other prerequisi	Other prerequisites		
1 semester		graduate				
Contents						

Contents

Remote sensing refers to the use of satellite- or aircraft-based sensor technologies to detect and classify objects on Earth, including on the surface and in the atmosphere and oceans, based on propagated signals (e.g. electromagnetic radiation). It may be split into "active" remote sensing (i.e., when a signal is emitted by a satellite or aircraft and its reflection by the object is detected by the sensor) and "passive" remote sensing (i.e., when the reflection of sunlight is detected by the sensor).

Intended learning outcomes

The students learn the basics of earth observation. They outline and explain the radiation path through the atmosphere to the object under investigation and back to the sensor. They emphasize essential characteristics of remote sensing data, sensors and platforms.

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

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Module taught in: German and/or English

 $\textbf{Method of assessment} \ (\textbf{type}, \textbf{scope}, \textbf{language} - \textbf{if other than German, examination offered} - \textbf{if not every semester, information on whether} \ (\textbf{type}, \textbf{scope}, \textbf{language} - \textbf{if other than German, examination offered} - \textbf{if not every semester, information on whether} \ (\textbf{type}, \textbf{scope}, \textbf{language}) \ (\textbf{type}, \textbf{language}) \$ module is creditable for bonus)

written examination (approx. 60 to 120 minutes)

If announced by the lecturer at the beginning of the course, the written examination may be replaced by an oral examination of one candidate each (approx. 20 minutes) or an oral examination in groups of 2 candidates (approx. 15 minutes per candidate).

Language of assessment: German and/or EnglishCreditable for bonus

Allocation of places

Additional information

possible majors for MA 120 Computer Science: LR,IN

Workload

150 h

Teaching cycle

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

Module appears in

Master's degree (1 major) Computer Science (2023)

Master's degree (1 major) Artificial Intelligence & Extended Reality (2024)

Master's degree (1 major) Artificial Intelligence (2024)

Master's degree (1 major) Computational Mathematics (2024)

Master's degree (1 major) Mathematics (2024)