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| <b>Module title</b>  |                          | <b>Abbreviation</b>                         |
| Radar Remote Sensing   |                          | 10-I=RRS-212-m01                            |
| <b>Module coordinator</b>  |                          | <b>Module offered by</b>                    |
| holder of the Chair of Computer Science VIII   |                          | Institute of Computer Science               |
| <b>ECTS</b>  | <b>Method of grading</b> | <b>Only after succ. compl. of module(s)</b> |
| 5  | numerical grade          | --  |
| <b>Duration</b>  | <b>Module level</b>      | <b>Other prerequisites</b>                  |
| 1 semester   | graduate                 | --  |
| <b>Contents</b>  |                          |   |
| 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). |                          |   |
| <b>Intended learning outcomes</b>  |                          |   |
| 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.   |                          |   |
| <b>Courses</b> (type, number of weekly contact hours, language — if other than German)   |                          |   |
| V (2) + Ü (2)<br>Module taught in: English   |                          |   |
| <b>Method of assessment</b> (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)   |                          |   |
| written examination (approx. 90 to 120 minutes).<br>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).<br>creditable for bonus<br>Language of assessment: English   |                          |   |
| <b>Allocation of places</b>  |                          |   |
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| <b>Additional information</b>  |                          |   |
| Focuses available for students of the Master's programme Informatik (Computer Science, 120 ECTS credits):<br>LR  |                          |   |
| <b>Workload</b>  |                          |   |
| 150 h  |                          |   |
| <b>Teaching cycle</b>  |                          |   |
| --   |                          |   |
| <b>Referred to in LPO I</b> (examination regulations for teaching-degree programmes)   |                          |   |
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| <b>Module appears in</b>   |                          |   |
| Master's degree (1 major) Computer Science (2021)<br>Master's degree (1 major) Aerospace Computer Science (2021)   |                          |   |