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| Module title | Geographic Information Systems in Water Management II – RWTH Aachen | | | |
| Identifier | 3015846 | | | |
| Duration (Semester) | one semester | | | |
| Cycle (Semester) | Winter semester | | | |
| Valid from | winter semester 2020 | | | |
| Valid until | - | | | |
| Module level | Master | | | |
| Content | Advanced tools and applications of GIS systems: advanced hydrology modelling, raster data analysis, spatial and raster data analysis, analysis of height information, interpolation (Thiessen polygons, IDW), georeferencing, geo databases, 3D-Analyst, Triangulated Networks, model builder | | | |
| Learning Objectives/ Learning Outcomes | Students should learn to analyse, edit and solve complex water management tasks with the tools of geographic information systems as well as database systems. The theoretical basis will be reduced to a minimum and the emphasis will be put on the advanced understanding of methods using GIS system and relational databases. At the end of the module, students should be independently able to analyse and solve complex water management tasks with the help of geographic information systems. The students will be able to transfer acquired expert knowledge to alien tasks. The acquired knowledge is under constant review as a part of self-assessment. Goal of the tutorial: Repetition and consolidation of the learned content as well as supervised working on homework and exercises. | | | |
| (Study-Specific) Prerequisites | None | | | |
| References | see Moodle | | | |
| Language | English | | | |
| Examination Terms | Graded written Exam. Prerequisite for participation in the written exam: compulsory attendance at the seminar. | | | |
| Miscellaneous | - | | | |
| Module coordinator | Universitätsprofessor Dr.-Ing. Heribert Nacken | | | |
| ECTS credits | 5 | | | |
| Contact time (WSH) | 2 | | | |
| Examination duration (min) | - | | | |
| Total hours (h) | 120 | | | |
| Contact hours (h) | 30 | | | |
| Self-study hours (h) | 90 | | | |
| Exam node (Kennung) | | | | |
| Title | ECTS Credits | Contact time (WSH) | Recommended Semester (Study start winter) | Recommended Semester (Study start summer) |

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| Seminar Geographic Information Systems in Water Management II (301584602) | 0 | 2 | 3rd semester | no semester recommended |
| Written exam (or oral ex-am) Geographic Information Systems in Water Management II (301584601) | 5 | 0 | 3rd semester | no semester recommended |
| Offer node | | | | |
| Title | ECTS Credits | Contact time (WSH) | Recommended Semester (Study start winter) | Recommended Semester (Study start summer) |
| Optional Tutorial Geographic Information Systems in Water Management II | - | 0 | 3rd semester | no semester recommended |