## Course of Study Water and Environmental Engineering (Study Cohort w22)

Sample course plan C Master Water and Environmental Engineering (WUMS) Dual study program Interdisciplinary complement Specialisation Water Biology, Geology and Chemistry Practical module 2 (dual study program, Master's degree) Practical module 3 (dual study program, Master's degree) Master thesis (dual study program) 2 Geology and Soil Science VL 3 Biology M 5 6 Sustainability and Risk Management 8 Safety, Reliability and Risk Assessment 10 11 Study Work Water/ Waste Water Modeling in Water Management Groundwater Modeling using Modflow VL 1 12 Groundwater Modeling using Modflow GÜ 2 13 Practical module 1 (dual study program, Master's degree) Modeling of Water Supply Network 14 15 16 17 Management of Surface Water Membrane Technology Modelling of Flow in Rivers and Estuaries VL 3 Membrane Technology VI 2 18 Nature-Oriented Hydraulic Engineering / Integrated Flood Protection PBL 2 Membrane Technology 19 Membrane Technology 20 21 22 23 Water Resources and -Supply Wastewater Systems Process Modeling in Water Technology Chemistry of Drinking Water Treatment VL 2 Advanced Wastewater Treatment VL 2 Process Modeling in Drinking Water Treatment PBL 2 24 Chemistry of Drinking Water Treatment Process Modelling of Wastewater Treatment VL 2 Wastewater Systems - Collection, Treatment and Reuse Water Resource Management Water Resource Management GÜ 1 Wastewater Systems - Collection, Treatment and Reuse 27 28 Construction and Simulation of Sewerage Systems Advanced Vadose Zone Hydrology Adaptation to Climate Change in Hydraulic Engineering (AKWAS) Construction and renovation of urban sewer systems SE 3 Vadose Zone Hydrology VL 2 Adaptation to climate change in hydraulic engineering 30 Simulation of sewerage systems SE 3 Vadose Zone Hydrology HÜ 2 31 Modeling Processes in Vadose Zone GÜ 2 32 33 34 Subsurface Processes Subsurface Solute Transport Subsurface Solute Transport Modeling of Subsurface Processes 39 40 Business & Management (from catalogue) - 6LP Linking theory and practice (dual study program, Master's degree) (from catalogue) - 6LP

The choice of courses from the catalogue is flexible (depends on the semestral work load), provided the necessary number of required credits is reached.