

Module Name	3.2.5 Hydrological and hydraulic modeling
Identification code	AEF415, EM3.2.5, AE-CAU320, EH-CAU406 (QIS-registration for examination) 73100
Subtitle	
Courses embedded	
Term	Annually in winter semester
Coordinator	Prof. Dr. N. Fohrer
Teachers	Prof. Dr. N. Fohrer, Dr. B. Guse
Tuition language	English
Programme involvement	Elective MSc Environmental Management Elective MSc Ecohydrology Elective MSc European Master in Applied Ecology Elective MSc agr. Umweltwissenschaften
Teaching form, contact time per week class size	lecture (30 h/90 h) exercises (30 h/90 h) 25
Workload overall	180h
Contact time	60h
ECTS credit points	6
Preconditions prescribed	
Prerequisites recommended	
Learning outcomes	Students are able to understand theoretical modelling concepts and their transformation in model code and application. They are able to run sensitivity analysis and to calibrate and validate hydrological models and interpret the results. They are capable of defining model scenarios and run comparative model exercises
Content	Rainfall-runoff modelling, runoff processes and their implementation into hydrological models, overview of state of the art of hydrological models, model parameterization, data pre- and postprocessing, spatially distributed models and GIS interface, model application, compiler functions, debugging, model modifications
Assessment	Report 100% Guse
Teaching media	
References	K. Beven, 2000: Rainfall – Runoff Modeling – the primer. John Wiley & Sons Ltd 2000 SWAT user manuals
Contact	Prof. Dr. agr. Nicola Fohrer Fon: +49 431 880-1276 Fax: +49 431 880-4607 E-Mail: nfohrer@hydrology.uni-kiel.de www: http://www.hydrology.uni-kiel.de:9673/Hydrology/Mitarbeiter/nfohrer/document_view