Modulnummer	**415 (für die Anmeldung in QIS 73100)**
Modulname - deutsch	**Hydrologische Modellierung**
Modulname - englisch	**Hydrological modeling**
Studiengang und -abschnitt	MSc Agricultural Sciences, MSc Environmental Management, MSc Eco-hydrology, MSc Applied Ecology
Häufigkeit des Angebots	yearly in WS
Modulverantwortlicher	Prof. Dr. N. Fohrer
Studienberatung zum Modul	Prof. Dr. N. Fohrer, Dr. B. Guse
Lehrveranstaltungen und Dozenten	**Lecture:** Hydrological modeling, Prof. Dr. N. Fohrer **Exercises:** Hydrological modeling, Prof. Dr. N. Fohrer by Dr. B. Guse
Vorkenntnisse	
Sprache	English
Plätze	25 Application up to 15th October at bguse@hydrology.uni-kiel.de
Lehrformen (Präsenzstunden/ Workload)	Lecture (30 h / 90 h) Exercises (30 h / 90 h)
Ablauf	weekly in the lecture period
Art und Gewichtung der Prüfungsleistungen	assignment: 100 % – Prof. Dr. N. Fohrer by Dr. B. Guse
European Credit Points des Moduls	6
Ziele des Moduls	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
Inhalte des Moduls	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
Vermittelte Kompetenzen	professional, learning, methodological and practical competence
Studienhilfsmittel	K. Beven, 2000: Rainfall – Runoff Modeling – the primer. John Wiley & Sons Ltd 2000 SWAT user manuals