List of Lectures

The study program Water Engineering informs about courses, professors, news and events related to this course for international students. For our lectures e-learning systems have been set up at e-learning for environmental hydrologists. Watch out at the bottom of each teaser text for each lecture.

Master Environmental Engineering

Hydrological Engineering

The course introduces principles and methods of sustainable water resources management for the Master Water Engineering. The course includes water resources assessment and the necessary hydrological background on processes and water balances, integrated water resources assessment, flood and drought risk assessment, management and mitigation and planning for environmental hydrology.

Notes on Sustainable Water Management

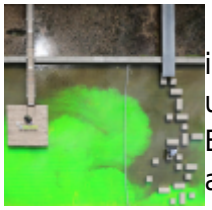
Hydrological Modeling

The master course includes modeling of water quality of rivers, transport modeling in rivers and lakes, water quality of lakes, groundwater quality, water, and solute movement in aquifers for the restoration of aquatic systems and water engineering with corresponding techniques. The course introduces the use of Python for hydrological modeling.

Hydrological Modeling Notes PhreeqC

Advanced Study Courses

Tracer Hydrology



The course on tracer hydrology introduces the principles of the use of tracers in hydrology. Environmental tracers and artificial tracers are presented, methods of applying them for hydrological studies, interpretation and modeling. The lecture is offered as a block course at TU Darmstadt. Lecture notes can be found here.

Environmental Tracer Techniques

The course introduces and demonstrates environmental isotope field techniques with sampling, monitoring, analysis and interpretation. Analysis of recharge and solute transport are presented. Course announcements are given on our news page. Participants can access notes of the lecture, slides, links and videos here.