

Field of Study 4 - Hydrogeology, Groundwater & Geothermal Energy

Master of Science in Environmental Engineering

Students of this FoS understand hydraulic properties of different aquifer types including hydrological and hydrogeological processes and biogeochemical reactions in subsurface environments. They can also solve problems related to use of geothermal energy and groundwater ecosystems. In addition, students are familiar with the fate and transport of anthropogenic and geological contaminants in groundwater systems and are capable of using numeric models to describe geological and hydrogeological conditions in subsurface environments.

Required Modules

- NN Groundwater Hydraulics
- NN The saturated and the unsaturated Zone: Process Understanding and Modelling

Elective Modules

- NN Numerical Modelling of Water Demand and Environmental Remediation Strategies
- NN Hydrogeologie in der Praxis
- NN Modelling of Groundwater Soil-Plant Interaction
- NN Shallow and Deep Geothermal Energy Use of Groundwater
- NN Modelling of groundwater/ surface water Interaction
- NN Transport of Contaminants in Groundwater
- BV490057 Technical Hydrogeology
- NN Hydrogeological and isotopic methods for the characterization of groundwater systems
- BV150050 Environmental Geology / Geochemistry
- BV380004 Microbiology of Groundwater Ecosystems

Pending module codes will be updated before the beginning of the semester.