Module number	Module name	Professor in charge
	Hydromechanics	**Prof. Pohl**
Contents and qualification aims	Starting with the physical characteristics of water the hydrostatics and subsequent the mainly steady hydrodynamics will be discussed with emphasis on the principles of conservation of energy, mass and momentum, pipe hydraulics, open channel hydraulics. The aim of qualification is to answer hydromechanical questions in engineering. This means: (i) Identification of hydromechanical problems in engineering and (ii) its quantitative solution for dimensioning and design of hydraulic structures and devices. Application of the results also to scientific problems	
Teaching form	2 hours a week lectures, 1 hour a week tutorials	
Pre-requisite of attendance	knowledge in physics, higher mathematics Literature: **White, F. M.**: Fluid Mechanics, McGraw-Hill, 1994, ISBN 0-07-113765-3 **Levi, Enzo**: The Science of Water, The foundation of Modern Hydraulics; ASCE, 1995,ISBN 0-7844-0005-9 **Gray, Donalds D., P. E.**: A First Course in Fluid Mechanics for Civil Egineers, WRP, 2000, ISBN 1-887201-11-4 . ISBN 1-887201-11-4, Publ. 2000 WRP.	
Usage	The modul is a mandatory module and especially designed for students with a first degree in environmental sciences.	
Pre-requisite to achieve credit points	The credit points are earned if the student passes the module exam. The module exam is a written exam (90 minutes).	
Credit points and marks	The module earns 5 cr. The module mark is identical to the exam mark.	
Frequency of the module	The module is offered each winter semester.	
Work load	The student’s work load is 150 hours.	
Duration of the module	The module is finished in one semester.	