Title of the course:	NEPTUN-code:	Teaching hours:	Credit: 4
Watershed management	RKWCG1EBNE	1+2+0	Exam type:
and stormwater		Semester: 6	exam
management			
Course leader:	Position:	Required preliminary knowledge:	
Rita Kendrovics Boda PhD	associate	Hydrology and hydraulics	
	professor	RKWHH1EBNE	

Curriculum:

"Water Framework Directive" and "River Basin Plan". The effect of urbanization on the hydrological circular process and its connection with the natural circular process. Flow, covert areas, and greeneries effects in the life of settlements. Water demands (social, ecological, and natural demands). Drinking water demand, usage demand, immediate and indirect demands, virtual demand. Moisture proportion. The quality and quantity characterisation of the flow. Moisture economy. The effects of climate change on the settlement hydrological circular process.

Professional competencies:

The students know the catchment-economy and the definition of the integrated water management and its principles, furthermore they know the main domestic water economy tasks.

Knowledge of the settlement's main hydrological parameters, the possible effect of the climate change on the water management and the condition of the rainwater drainage in the inner-city areas.

The knowledge of the possible technological solutions of the rainwater drainage and the quality of the rainwater, furthermore the recovery regulations.

The students will be able to cooperate other professions trained experts in their own field. They keep under review and endorse the legal, technical, technological, and administrative changes during their professional work.

Bibliography:

Walter Lükenga: Water Resource Management, free download from bookboon.com Watershed Hydrology Management and Modelling

David A. Lloyd Owen (2018): Smart Water Technologies and Techniques: Data Capture and Analysis for Sustainable Water Management, WILEY Blackwell,

Walter Leal Filho (2012): Climate Change and the Sustainable Use of Water Resources, Springer-Verlab Berlin Heidelberg

Stormwater Management Guide https://info.buildingsolutions.com/hubfs/Stormwater-Management-Guide.pdf

Hlavínek, Petr, Zelenáková, Martina (2015): Storm Water Management, Springer

Comment: