

Subject name	Fluvial geomorphology for engineers	
Subject code	IS-FGE-9	
Department	Hydraulic Engineering and Geotechnics	
Faculty	Environmental Engineering and Land Surveying	
Subject supervisor/Lecturer	Professor Artur Radecki-Pawlik	
General information	Teaching period	winter or summer semester
	ECTS credit	6
	Lectures total	15
	Lab practical	30
Objective and general description	Get students acquainted with elements of fluvial geomorphology in the river engineering works. Within the framework of the Water Directive of EU such knowledge is necessary to prepare appropriate projects and design appropriate hydraulic structures along mountain streams and rivers. During the course a lot of basic information from fluvial geomorphology from all over the world will be presented. The subject all the time refers to engineering tasks. In this way the student is prepared to take the management tasks.	
Lectures 5 x 3 hours	Introduction and basic nomenclature 1. Methods, techniques and tools connected with fluvial geomorphology Braided and meandering rivers Dominant discharge Bankfull 2. Case studies	
Lab practicals 10 x 3 hours	Students are supposed to prepare an analysis of one chosen subject from fluvial geomorphology and present it.	
References	<p>Rowinski P., Radecki-Pawlik, A. (Eds.) 2015. Rivers – Physical, Fluvial and Environmental Processes. Springer, Series: GeoPlanet: Earth and Planetary Sciences, pp. 684.</p> <p>Radecki-Pawlik A. 2011. Hydromorfologia rzek i potoków górskich – działy wybrane. Podręcznik Akademicki. Uniwersytet Rolniczy w Krakowie, s. 280. (in Polish but with translations during lectures)</p> <p>Radecki-Pawlik, A. 2015. Why Do We Need Bankfull and Dominant Discharges? In: Rowinski P., Radecki-Pawlik, A. (Eds.) 2015. Rivers – Physical, Fluvial and Environmental Processes. Springer, Series: GeoPlanet: Earth and Planetary Sciences, pp. 684.</p> <p>Radecki-Pawlik A., Hernik J. 2010. Cultural Landscapes of River Valleys. Uniwersytet Rolniczy w Krakowie, Eds., monografia, s.260.</p> <p>Radecki-Pawlik A. 2002. Bankfull discharge in mountain streams: theory and practice. Earth Surface Processes and Landforms, John Wiley and Sons, 27, 115-123, poz.bibl. 17.</p>	