Fachbereich für Bau- und Umweltingenieurwissenschaften
Institut für Wasserbau und Wasserwirtschaft

Fachgebiet Wasserbau und Hydraulik

Leiter: Prof. Dr.-Ing. habil. Boris Lehmann

TECHNISCHE UNIVERSITÄT DARMSTADT

WASSERBAU HYDRAULIK

Hydraulic Engineering

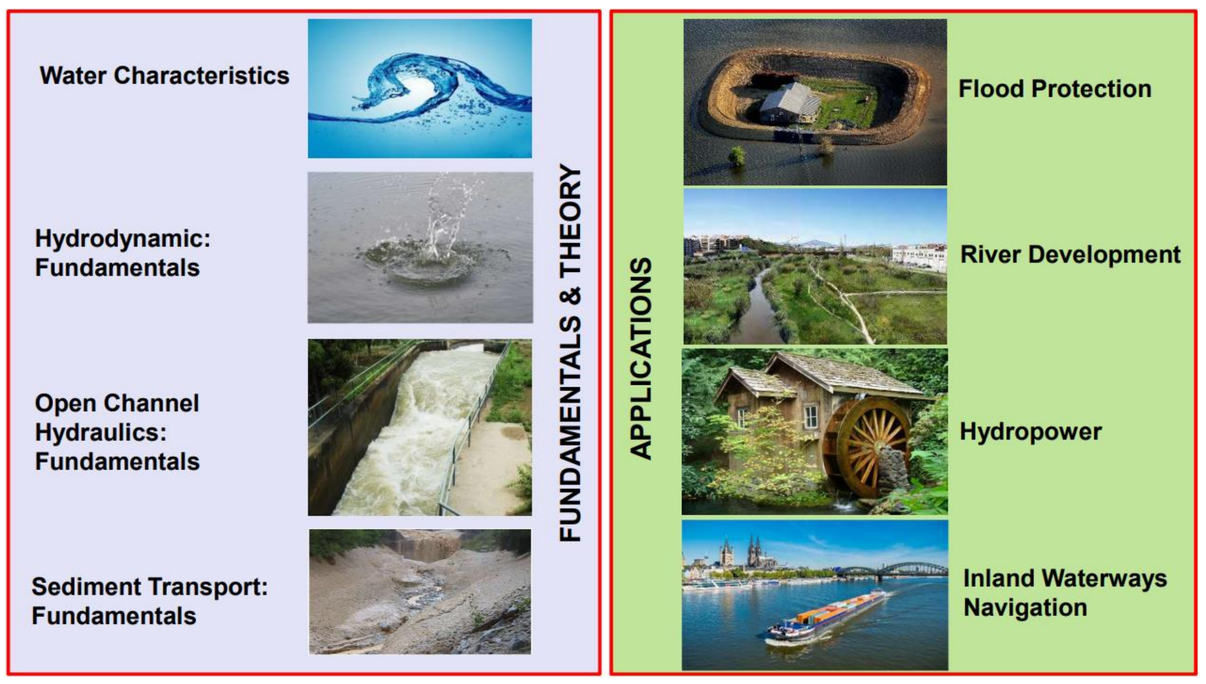
Winter Semester (Mo 1:30 pm – 3:10 pm)
Part of Water in Urban Development (Module Number 13-02-J004, 6 CP)
Sustainable Urban Development (SUD)

Learning Objectives

In order to understand, design and plan water courses and their corridors in urban areas, a basic hydraulic understanding of the flow characteristics of water bodies is needed. The main objective of the course is the hydraulic understanding of the processes involved in channel flows.

PDF slide copies are available to download for each course unit and supplementary literature recommendations are provided. Some course units are supported by screencasts.

Contents



Pre-Skills & Certificate of Achievement

Basic knowledge of engineering-mathematical content is an advantage. Project work in small groups on current hydraulic engineering topics is beneficial and is encouraged. The achievement is verified by a written examination and covers all the topics given in the overall contents.

Professional Focus and Relevance

For hydraulic engineering measures, both along the course of a watercourse and in urban areas, associated hydraulic design tasks are necessary for design and dimensioning. The flow rate Q and the water depth h often play a central role. The relevant knowledge is taught in the module.