



An integrated approach to education on flood risk management: the EU's Erasmus Mundus Masters Course

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Flooding is a major natural hazard which has become more frequent and severe in the recent years. Consequently, flood risk management has emerged as a key concern posing significant engineering and societal challenges in all around the world, including the Mediterranean region. As underlined in the EU Flood Directive (2007/60/EC), it is essential that a holistic integrated approach for management of flood risks be adopted. Following this, integrated flood risk management has emerged as a requisite field of interdisciplinary research and practice aimed at reducing the human and socio-economic losses caused by flooding (i.e. river, urban or coastal) while at the same time taking into consideration its ecological benefits on the floodplains or coastal zones. Providing education to students and professionals in the field of flood risk management based on this integrated approach is important but the necessity of such education has not been widely and effectively recognized in Europe. Unfortunately, existing graduate degrees and courses on floods within European universities lacks a certain level of integration although they are capable of covering many technical aspects. In this respect, Erasmus Mundus Masters Course in Flood Risk Management (<http://floodriskmaster.org/>) is an important advance in water education for Europe. The Erasmus Mundus Programme in Flood Risk Management is a joint programme led by UNESCO-IHE Institute for Water Education (the Netherlands) and in collaboration with Technical University of Dresden (Germany), Technical University of Catalonia (Spain) and University of Ljubljana (Slovenia). In this two-year MSc Programme students master the subject of integrated flood risk management by attaining a broad and cross-boundary knowledge on natural and man-made processes occurring in river basins and in coastal zones at different spatial and temporal scales, and develop an understanding of the current theory and practice related to flooding and flood management. The subjects covered include hydrology and climatology, geodesy, hydrological and hydraulic modelling for various types of flooding (fluvial, urban and coastal), climate change and hydroinformatics for decision support as well as risk management, spatial planning, and socio-economic and institutional framework for flood risk management. There are also a variety of technical trips in each country during which students learn about the specific flood-related problems at the local level and their solutions. In this regard, the course provides an excellent opportunity for students to see various applications of theoretical knowledge they gain within real life practices of flood risk management. At the last semester, each student conducts a thesis research and specializes in a particular subject more academically at one of the four institutes involved or with an industrial partner. The blog pages run by the first and third batch students (<http://emfrm.blogspot.com/> and <http://emfrm-3.blogspot/>, respectively) can be seen to learn about both their academic and personal experiences during the Masters course.