European Joint Master Programme in

Flood Risk Management:

Global Change, Hydroinformatics and Planning

The European Joint Master Programme in Flood Risk Management is offered by a consortium consisting of

- IHE Delft Institute for Water Education (the Netherlands)
- Technical University of Dresden (Germany)
- Barcelona Tech (Barcelona, Spain)
- University of Ljubljana (Slovenia)

Start date: September each year, duration: 2 years, language: English
Locations: Delft (the Netherlands), Dresden (Germany), Barcelona (Spain) and Ljubljana (Slovenia)
Degree: Successful candidates receive MSc degrees from IHE Delft, TU Dresden, UPC Barcelona and University of Ljubljana.

Other collaborating organisations include European hydraulics laboratories, namely, DHI (Denmark), Deltares (the Netherlands) and HR Wallingford (UK), key national organisations responsible for flood management, including Rijkswaterstaat (the Netherlands), Rijnland Regional Water Authority (the Netherlands), National Research and Development Institute for Marine Geology and Geoecology (Romania) and ICHARM (Japan), consulting firm HydroLogic (the Netherlands), Center for Environmental Studies (Florida Atlantic University, USA), Institute of Water and Flood Management (BUET, Bangladesh) and International Association of Hydrological Sciences (UK). These organisations bring their specific complementary expertise in flood risk management to the programme.

INTRODUCTION

Integrated flood risk management aims to reduce the human and socio-economic losses caused by flooding while at the same time taking into account the social, economic, and ecological benefits from floods and the use of flood plains or coastal zones. The need for the adoption of a holistic integrated approach to managing flood risks has been reflected in Flood Directive of the European Parliament.

The programme follows the holistic approach and is explicitly designed to cover wide range of topics - from drivers and natural processes to models, decisions and socio-economic consequences and institutional environment, and is therefore an important advance in water education for Europe.

PROGRAMME

Semester 1 (Dresden)	Hydro-meteorological processes, global change and its impact, flood risk management and GIS
Semester 2 (Delft)	Hydroinformatics, modelling for planning, forecasting, control and decision support, hazard mapping, ICT and fluvial flooding and urban flood disasters
Semester 3.1 (Barcelona)	Hazards due to flash floods, debris flow, coastal flooding, and climate change
Semester 3.2 (Ljubljana)	Spatial planning and socio-economic and institutional framework of flood risk management
Semester 4	Thesis work with one of the four institutes or with an industrial organisation

A number of elective subjects are provided in each semester. International fieldtrips (in Florida) are organised. During the 2-year programme students accumulate 120 ECTS credits.

TARGET GROUP

The course is designed for young graduates in civil/ environmental engineering or a related discipline, and water professionals (engineers and scientists), decision-makers and others involved in flood modelling and flood risk management, particularly those who would like to learn the latest tools and techniques in flood risk management.

Cost: Tuition: € 9000 (per year)

The programme has been funded (second time) by the Erasmus+ programme of the European Commission for the period 2019-2024. Limited number of scholarships for EU and non-EU applicants are available.

PREREQUISITES

A BSc degree in civil or environmental engineering or in geosciences, environmental sciences, limnology, oceanography, geography, geology, natural resources, or a similar subject. BSc students who finishes their BSc by July are welcome to apply.

APPLICATION

Interested candidates may apply online at http://www.floodriskmaster.org/.
Preferred deadline for application is May 31 (if you need visa)/ June 30 (if you do not need visa).
Deadline for scholarship application: January 15 (non-EU applicants) and February 15 (EU applicants).

Further information: http://www.floodriskmaster.org/