Urban Flooding and Drainage (CEGE0039)

Description

This course introduces students to engineering techniques used for managing surface water in urban environment. The course will focus on three main areas: flood risk, flood defence and flood mitigation using sustainable urban drainage techniques. Flood defence will address permanent and temporary defence measures, designing for floods and making space for water. Sustainable urban drainage will provide an introduction to state of the art techniques for reducing surface water flood risk in urban environments and will involve a field trip to case study sites in the greater London area.

LEARNING OUTCOMES:

By the end of this module students will be able to:

- Understand key concepts of flood hydrology including return period and flood estimation procedures
- Understand the principles of urban and sustainable urban drainage and the technologies applied to manage urban surface water at different scales
- Explore performance of SuDS drainage components under different flood conditions
- Understand the difference between flood defence and flood resilience in design
- Describe the principle techniques used for flood defence at different temporal and spatial scales and understand methods used for assessing different options

Key information

Year 2020/21
Credit value 15 (150 study hours)
Delivery PGT L7, Campus-based
Reading List View on UCL website
Tutor Dr Gabriele Manoli
Term Term 2
Timetable View on UCL website

Assessment

- Coursework: 40.0%
- Open-book examination (departmentally managed): 30.0%
- Coursework: 30.0%

Find out more

For more information about the department, programmes, relevant open days and to browse other modules, visit ucl.ac.uk
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Disclaimer: All information correct as of March 2020. Please note that aspects of the module may be subject to change. UCL will make best efforts to inform applicants of major changes.