

## Course G1448: HYDROLOGY

### GENERAL INFORMATION

Spring Semester  
6 ECTS credits

### INSTRUCTOR(S)

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### Description

This course studies the hydrological cycle and phenomena involved in it. It discusses methods for measuring flow in a section of a watercourse; hydrographs are studied and the methods for their determination and for their transit through stretches of rivers and reservoirs and are determined maximum flows in both the general case and in cases such as urban hydrology and drainage of roads. Finally, we study basic aspects of Hydrogeology and movement in porous media.

### TEXTBOOK

**Textbook:** *Applied Hydrology*. Ven Te Chow, David R. Maidment and Larry W. Mays.

### SYLLABUS

1. Introduction
2. Hydrologic cycle
3. Precipitation
4. Evapotranspiration
5. Infiltration
6. Surface water flow
7. Hydrograph analysis
8. Flood routing
9. Computation of extreme flows
10. Theory of groundwater flow and applications of groundwater flow