

**Hydrogeological Risk
Assessment &
Mitigation**

Hydrogeological Risk Assessment & Mitigation		First semester			Second semester					
		From last weeks of September to December	Month 5 (January)	Exams (February)	Month 1 (March)	Month 2 (April)	Month 3 (May)	Month 4 (June)	Exams (June-July)	
1 st year	Parallel	Applied Mathematics (M. Martinelli)	Probability and Statistics for Eng Appl (P.Bazzurro, C.Giudicianni)	Exams	Hydromorphology (R. Boni)		Geomatics and GIS (A.Taramelli, ...)		Exams	
		Computational Fluid Dynamics (S. Sibilla, Fenocchi)								
		Landslides hazard and risk (Meisina and Bordoni)								
		Snow Avalanches and Related Mountain Natural Hazards (Barbolini, Pasian) ■								
2 nd year	Parallel	Reliable Design and Management of Urban Hydraulic infrastructures (E.Creaco)		Exams	Hydrological Risks (Dottori, Arosio) (March)	Risk Modelling and Climate (Martina) ■■1 (April-July) 3 CFU				Exams
		Flood Propagation (G.Petaccia)				Systemic risk and indirect impacts (M. Arosio) ■■ 2 (April-July) 3 CFU				
		Fluvial Protection Works (A. Fenocchi)				Foundation Engin. and Earth Ret. Structures ■■ (April) 6 CFU				
		Landslide Modelling and Mitigation Strategies (D. Giofrè) ■■				Hydraulic Measurements (Petaccia) ■■ 3				
					Thesis					

■ indicates the first elective option

■■ indicates the second elective option, as one 6 CFU course or as two 3 CFU courses (■■1, ■■ 2, ■■ 3)

Mathematics and statistics	
Fluid and continuum mechanics	
Hazard and exposure; definition and modeling	
Risk analysis	
Measures for risk mitigation	
Complementary	