

MSc in “Civil Engineering for Mitigation of Risk from Natural Hazards”

Courses offered (general structure) 2025-2026

<u>Reduction Of Seismic Risk</u>		First semester					Second semester				
		Month 1 (Sept-Oct)	Month 2 (Oct-Nov)	Month 3 (Nov-Dec)	Month 4 (Jan)	Month 5 (Feb)	Month 1 (March)	Month 2 (Apr-May)	Month 3 (May-Jun)	Month 4 (Jun-Jul)	Month 5
1 st year	Series	Dynamics of Structures (G. O'Reilly, G.Scalet)	Reinforced Concrete Structures (G.Guerrini, S.Kallioras)	Computational Mechanics (S.Morganti)	Probability and Statistics for Eng Appl (P.Bazzurro, C.Giudicianni)	Exams (Probability and Statistics + possible others)	Seismic Hazard and Applied Seismology (V.Poggi – OGS Trieste*)	Foundation Engineering and Earth Retaining Structures (R.Cosentini, Polit. Of Turin))	Nonlinear Response Analysis (R.Pinho)	Fundamentals of Seismic Design (R.Monteiro)	
	Parallel	Applied Mathematics (M.Martinelli)					Geotechnical Earthquake Engineering (C.G..Lai)				
2 nd year	Series	Risk Assessment and Loss Estimation (P.Bazzurro + D.Vamvatsikos NTU Athens * + M.Kohrangi)	1 choice ■	Bridge structures (G.M. Calvi)	Masonry structures (G.Magenes, F.Graziotti)	1 choice ■■	Thesis				
	Parallel	-									

Choices		Steel Structures (R.Nascimbene) ■			Seismic Isolation and Dissipation (A.Pavese-M.Furinghetti) ■■						
					Sustainability Science in the Built Environment ■■ 3CFU			Systemic risk and indirect impacts (M. Arosio) ■■ 2(April-July) 3 CFU			

Mathematics and statistics	
Solid and structural mechanics	
Structural/geotechnical design, assessment and retrofit	
Hazard and risk analysis	
Complementary	