



Course: Geotechnical Modelling	Teaching Language: English
SSD (Subject Areas): ICAR/07	CREDITS: 9
Course year: I / II	Type of Educational Activity: C (Related or supplementary)
Teaching Methods: in person	
Contents extracted from the SSD declaratory consistent with the training objectives of the course: computational methodologies for the physical-mechanical modelling of soils and rocks and for the evaluation of their behaviour in the static field; the analysis and design of geotechnical structures such as foundations, underground constructions, excavations and retaining structures, embankments, and earth-constructions.	
Objectives: to provide students with theoretical and practical knowledge necessary for implementing numerical models for resolution of Geotechnical Engineering application problems. The course will deepen treatment of field equations for porous media and introduce constitutive relations used in geotechnical applications in a systematic way. The application of the finite element method to a series of Geotechnical Engineering problems is aimed at using the theoretical concepts acquired during the course.	
Propaedeuticities: none Is a propaedeuticity for: none	
Types of examinations and other tests: oral examination with discussion of a year's project	