



Course: FEM in nonlinear structural analysis	Teaching Language: English
SSD (Subject Areas): ICAR/08	CREDITS: 9
Course year: II	Type of Educational Activity: B (Characterising)
Teaching Methods: in person	
Contents extracted from the SSD declaratory consistent with the training objectives of the course: Acquiring the basic knowledge and the methodological approaches typical of Computational Mechanics and Dynamics required to perform nonlinear time history analyses of structures by means of frontal lectures, numerical exercises and MATLAB programming.	
Objectives: Aim of the course is to illustrate the theoretical aspects and the numerical techniques underlying the analysis, in the static and dynamic case, of structures exhibiting geometrical and mechanical nonlinearities. Particular attention is given to the phenomenological modeling of complex hysteresis phenomena typical of mechanical systems, devices and materials.	
Propaedeuticities: none Is a propaedeuticity for: none	
Types of examinations and other tests: Oral exam	