



Course: Continuum Mechanics	Teaching Language: English
SSD (Subject Areas): ICAR/08	CREDITS: 9
Course year: 1st	Type of Educational Activity: TAF-B
Teaching Methods: In-person. Blended for foreign students.	
Contents extracted from the SSD declaratory consistent with the training objectives of the course: Continuum mechanics: deformation analysis, stress analysis, constitutive behaviour of three-dimensional homogeneous materials. Analysis of elastic structures: equilibrium and compatibility. Stress and strain field in beam models. Yielding criteria. Stability of equilibrium paths. Plasticity.	
Objectives: The course provides the basics about the mechanics of solids and structures. Understanding of the kinematics of a structural systems, its degrees of freedom, under- and over-determined behaviors. Computation of constraint reactions and internal forces (analytically and graphically) of structural systems. Computation of strain and stress in solids of arbitrary section and loads. Safety checks.	
Propaedeuticities: none	
Is a propaedeuticity for: none	
Types of examinations and other tests: Written and oral exam.	