

Course: Design and retrofit of masonry structures		Teaching Language: Italian	
SSD (Subject Areas): CEAR-07/A		CREDITS: 9	
Course year: II		Type of Educational Activity: B	
Teaching Methods: in-person			
Contents extracted from the SSD declaratory consistent with the training objectives of the course: Scientific-disciplinary contents consist of the theories and techniques used for both the structural design and construction of new buildings, and the verification and structural rehabilitation of existing ones. Scientific-disciplinary content includes: actions on buildings, including the effects of seismic action; the behaviour of structures as a function of their type, morphology, and materials; methods and tools for structural design; vulnerability and safety assessments; historical building surveys, safety checks, and structural intervention solutions applicable to historic buildings and monuments.			
Objectives: The course, through lectures and design exercises, aims to provide the general criteria and methods for the simulation of the structural behaviour of masonry buildings, which constitute a high fraction of the Italian and world building stock. The course deals with both the design of new buildings located in seismic areas and the structural assessment and retrofit of existing masonry buildings, using traditional or innovative materials/technologies.			
Propaedeuticities: Dinamica delle costruzioni ed ingegneria sismica or, equivalently, Earthquake engineering and structural control			
Is a propaedeuticity for: None			
Types of examinations and other tests: Oral discussion of the theoretical topics and the design project developed during the course.			