



Course: Structural Reliability		Teaching Language: English
SSD (Subject Areas): CEAR-07/A		CREDITS: 9
Course year: II	Type of Educational Activity: C	
Teaching Methods: Module in-person. Seminars in-person		
Contents extracted from the SSD declaratory consistent with the training objectives of the course: 1. Fundamentals of probability and statistics for structural engineering 2. Probabilistic and deterministic characterization of actions on structures 3. Methods of structural analysis to evaluate safety and reliability		
Objectives: Applications of probability and statistics for civil structures: characterization of natural actions (seismic, wind, floods, etc), modelling of uncertainty for structural materials, assumptions and methods of structural analyses for evaluating reliability. Knowledge of methods to evaluate the reliability of structural systems. Evaluation of risk of structures exposed to natural hazards (single and multiple hazards). Cost-benefit analysis for civil structures and infrastructure.		
Propaedeuticities: Structural Dynamics and Earthquake Engineering		
Is a propaedeuticity for: None		
Types of examinations and other tests: The type of examinations and other tests is oral. Students are also requested to discuss a technical report based on assignment provided during the lectures.		