



UNIVERSITÀ DI PAVIA

Anno Accademico 2021/2022

REINFORCED CONCRETE STRUCTURES

Anno immatricolazione	2021/2022
Anno offerta	2021/2022
Normativa	DM270
SSD	ICAR/09 (TECNICA DELLE COSTRUZIONI)
Dipartimento	DIPARTIMENTO DI INGEGNERIA CIVILE E ARCHITETTURA
Corso di studio	CIVIL ENGINEERING FOR MITIGATION OF RISK FROM NATURAL HAZARDS
Curriculum	Reduction of seismic risk
Anno di corso	1°
Periodo didattico	Primo Semestre (20/09/2021 - 13/10/2021)
Crediti	6
Ore	51 ore di attività frontale
Lingua insegnamento	English
Tipo esame	SCRITTO
Docente	MIHAYLOV BOYAN ILIEV (titolare) - 3 CFU GUERRINI GABRIELE - 3 CFU
Prerequisiti	---
Obiettivi formativi	The main objective of the course is to develop knowledge and skills necessary for the design of a variety of important reinforced and prestressed concrete members and structures.
Programma e contenuti	The focus is placed on using fundamental principles (flow of forces, compatibility and deformations, stress-strain relationships, equilibrium) to solve different design problems from 1D (beams and girders) to 3D members and structures (single foundations, pile caps and wall systems). In this manner, the course develops a fundamental understanding of structural design which the students can apply to any other type of concrete structures not covered in the syllabus.

To maximize the learning outcome, the course will use a variety of different learning methods. The classess will include a combination of slide presentations, blackboard lectures, solved demonstration problems, individual and group work of the students for solving challenging problems, video materials, reading and critically analysing materials in classroom. The students will participate actively by using first principles to solve analysis and design problems which are aimed at providing an important insight into the behaviour of concrete structures. They will be guided towards the final solution by solving intermediate problems with increasing complexity.

The evaluation will be based on homework assignments and a written final exam. The exam will consist of two parts: exercises (open book) and theory (closed book).

Altre informazioni

