



UNIVERSITÀ DEGLI STUDI DI NAPOLI FEDERICO II
DIPARTIMENTO DI STRUTTURE PER L'INGEGNERIA E L'ARCHITETTURA
Dottorato in Ingegneria Strutturale, Geotecnica e Rischio Sismico

PROPOSTA CORSO – OFFERTA FORMATIVA 2026

Titolo del corso	SARAH Advanced School “Structural Robustness and Resilient Infrastructure against Extreme Hazards”
Docenti proponenti	Fulvio Parisi
Argomenti trattati / Descrizione sintetica	<p>The SARAH Advanced School aims at disseminating knowledge on structural robustness, large-displacement inelastic response of structures, disaster risk and resilience of structures and infrastructures, as well as methods and tools for structural design, assessment and retrofitting against extreme natural and/or anthropogenic hazards, also considering the effects of climate change.</p> <p>The training programme includes theoretical lectures, exercise classes, the analysis of real case studies and experimental tests, and thematic presentations.</p> <p>The main topics of the SARAH Advanced School are listed as follows:</p> <ul style="list-style-type: none">• Structural robustness and reliability in codes and guidelines• Extreme events and modelling of abnormal loads on structures• Forensic analysis of catastrophic failures• Progressive collapse and extreme resisting mechanisms• Reliability-based and risk-based design, assessment and retrofitting• Computational strategies for structural response analysis under extreme conditions• Probabilistic simulation and surrogate modelling• Robustness quantification• Experimental testing and structural monitoring for progressive collapse prevention• Multi-hazard conditions and relationship between structural robustness and disaster resilience. <p>Given the relevance of the topics addressed, the SARAH Advanced School is promoted by several scientific organizations, including the Fédération Internationale du Béton (fib), the Italian Network of University Laboratories of Earthquake and Structural Engineering (ReLUI), and the International Civil Engineering Risk and Reliability Association (CERRA).</p>
Data o periodo previsto	7–11 settembre 2026
Numero di ore totali	40
CFU proposti	5
Modalità di erogazione	In presenza