

## International Doctorate in Civil and Environmental Engineering

DOCTORAL COURSE – A.Y. 2020/21

### **Mechanics of some unconventional systems**

Teacher: Prof. Massimiliano Fraldi

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Calendar	
14/04/2021 - h 16:00-18:00	
16/04/2021 - h 16:00-18:00	
21/04/2021 - h 16:00-18:00	
23/04/2021 - h 16:00-18:00	
Total	8 hours – 4 credits

Program
<p>By starting from classical concepts of theory of elasticity, the course will present, through some paradigms, the diriment role that interface and nonlinearities could have in the mechanics of passive and active systems where prestress, adhesion and inelastic (also growth-induced) deformations co-exist or somehow compete, hinting at how the projection at the macroscale of some microstructural behaviors leads to unconventional continuum models. Motivations of some ongoing research activities and applications to several engineering fields will be also briefly discussed.</p>