Elements of non-linear dynamics

Professor

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Institution

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General Information

Description

The course provides some basic notions on the dynamic behaviour of non-linear mechanical systems. Perturbation methods and the most common algorithms for solving non-linear dynamic problems are also introduced.

The course (in English) will be held in mixed mode: in person (ISTI-CNR, Pisa, Via G. Moruzzi 1, Building B, Gate 19, 1st floor, room C29 "A. Faedo") and online (link provided by the teacher).

Schedule

Dates	Description
06/05/26 (10:00-12:00)	Preliminary remarks. Initial value problems
08/05/26 (10:00-12:00)	Perturbation methods
13/05/26 (10:00-12:00)	Non-linear oscillators: single DOF systems
15/05/26 (10:00-12:00)	Non-linear oscillators: multiple DOF systems
19/05/26 (10:00-12:00)	Continuous systems, finite elements
21/05/26 (10:00-12:00)	Non-linear dynamic simulations. Some example applications
	Total: 12 Hours (INDICEE students: 2 Credits)

For any information www.indicee.unifi.it - dott-dicea@unifi.it

International Doctorate in Civil and Environmental Engineering