

Nonlinear structural analysis of Historical Masonry Constructions by FE methods

Professor

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Institution

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General Information

The course introduces students to the numerical modelling of historic masonry structures. After a brief overview of the finite element method and modelling techniques, the constitutive equation for *masonry-like* (no-tension) materials will be described. Then, the course will show the use of the finite element code NOSA-ITACA, covering its basic commands and applications to real-world case studies.

Lessons (in English) will be held both in person (ISTI-CNR, Via G. Moruzzi 1 Pisa, Building B, gate 19, 1st floor, room C 29) and online (link provided by the teacher). **Attending in person is highly recommended**, as course exercises will use software provided by the teacher.

Materials

Students should bring a laptop with Oracle VirtualBox installed and at least 30 GB of free disk space.

Schedule

Dates	Description
06/05/2025	h 10:00-12:00
13/05/2025	h 10:00-12:00
15/05/2025	h 10:00-12:00
20/05/2025	h 10:00-12:00
23/05/2025	h 10:00-12:00
27/05/2025	h 10:00-12:00
29/05/2025	h 10:00-12:00
05/06/2025	h 10:00-12:00
06/06/2025	h 10:00-12:00

Dates**Description**

Total 18 Hours - 3 Credits

Other information

The final exam will be the discussion of an exercise assigned at the end of the course to the students consisting in a finite element analysis, performed by the NOSA-ITACA code, of a real case study.

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