

Elements of Output-Only Modal Analysis for civil structures and infrastructures

Professor

Giacomo Zini

E-mail

giacomo.zini@unifi.it

Institution

Università degli studi di
Firenze

General Information

The course will introduce the students to the problems related to the dynamic test of large civil structures and infrastructures. The main techniques in the time (SSI) and frequency domain (FDD, EFDD) applied nowadays will be deeply illustrated along with the practical issues that can arise during the in-situ testing campaign. Lastly several case of study will be shown in detail to practically illustrate the aforementioned methods. **The course will be held online in English with the schedule attached below.**

Materials

It is recommended the use of a laptop with the MATLAB © software for the exercitation.

Schedule

Dates	Description
24/04/2025 – 14-16	Introduction to the modal testing basis
08/05/2025 – 14-16	Frequency domain techniques
15/05/2025 – 14-16	Time domain techniques
22/05/2025 – 14-17	Practical issues in modal testing
29/05/2025 – 14-17	Illustration of representative test-cases
Total 12 Hours – 2 Credits	

Other information

The final exam will be the discussion of the exercise that will be assigned at the beginning of the course to the students based on a real case of study.

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