Teaching Activities

**List of courses**
- MECA030-0 Dynamics of mechanical systems
- MECA029-0 Theory of vibrations: application to structural dynamics
- AERO015-0 Mechanical design of turbomachinery
- MECA062-0 Vibration testing and modal identification

Research Activities

The LTAS-VIS lab carries out research in the field of **structural dynamics**, **mechanical vibrations** and **rotordynamics**.

- Vibration testing and experimental modal analysis;
- Identification of linear and nonlinear mechanical structures;
- Operational modal analysis and structural health monitoring

Experimental and Operational Modal Analysis

**Ph.D. thesis**: Identification of linear time-varying systems

Topics for Master and Ph.D. thesis

- Testing and identification of dynamic systems.
- Dynamics of rotors in presence of nonlinear contact forces.

These topics are very broad and have to be discussed with interested candidates. Other proposals in cooperation with industry are also welcome!

Environmental Vibration Testing

**Services to the industry**

Vibration testing facilities and equipments are shared with the V2i start-up company which was created in 2004 to provide services to industry.

Fatigue testing on electro-dynamic shaker