

## Instrumentation systems

Number of ECTS credits: 3

Coefficient:

### Description:

Study of the various Instrumentation systems.

- Instrumentation systems
- Modular instrumentation systems (PXI, CompactRIO, VXI)
- communication protocols (LXI)
- Instrumentation buses: communication with measuring devices
- Software systems (specific drivers: IVI, VXI11)
- Free Software Instrumentation

### Pedagogical objectives:

- Design modular instrumentation systems
- Know the software architecture dedicated to instrumentation

### Bibliography: Prerequisite:

Basis of instrumentation, principles of digitization of a signal, concepts on VISA and SCPI

Lectures Hours: 10.5

Tutorials Hours: 10

Labs Hours: 8

Knowledge monitoring modalities: 100% continuous assesement

Assesement: Reports of labs, exam

**Leader: Jean-François MANCEAU**

**Participants:**