## Summary

Students will acquire basic knowledge of computer-driven data acquisition using LabVIEW programming and DAQ hardware. This knowledge will be put into practice by acquiring analog and digital signals, characterizing AD/DA converters, displacement sensors and other simple measurement systems.

## Content

TP1: Introduction to LabVIEW  
TP2: Acquisition system  
TP3: Measuring devices  
TP4: Time and frequency analysis  
TP5: Displacement sensor  
TP6: ECG monitoring

## Learning Prerequisites

**Required courses**  
EE-206 Measuring systems

## Learning Outcomes

By the end of the course, the student must be able to:

- Design an appropriate measurement circuit  
- Design the LabVIEW code adapted to a measurement problem  
- Carry out the measurement  
- Interpret measurement results

## Teaching methods

Laboratory

## Expected student activities

Attending laboratory exercises (obligatory)  
Preparing for lab exercises in the form of a written summary  
Writing a laboratory notebook

## Assessment methods
Preparation level at the start of each laboratory
Laboratory notebook
Written lab test at the end of the semester

Resources

Bibliography

- EE-206 Course notes and slides

Ressources en bibliothèque

- *Systèmes de mesure / Paratte*
- *Acquisition de données : du capteur à l'ordinateur / Asch*