CAPTEURS INTELLIGENTS COMMUNICANTS : SYSTÈMES D'INTERFACE

COMMUNICANT AND INTELLIGENT SENSORS

Lecturers: Cédric MARCHAND, David NAVARRO

| Lecturers : 16.0 | TC : 10.0 | PW : 8.0 | Autonomy : 14.0 | Study : 0.0 | Project : 0.0 | Language : FR

Objectives

The objective of this course is to describe the different part of the acquisition chain in electronics systems (sensors, actuators, microcontroler). This course take example from modern sensing and communicating systems.

Keywords : Sensor, acquisition chain, microcontroler

Programme

0 - Introduction
1 - Sensors
2 - Filtering
3 - Conversion
4 - Modulation
5 - Microcontrolers

Learning outcomes

Independent study

Objectifs : Apply knowledge from lecture and exercises sessions to prepare lab sessions. Final report writing.

Méhodes : Exercise given before the Lab session.

Core texts

B.P. Lathi, *MODERN ANALOG AND DIGITAL COMMUNICATION SYSTEMS.*, Oxford university press, 1998
F. Cottet. *TRAITEMENT DU SIGNAL ET ACQUISITION DE DONNÉES*, Dunod, 2009
H. Mathieu, H. Fanet.*PHYSIQUE DES SEMICONDUCTEURS ET DES COMPOSANTS ÉLECTRONIQUES*, Dunod, 2009

Assessment

Final mark = 50 % Knowledge + 50% Know-how.
Knowledge mark = 100% final exam
Know-how mark = 100% continuous assessment