

COURSE NAME			
Sensors in Integrated Technologies			
CREDITS	6 ECTS	TYPE	Elective
SCHEDULING	2nd Term	CHARACTER	Theoretical-Practical

CONCISE COURSE CONTENTS

- Physical, chemical and biological sensors.
- Micro-Electro-Mechanical Systems (MEMs).
- Microsystems.
- Interface circuitry, calibration and compensation.
- Applications: medical, automotive, ambient intelligence.

LEARNING OBJECTIVES

- Become familiar with the main alternatives for the implementation of integrated sensors (microsensors).
- Apply solutions at circuit level related to the acquisition and conditioning of the different sensory signals.
- Select the architecture and identify functional parts of a sensory system.

LEARNING ACTIVITIES

- Online theoretical-lectures classes.
- Practical classes and/or exercises: tutorials, resolution of selected problems and practical work.

EVALUATION SYSTEM

- Assimilation of concepts: on-going evaluation supported by exercises and problems.
- Evaluation of capacities: practical cases with optional individual online presentation.
- Examinations.