# COURSE NAME Design of Analog, Digital, Mixed Signal and RF (AMS/RF) Integrated Circuits CREDITS 6 ECTS TYPE Compulsory SCHEDULING 1st Term CHARACTER Theoretical-Practical

# **CONCISE COURSE CONTENTS**

- · Analysis and design of basic digital blocks.
- Analysis and design of basic analog, mixed-signal and RF blocks.
- A/D and D/A data conversion circuits.
- · Circuits and systems for communication.

## **LEARNING OBJECTIVES**

- Modeling and evaluation of the performance of digital circuits, analog blocks and RF.
- Know how to design analog/RF circuits (blocks) from their specifications.
- Get to know and make use of the circuit structures and design techniques for different applications: acquisition and signal conditioning, A/D and D/A data conversion and communication systems.

## **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.