# **COURSE NAME**

#### Micro- and Nano-Devices and Technologies

| CREDITS    | 6 ECTS   | ТҮРЕ      | Compulsory            |
|------------|----------|-----------|-----------------------|
| SCHEDULING | 1st Term | CHARACTER | Theoretical-Practical |

#### **CONCISE COURSE CONTENTS**

- Micro/nanoscale MOS technologies.
- Active and passive devices: structure, operation and modeling.
- Introduction to emerging devices and nanoelectronics.

#### **LEARNING OBJECTIVES**

- Get to know the materials, processes and technologies employed for the fabrication of integrated circuits.
- Understand the physical and technological aspects of the operation of electronic devices as well as the design of integrated circuits.
- Get to know the evolution of CMOS fabrication technologies and future trends.

# 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.