

| COURSE NAME | | | |
|---|----------|-----------|-----------------------|
| Bio-Inspired Processing: Algorithms and Circuits | | | |
| CREDITS | 6 ECTS | TYPE | Elective |
| SCHEDULING | 2nd Term | CHARACTER | Theoretical-Practical |

| CONCISE COURSE CONTENTS |
|---|
| <ul style="list-style-type: none"> • Microelectronic implementation of bio-inspired processing systems. • Analog, digital and mixed-signal implementations. |

| LEARNING OBJECTIVES |
|---|
| <ul style="list-style-type: none"> • Get to know the main algorithms, architectures and circuit techniques suitable for the integrated implementation of bio-inspired processing systems. Get to know the achievable performance. • Understand the problems and apply solutions at circuit level related to this kind of systems. • Be able to address the task of designing and testing a bio-inspired processing system, from conception of functionality to the field test. |

| LEARNING ACTIVITIES |
|--|
| <ul style="list-style-type: none"> • Online theoretical-lectures classes. • Practical classes and/or exercises: tutorials, resolution of selected problems and practical work. |

| EVALUATION SYSTEM |
|--|
| <ul style="list-style-type: none"> • Assimilation of concepts: on-going evaluation supported by exercises and problems. • Evaluation of capacities: practical cases with optional individual online presentation. • Examinations. |