

Master's degree in Optics, Image, Vision and Multimedia Signal and Medical Imaging

## Master's degree year 1 - semester 1

Information theory (3 ECTS) Programmable digital systems (3 ECTS) Signal and image processing 1 (6 ECTS) Object-oriented programming (3 ECTS) Algorithm design and analysis (3 ECTS) Programming and digital problem solving (3 ECTS) Digital system control (3 ECTS) Language techniques (3 ECTS) English 1 (3 ECTS)

## Master's degree year 1 - semester 2

Instrumentation (6 ECTS) including: \*\* Electronics and sensor for instrumentation (4 ECTS) \*\* Image system: physical principles and implementation (2 ECTS) Signal and image processing 2 (6 ECTS) Metrology and measurement (3 ECTS) Programming and digital problem solving 2 (3 ECTS) Physiology, systems of functional exploration and medical imaging (3 ECTS) Instrumentation and production, signal and image (3 ECTS) Project management (3 ECTS) English (3 ECTS)

## Master's degree year 2 - semester 1

Medical imaging 1 (5 ECTS) Signal and image processing in medical applications (5 ECTS) Physiological signals (3 ECTS) Signal processing (4 ECTS) including: \*\* Data analysis and processing (2 ECTS) \*\* Non-stationary signal processing (2 ECTS) Graphs theory and algorithms 2 (2 ECTS) Advanced image processing techniques (3 ECTS) English (3 ECTS) Projects, seminars, and research (3 ECTS) \*\* Projects (2 ECTS) \*\* Seminars and research (1 ECTS) Instrumentation and embedded instrumentation (2 ECTS)

## Master's degree year 2 - semester 2

Internship (30 ECTS)