Master's Degree in

ENGINEERING AND COMPUTER SCIENCE

Scientific coordinator
Prof. Dario Bruneo
dario.bruneo@unime.it

Department
Engineering

Duration
2 years
Programme overview

This Master's degree develops knowledge and expertise in Computer Engineering and Computer Science. There are two strands within areas degree's classes - one focuses on Computer Engineering and one on Computer Science. The requirements overlap and complement each other. Both strands entitle graduates to participate in engineering licensing exams to work as engineers.

Skills acquired in this programme include:
- system management, planning and design;
- management of complex, innovative and distributed systems, data analysis, intelligent cyber physical systems, robotics;
- complex experiment design and management;
- with contextual knowledge and cross-domain skills.

Minimal entry requirements

Admission will be granted to the candidates having a Bachelor's degree either in Engineering or Computer Science that includes the following prerequisites:

- Geometry
- Mathematical Analysis
- Physics
- Computer Science
- Computer Engineering
- Electronics
- Electromagnetic fields
- Telecommunications
- Automation

The course commission will evaluate the candidate's curriculum for admission. Scan the QR Code for further admission requirements criteria.
Language requirements

*International English language certificate issued by an Institution recognised by the Italian Ministry of University and Research (MUR), B2 level of the Common European Framework of Reference.*

Study programme

**COMPUTER ENGINEERING**
**CLASS DEGREE (LM-32)**

### YEAR 1
- Embedded systems
- Computer system analysis
- Advanced algorithms and computational models
- Industrial IoT
- Computer system security
- Managing innovation and entrepreneurship or Lean production and total quality management
- Electives

### YEAR 2
- Distributed systems
- Industrial automation and robotics
- Machine Learning
- Multimedia digital signal processing
- Electives
- Further study and internship
- Thesis

**COMPUTER SCIENCE**
**CLASS DEGREE (LM-18)**

### YEAR 1
- High performance computing
- Computer system analysis
- Advanced algorithms and computational models
- Game theory
- Big data
- Computer system security
- Electives

### YEAR 2
- Distributed systems
- Industrial automation and robotics
- Machine Learning
- Electives
- Optimisation methods and algorithms or Acoustics and sound processing
- Further knowledge and internship
- Thesis
My Master’s Degree in Engineering and Computer Science is giving me new opportunities that I had never thought of before. I will be able to take the Italian national qualifying exam for engineering, and at the same time expand my skills and knowledge in the field of Computer Science. Our professors are highly qualified and they are very supportive. We have state-of-the-art equipment and it’s very exciting to think about what I can do in the future. I really like my programme!

Darsi Ashok