



MEA



The Microelectronics and Automation specialization (MEA) is a Master's level program that trains multidisciplinary engineers with recognized skills in electronics and microelectronics, automation and robotics, computer engineering, and industrial engineering.

KEYWORDS

AUTOMATION
ELECTRONICS
INDUSTRIAL INFORMATICS
MICROELECTRONICS
ROBOTICS
EMBEDDED SYSTEMS
SIGNAL PROCESSING

ALL POLYTECH PROGRAMS LEVERAGE A SOLID PARTNERSHIP NETWORK WITH:

- The industrial world (800 internships, 200 industry projects, and 50 apprenticeship contracts per year)
- Academic research (14 associated research laboratories)
- International partners (over 100 partner universities around the world)

ARE YOU INTERESTED IN AN APPRENTICESHIP?

If an alternating work-study program interests you more than the "classic" student path, POLYTECH Montpellier also offers you the opportunity to pursue your education through an Embedded Systems (SE) apprenticeship, quite similar to the topics covered in the MEA program.

↘ TARGET PROFESSIONS

When MEA engineering students graduate:

- they have acquired a solid scientific foundation in the fields of physics, electronics, automation, and industrial informatics.
- they possess strong knowledge of the technologies specific to today's embedded systems, both in terms of hardware and software, and they master the related computer-aided design (CAD) tools. They have established their specialization in the fields of integrated circuit design or robotics.
- they are able to handle technical, human, and economic aspects of projects and activities in the fields of electronics and automated systems.
- they are aware of sustainability, recycling, and eco-design issues.

Graduates are qualified for many jobs:

- R&D Engineer
- Research and Consulting Engineer
- Methods and Industrialization Engineer
- Operation and Maintenance Engineer
- Quality Engineer
- Technical-sales Engineer
- Business Engineer
- Project Manager
- Information System Administrator

↘ TARGET ACTIVITY SECTORS

- Engineering firms and consultancies
- Semiconductor industry
- Telecommunications and multimedia sectors
- Health sector
- Transport industry

MAIN PROGRAM TOPICS

- mathematics
- physics
- analog and digital electronics
- automation
- computer science / industrial informatics
- signal processing
- microelectronics
- human and social sciences
- modern languages

A complete list of courses offered at POLYTECH, and total hours, is available on www.polytech-montpellier.fr

PROJECTS AND INTERNSHIPS

Engineering students participate in several internships with companies or research laboratories:

- 1-3 months internship at the end of the 3rd year
- 2-3 months internship at the end of the 4th year
- 5-6 months internship at the end of the 5th year

5th year students perform an industry project at the end of their studies (300 hours), which places them in a professional context and helps establish their independence.

"MEA" GRADUATES

Yann Chéri, Senior Product Manager, Apple (MEA 2000)

Laurent Fontenay, General Director, Cegelec Spain (MEA 1985)

Laurent Rougé, Founder, Menta (MEA 2003)

ADMISSION REQUIREMENTS

3rd year

→ For students in preparatory classes at higher education establishments: recruitment via Polytech competition.

→ For holders of L2, L3, DUT, BTS, or equivalent foreign diploma: competition via written application and interview.

→ For PeiP2 students (Polytech engineering schools program): after curriculum validation and national ranking.

4th year

For holders of an M1 degree or equivalent foreign degree: competition via written application and interview.

Continued education

The Microelectronics and Automation program is also available as continued education under some conditions, for employees who can demonstrate at least three years of professional experience related to this specialization.

www.polytech-admission.org

CUTTING-EDGE COLLABORATION WITH THE INDUSTRY

Instruction for MEA engineering students is provided by professors who also actively participate in research activities and technology transfer in the school's partner research laboratories. Much of this work is carried out in collaboration with the industry.

Projects generally involve the cutting edge fields facing future engineering graduates, including: integrated circuit design and testing, sensor design, radio-identification, cosmic and nuclear radiation hardening, electron microscopy, acoustic microscopy, electrical energy transmission, manipulation robotics, medical robotics, and mobile robotics.

Photos: Groupe Archimède - Camille Boulicault for Campus Communication; Shutterstock. Design and illustration: Atelier de signes.

TO FIND OUT MORE +

More information regarding the number of ECTS, course descriptions, research partnerships, and international opportunities on: www.polytech-montpellier.fr.



POLYTECH Montpellier – Spécialité MEA / EII – Bâtiment 31 – CC419 – Université de Montpellier
Campus Triolet – Place Eugène Bataillon – 34095 Montpellier cedex 5 – France
+33 (0)4 67 14 48 70 / polytech-secretaire-mea@umontpellier.fr / www.polytech-montpellier.fr

