The Embedded Systems (SE) specialization is a Master's-level program that trains engineers via apprenticeships to manage industrial projects in the electronics and industrial informatics sectors for embedded systems.

**KEYWORDS**
- AUTOMATICS
- ANALOG ELECTRONICS
- COMPUTER SCIENCE
- INDUSTRIAL INFORMATICS
- EMBEDDED SYSTEMS
- DIGITAL 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)

**TRAINING VIA APPRENTICESHIP**
- Work-study alternation: 50% in school and 50% in company, alternating every two weeks on average for the three years.

**TARGET PROFESSIONS**
When SE engineering students graduate:
- they have acquired a solid scientific foundation in the fields of physics, electronics, automatics, 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 are able to handle technical, human, and economic aspects of projects and activities in the fields of embedded systems.
- they are aware of sustainability, recycling, and eco-design issues.

Graduates are qualified for many jobs:
- R&D Engineer
- Study and Consulting Engineer
- Methods and Industrialization Engineer
- Operation and Maintenance Engineer
- Quality Engineer
- Technical-sales Engineer
- Business Engineer
- Project Manager
- Information Systems 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
- Automatics
- Computer science / industrial informatics
- Signal processing
- Human and social sciences
- Modern languages

A complete list of courses offered at POLYTECH, and total hours, is available on www.polytech-montpellier.fr in the Training/Embedded Systems section.

PROFESSIONAL PROGRAMS

Enterprise training (work-study) is supervised by an industry advisor, the apprenticeship director, and monitored by an educational director, the professor. The program is organized into five professional modules:

- Enterprise knowledge (MP1)
- Technical environment (MP2)
- Technology application (MP3)
- Project management (MP4)
- End-of-year industry project (MP5)

CALENDAR

- Program duration: 3 years
- Program start: late September
- 70 weeks in school + 71 weeks in company + 5 weeks paid vacation per year.
- Work-study alternation:
  - 23 weeks / 24 weeks in 1st year
  - 24 weeks / 23 weeks in 2nd year
  - 23 weeks / 24 weeks in 3rd year

ADMISSION

- Under age 26, upon signature of apprenticeship contract.
- High school + 2 yrs [L2, DUT, BTS, CPGE, PeiP2...] in science and technology.
- Entrance exam via application and interview
- Apprenticeship contract signature.

The apprentice earns compensation between 41% and 78% of the legal minimum wage.

ADVANTAGES OF APPRENTICESHIP

- High-level studies free of charge.
- A true, first professional experience.
- Employee status for three years.
- Fast professional integration after graduation.

SOLID PARTNERSHIP

The SE program benefits from strong support from:
the Région Languedoc-Roussillon-Midi-Pyrénées, through the Higher Education Regional Center for Apprentice Training (CFA EnSup-LR).

FIND OUT MORE +