

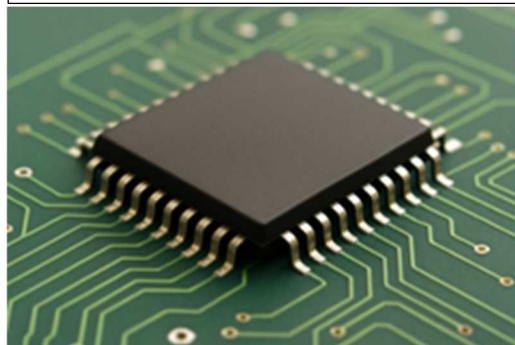
The only requirements for both courses are:

- Unemployment status at the time of enrollment
- Residency or domicile in Lombardy
- Genuine, motivated interest in the sector

More than 12 companies from the district will participate in teaching, support, and on-the-job training (internships).

Both courses grant **competency certificates** in accordance with the QRSP (Professional Standards Framework) of the Regione Lombardia, recognized at the regional and European levels.

This is a unique opportunity: **completely free courses, lessons with university professors, researchers, and industry professionals. Both courses include a curricular internship aimed at employment!**



How to Apply

For detailed information on the schedule, syllabus, selection process, and registration, contact us through:

osservatorio.mercatolavoro@provincia.pv.it

0382/597453

0382/597426

0382/597449



Your Future Is Already in the Circuits



Discover the world of microelectronics and become an IC Layout Designer or Lab Technician with a free course offered by ITS, university professors, and industry professionals.



The initiative 'From Micro To Macro' is part of the programs promoted under the Cohesion Policy 2021-2027, particularly within the Regional Program co-financed by the European Social Fund Plus (ESF+).

For more information: www.fse.regione.lombardia.it



The Courses

The Province of Pavia is the lead partner in the **From Micro To Macro** project, developed within the framework of the **'Territorial Pacts for Skills and Employment'** promoted by the Lombardy Region. The goal is to support the **microelectronics** sector, a local area of excellence. A broad and qualified partnership, including the Alma Mater Ticinensis Foundation (operational branch of the University of Pavia), ITS Meccatronica, companies, and institutions, has enabled the creation of two innovative and **free** training paths that directly respond to the needs expressed by local industries.

The courses differ in terms of duration and qualification but were designed after productive discussions between partners and companies, leading to updates in the regional professional standards (**QRSP**). **These will be the first courses to award the new qualifications.**

IC LAYOUT DESIGNER

The IC Layout Designer is responsible for physically designing integrated circuits (microchips), translating the schematic into a precise geometric on silicon. They use specialized software (EDA tools) to place and connect transistors, resistors, and other components, adhering to technological and performance rules. This role is crucial in microelectronics, as the chip's efficiency, size, and functionality depend on their work.

Course Objective

To train professionals specialized in IC layout design, capable of operating in the strategic microelectronics sector. The course provides both theoretical and practical skills to meet the needs of Lombardy's Microelectronics District companies.

Course Structure

Total: 520 hours

- 200 hours of classroom training
- 200 hours of hands-on laboratory work
- **120 hours of internship in companies**

Period: September 2025 – March 2026

Main Topics

- Fundamentals of electronics and semiconductor technologies
- Integrated circuit design and EDA software usage
- Layout verification techniques

LAB TECHNICIAN

The Lab Technician works in an electronics lab, performing measurements, tests, prototyping, and minor circuit interventions. They use tools like multimeters, oscilloscopes, and signal generators, read and edit PCB layouts, perform microsoldering, and basic programming in Python. They have foundational knowledge of electronic components, can read datasheets, and apply safety principles and work regulations.

Course Objective

To provide the operational basics for working in an electronics lab, from measurement instruments and reading schematics to microsoldering and basic Python programming.

Course Structure

Total: 190 hours

- 138 hours of theoretical and practical training
- **52 hours of internship in companies**

Period: September 2025 – March 2026

Main Topics

- Electronic measurements with multimeters, oscilloscopes, signal generators
- PCB layout reading and editing
- Component programming in Python
- Microsoldering
- Active and passive components