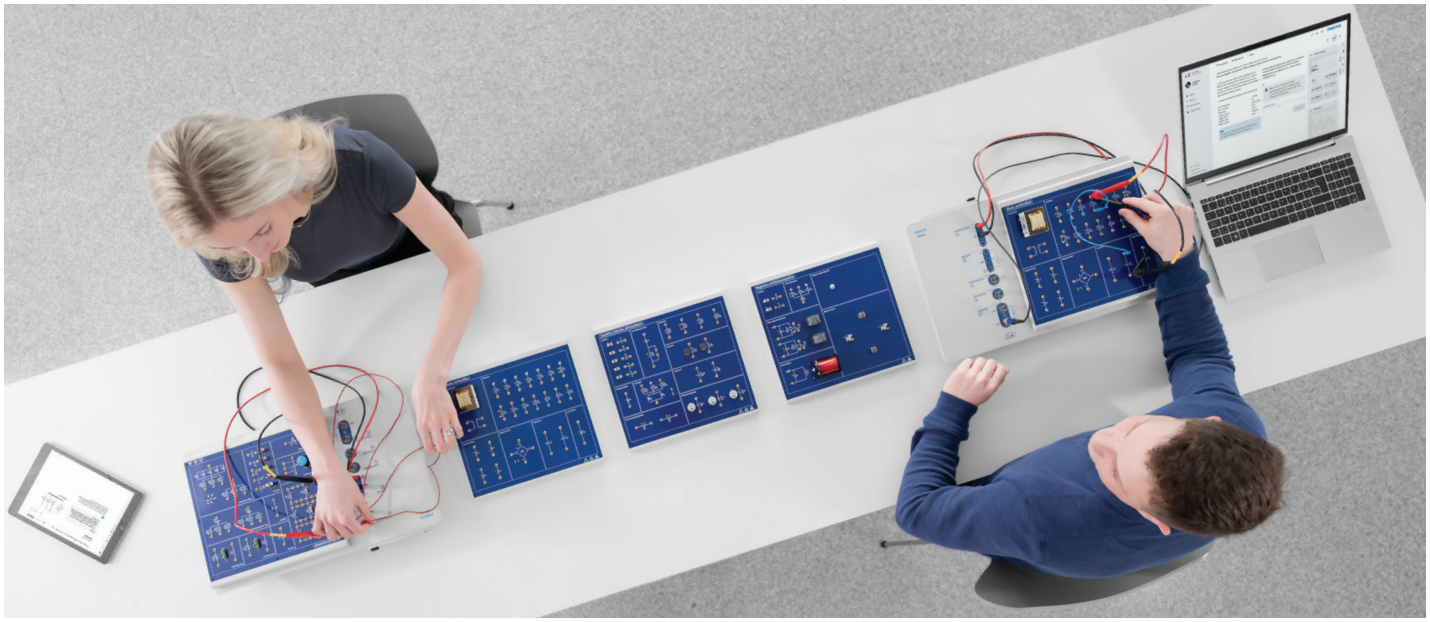
Electeo

Harness the Power of Electronics

FESTO



Highlights

- Complete learning solution with ready-to-use courses materials
- Fully web-based solution when used with Festo LX (optional)
- Built-in digital data acquisition with virtual instruments
- Compatible with various devices, operating systems, and browsers
- Simulation with FluidSIM (optional)

A modern, digital electronics lab that runs smoothly and adapts to evolving needs is now within reach. Electeo harnesses the power of electronics to streamline both teaching and learning—delivering a smart solution for electronics education and training.

Our solution

Electeo is a blended learning solution that combines lab equipment, digital courseware, and virtual instruments to develop professional skills in vocational, technical, and engineering schools, as well as in industrial training centers.

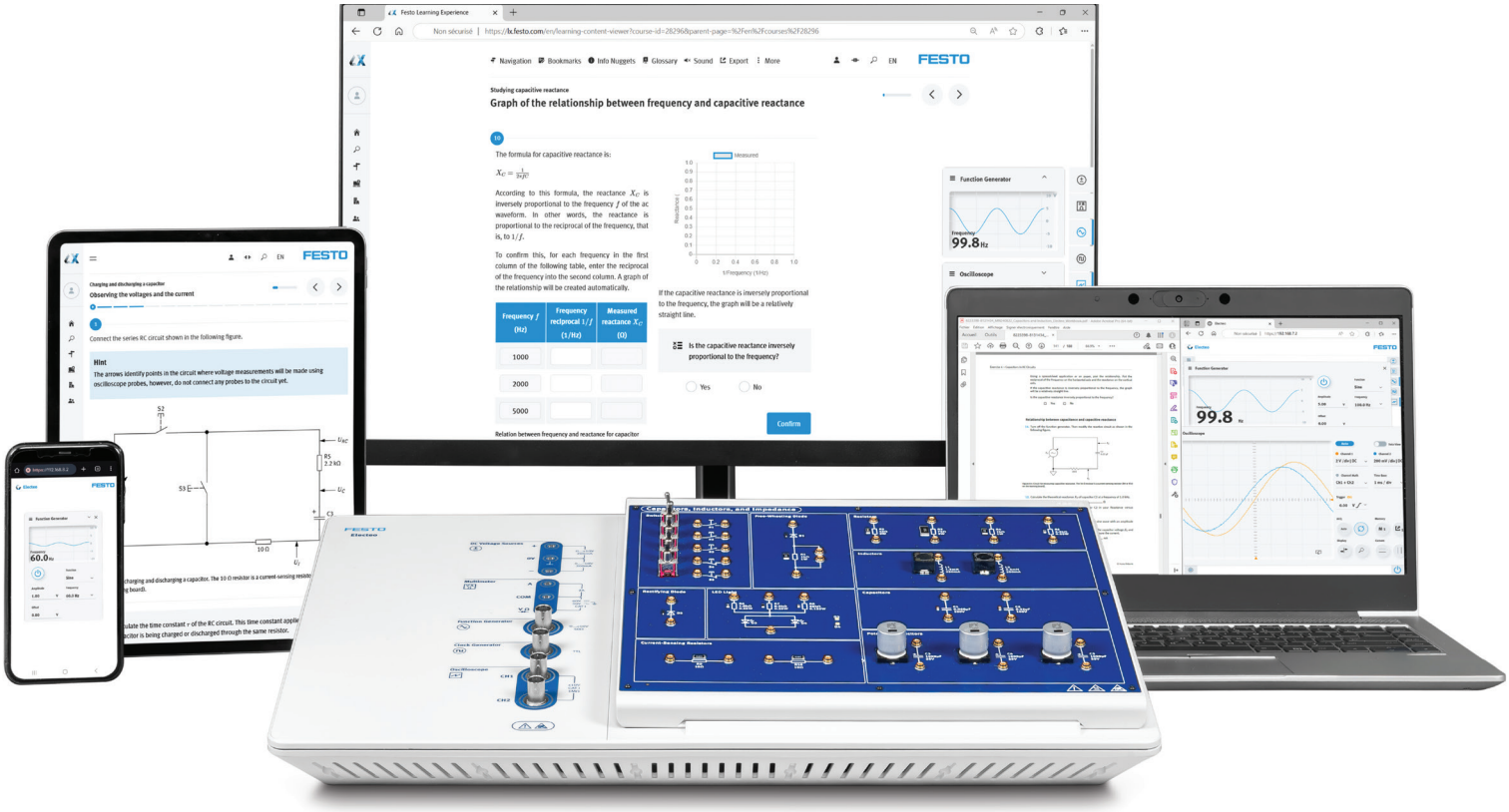
Learners study, analyze, test, troubleshoot, and design analog and digital electronic circuits in a user-friendly environment designed for performance.

Your benefits

- A reliable, productive environment for efficient hands-on sessions.
- Simplified course preparation and personalization.
- One solution to teach multiple classes and programs.
- A long-term investment that stays in step with evolving training and budget requirements.

→ Video

Step into the world of Electeo:
Explore the concept behind a modern, sleek electronics lab.



With its modular design and solid technological foundation, Electeo adapts to a wide range of teaching and learning scenarios—whether working online, offline, in class, or remotely. It integrates easily into existing IT infrastructure, enabling a consistent, hands-on experience—all from one reliable platform.

The course collection: the pedagogical foundation

All Electeo courses have a consistent design that blends in-depth theory with guided exercises and applied projects to build technical and soft skills. Teachers can use the content as is or select and adapt sections to align with their course objectives.

Multimedia elements bring complex concepts to life. Students stay engaged with interactive, real-world tasks, study questions, and instant feedback. All resources support autonomous lab work.

The base unit: the self-contained workspace

Practical learning takes place on the lightweight base unit that offers integrated digital data acquisition. Learners clip a learning board onto the base unit, wire circuits, and measure electrical values in real time.

The boards are built to withstand years of hands-on use and feature IEC symbols for easy component identification. Selected boards also include fault insertion for troubleshooting practice.

The virtual instruments: the digital toolbox

The embedded virtual test and measurement instruments—DC sources, multimeter, function generator, clock generator, and oscilloscope—help students understand, test, and analyze electronic circuits with the accuracy, precision, and responsiveness of traditional benchtop equipment. This reduces costs, saves space, and facilitates data analysis.

Optimized for various screen sizes, the instruments are accessible via most web browsers.

Personalized learning, simplified

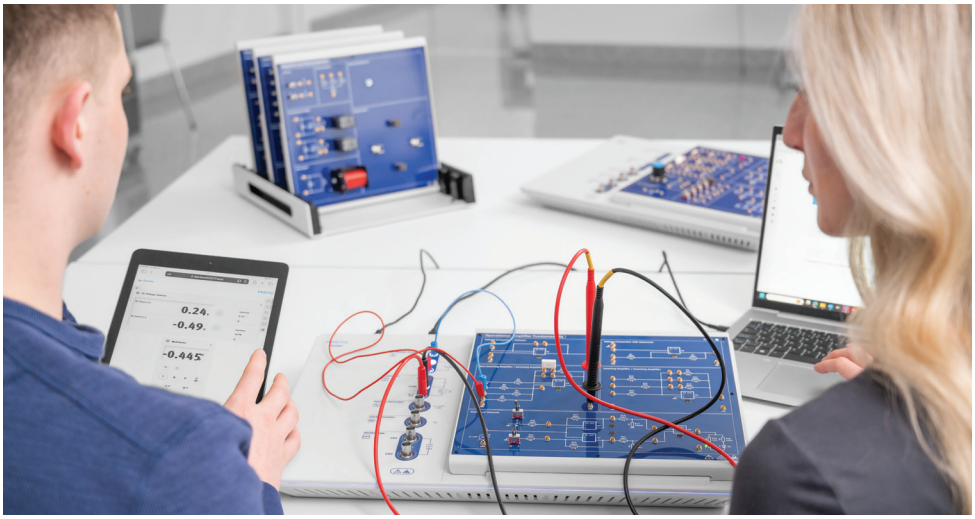
Combine Electeo with a subscription to the digital portal Festo LX to build learning paths, track student progress, and simplify your course planning—all in one place.

Teachers can assign, adapt, and customize courses with ease, while students access Electeo's virtual instruments directly within the Festo LX interface. Real-time data integrates automatically into exercises, boosting interactivity and productivity.

Online simulations, anytime, anywhere

With FluidSIM 365, students can safely explore circuit design, test their ideas, and build deeper understanding through interactive online simulations.

Available as an annual subscription, this powerful simulation tool for electronics and fluid power is accessible via browser or fully integrated into Festo LX. Whether in class or learning remotely, it brings circuits to life—no hardware required.



+ Quick setup, no headaches

Electeo is powered by a unique electronic core that ensures hassle-free operation. Whether your lab is wired, wireless, or both, Electeo adapts to your setup with ease.

The base unit connects to devices via Wi-Fi, USB, or Ethernet—no software installation required.

Electeo is compatible with a wide range of devices, including computers, tablets, and smartphones, as well as various operating systems and web browsers. Even without internet access, Electeo continues to function seamlessly by creating its own local network.

+ Smart and safe

Electeo is designed with safety and ease of use in mind. Indicator lights around the base unit and instrument connectors provide instant visual feedback, helping students and instructors quickly identify issues and prevent mistakes.

The system operates at low voltage and includes built-in short-circuit protection, ensuring a safe learning environment. With safety cables and carefully rated components, Electeo prevents the generation of high or hazardous voltages—so students can focus on learning without worry.

+ Scalable and future-ready

With Electeo being developed and manufactured entirely in-house, our team has full control over quality, service, and future enhancements.

The digital-first approach makes it easy to integrate new technologies, updates, and evolving industry trends—without the need for major overhauls. The course and hardware collection continues to expand, so schools can start small and scale over time.

For advanced users, the base unit will also support custom application development using software tools like LabVIEW, MATLAB, or C#, adding even more flexibility and future potential.

Step by step to your Electeo laboratory

Step 1 Courses
Select the topics you want to teach from our growing course collection. To get an overview of each course, search “Electeo” on the portal → lx.festo.com.

Step 2 Course delivery method
Decide how you’d like to access the course materials. They’re available on the Festo LX portal (subscription required) or as PDF workbooks under a campus license.

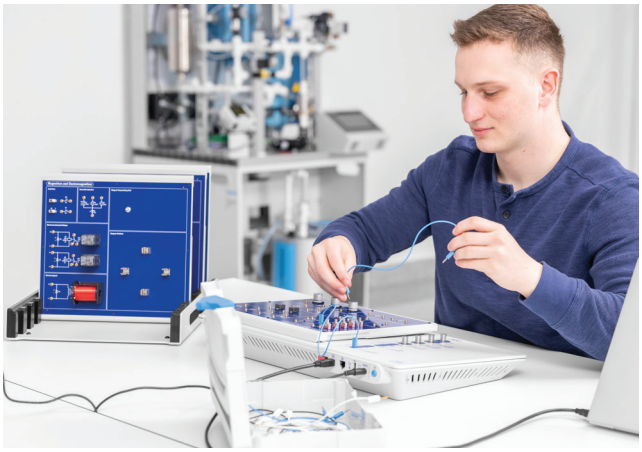
Step 3 Learning boards
Each course is supported by a specific learning board. Based on your course selection, check which boards are required and how many units you need. Browse available boards on the → website.

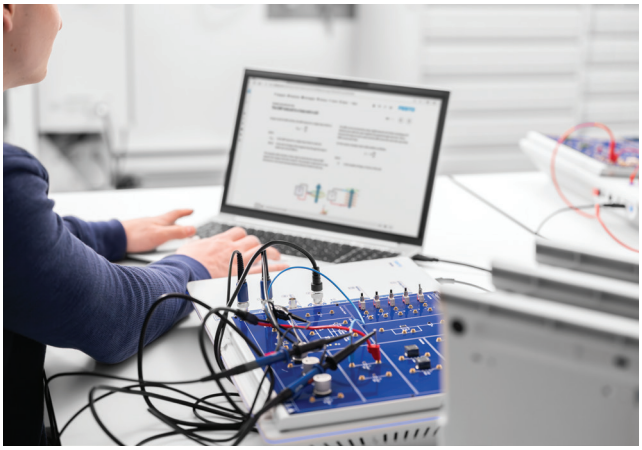
Step 4 Base units
Choose your base unit model—either the standard version or one without the Wi-Fi module—and decide how many units you need. Each base unit comes with a set of cables and probes.

Step 5 Options
Consider adding train-the-trainer sessions, a FluidSIM subscription, storage units, or extra cable and probe sets.

Outstanding service and a full warranty come standard.

Start small or go big—your lab is ready to grow when you are.





Do you have questions, or need a demo or a quote?
Get in touch with a Festo Didactic representative or an authorized dealer for all details about Electeo.