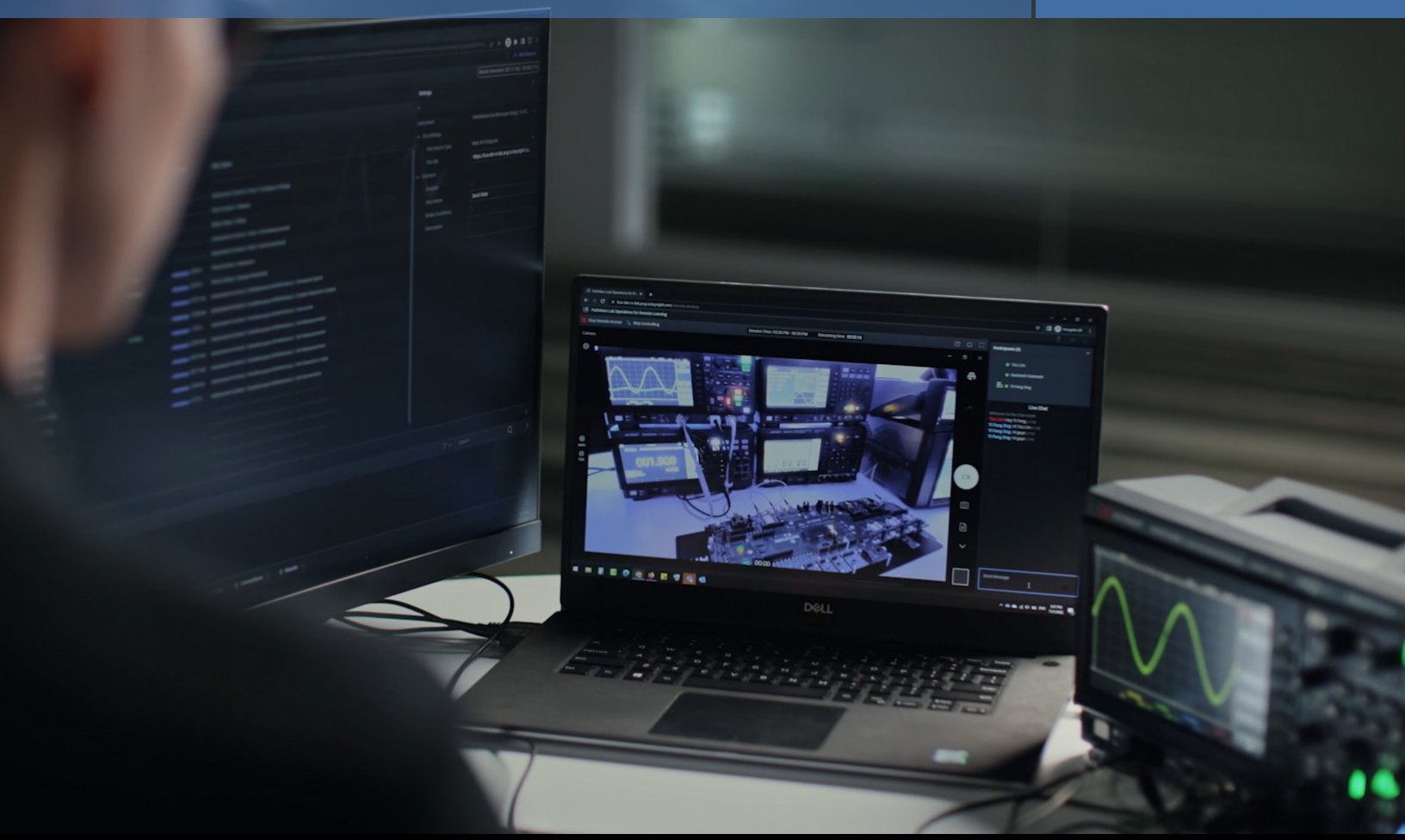
SOLUTION BRIEF



New Digital Learning Suite for Engineering Education

Earn an academic reputation while staying on budget

KEYSIGHT

Challenges

Engineering colleges and universities worldwide compete against each other to gain a solid academic reputation. An institution known for providing high-quality education can attract more potential students, researchers, and educators.

However, managing an educational institution, especially in prominent engineering colleges and universities, is no easy feat. Educators may be good at teaching, but it takes more than good teaching to become a reputable educational institution.

Engineering educators often find themselves balancing their research work with teaching. They cannot concentrate on research because they must also focus on curriculum development, administrative activities, and maintaining engineering resources. Most of all, educators must stay abreast of industry trends and keep their students interested and engaged. They need to build a lasting knowledge foundation for their students through a holistic learning journey.

A New Digital Learning Suite

When it comes to technical knowledge and measurement science, Keysight Technologies has more than 90 years of leadership and innovation. It is at the forefront of the education industry, advancing teaching and learning with innovative solutions.

Keysight provides hardware and software tools to transform academic teaching labs. Keeping in mind the challenges that engineering educators and lab managers face, Keysight introduces a digital learning software suite for engineering education. Your new digital learning experiences start with the Keysight SR101EDUA digital learning software suite.

Streamlined teaching workflow

Keysight SR101EDUA is a unified web-based digital learning suite with secure one-stop access to university engineering lab resources, measurement data analysis tools, and industry-relevant learning resources. This software consists of two key modules:

- The Keysight KS8400EDU industry-grade test sequencer with an integrated web interface controls instruments and characterizes your designs.

- The Keysight PW9300EDU remote collaborative learning tool with a built-in IMS LTI connection and single-sign-on (SSO) authentication easily integrates with your favorite learning management system (LMS) or identity provider.

A single web-based software suite provides lab management, instrument control, and learning resources subsystems. Full integration of all the tools helps streamline your teaching workflow.

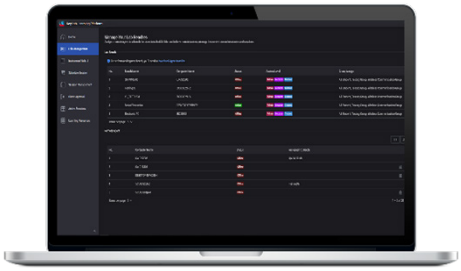
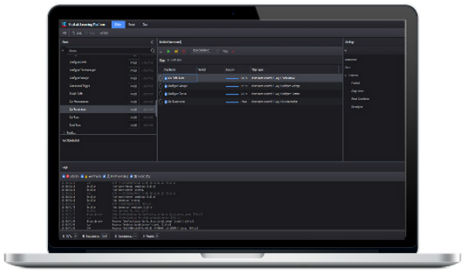
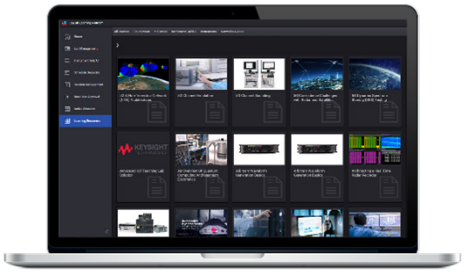
Fully integrated subsystem	Functions
Lab management 	• Streamline and simplify lab management. • Interact with students and facilitate group collaboration in real time. • Integrate with your LMS.
Instrument control 	• Access instrument controls and perform measurements remotely. • Take screenshots, plot measurements, perform math functions, and more. • Remotely connect to instruments linked to local lab benches.
Learning resources 	• Access all premium lab exercises and courseware. • Receive new content automatically and regularly. • Integrate with your LMS.

Figure 1. Fully integrated teaching sub-systems in a single web-based digital learning platform

Enhanced teaching workflow

A key benefit of this digital learning suite is that it enables access to thousands of on-demand industry-relevant learning resources from Keysight technical experts. Keysight has been at the forefront in enabling many current high-growth and future-growth industries, such as 5G / 6G telecommunications infrastructure, autonomous and electric vehicles, aerospace and defense, renewable energy, and quantum computing. Keysight is making these resources available for engineering students to explore adjacent fields through this self-paced digital learning suite for a holistic learning journey.

The digital learning suite includes Keysight's teaching courseware resources to assist engineering educators in saving time designing a syllabus from the ground up. For example, it has built-in teaching courseware resources on topics related to the Internet of Things, cybersecurity, RF microwave, power systems, and more.

Figure 2. A lecturer demonstrates a lab exercise with students using the digital learning platform

It also comes with hands-on remote collaborative lab tools to help students and educators work together, learn, and build a lasting knowledge foundation.

Maximized lab resource utilization

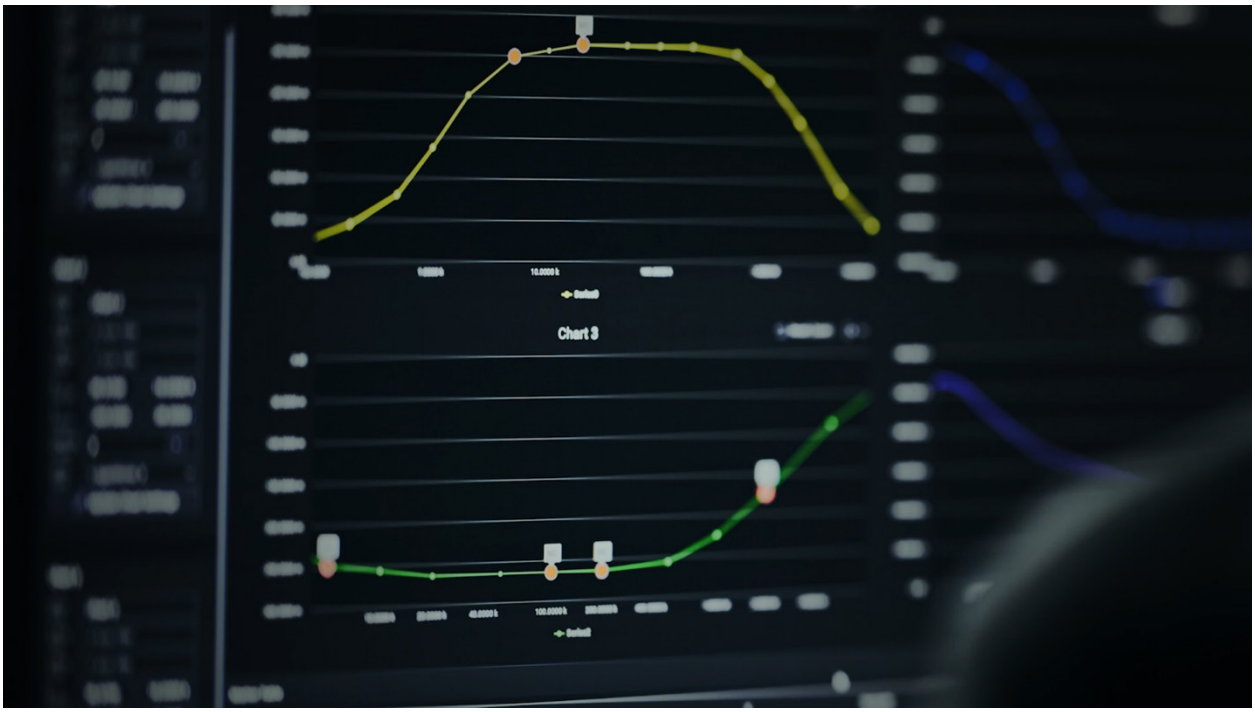


Figure 2. Easy graphical charting and analysis tool

With secure SSO authentication and remote-control access, you can make the university lab available beyond regular working hours, maximizing lab resource utilization.

Digital learning experiences start here. Let Keysight help you accelerate innovation with a digital learning suite to access industry-relevant learning resources through a secure web interface. This software suite controls engineering lab resources and manages tools to visualize, compare, and analyze measurement data. It reduces workflow processing time and increases lab resource utilization.

Learn More

Keysight has many resources to get you started on a digital learning experience.

Learn more about the SR101EDUA digital learning platform.

Check out Keysight's industry-grade test instruments, which will be valuable companions to the SR101EDUA digital learning software. Find out more about the Keysight Smart Bench Essentials general-purpose test instruments: EDU34450A digital multimeter, EDU36311A DC power supply, EDU33212A waveform generator, and InfiniiVision 1000 X-Series oscilloscopes.

For your RF and microwave lab bench, find out more about the FieldFox handheld RF and microwave analyzers.

Keysight enables innovators to push the boundaries of engineering by quickly solving design, emulation, and test challenges to create the best product experiences. Start your innovation journey at www.keysight.com.

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