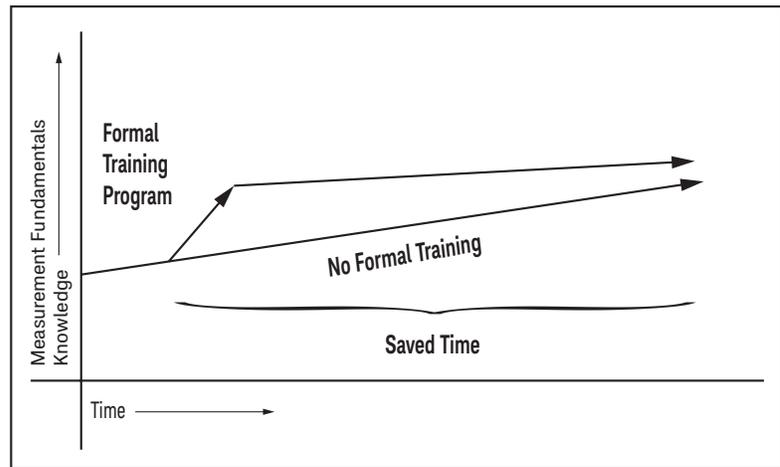


# Keysight Accelerated Education Curriculum

Improve your employees' test and measurement expertise and cut their time-to-productivity



## Expert test and measurement training = faster productivity = improved profits

A well-trained engineer solves problems more effectively and efficiently. That means you can get your products to market faster, which improves your profitability. With the Keysight Technologies, Inc. Accelerated Education Curriculum, your engineers become productive fast, as Keysight's global experts share their real-world test and measurement expertise. Your investment in an accelerated curriculum will pay for itself quickly as you jump-start your employees' productivity.

Ideal for:

- Newly hired engineers
- Experienced engineers changing job or needing a refresher

### Flexible, convenient, and cost-effective

The Keysight Accelerated Education Curriculum offers specific training to meet your organization's needs and delivers it in a format that works best for you.

### Standard and custom curricula

Choose from our standard curricula (see following page) or combine courses from Keysight's extensive class catalog (covering a wide variety of subjects in measurement fundamentals, technology training, product operation training, and application training) to create a tailored curriculum to meet your employees' needs.

### Flexible delivery options

Accelerated courses can be delivered in a choice of formats.

- Face-to-face sessions at your site or ours
- On-demand eLearning modules available over the Internet (limited classes available in this format)

### Cost-effective training

Managing your company's test and measurement training needs in-house means investing resources in course development, curriculum management, instructors, materials, equipment, etc. Now you can focus on your core competencies and take advantage of the cost-effective classes offered by test and measurement experts through the Keysight Accelerated Education Curriculum.

### Why Keysight?

When you choose the Keysight Accelerated Education Curriculum, you get more than a training package. You get a reliable, experienced partner committed to your success. Keysight is a global leader in the test and measurement industry that trains thousands of students each year.

### Who can benefit from accelerated education?

#### New hires

Yesterday, engineers learned theory in engineering school, then honed their real-world expertise with on-the-job training. With today's intense competitive challenges and rapidly evolving technologies, you cannot afford the luxury of on-the-job training. You need your newly hired engineers to be productive immediately. The Keysight Accelerated Education Curriculum quickly gives your new hires the test and measurement expertise they need, so they become valuable contributors faster.

#### Experienced engineers

With today's rapid and dramatic changes in technology, your employees' skills can get out of date quickly. The Keysight Accelerated Education Curriculum gives your seasoned engineers a fast refresher in the latest test and measurement technologies and techniques. Increase your confidence in your product development schedules by keeping your engineers abreast of emerging technologies and keeping their skills current.

## Select the curriculum that meets your needs

You'll save money when you select an entire curriculum compared to signing up for individual classes. Curricula are carefully designed to provide your employees with the real-world, market-tuned measurement expertise they need to thrive in today's fast-changing environment.

	Course	Module	Description
<b>Test and Measurement Fundamentals Curriculum (7250B-500)</b>	Metrology Basics	1	<b>Learn about the science of measurement. This course covers measurement process, classification of standards, the SI units system, laboratory calibration needs, tracability, standards bodies' requirements, interpreting calibration results and how calibration affects measurements</b>
	Measurement Uncertainties	2	Learn how to perform measurement uncertainty analysis. This course covers terms and definitions used in CIPM and ISO uncertainty calculations; identification of errors in microwave parameters; and the mathematical summation of total measurement uncertainty.
	Measurement Automation	3	Learn the fundamentals of measurement automation: what it is, features and benefits, basic elements of an automated system. Includes an introduction to the computers and computer languages and common bus interfaces used in automated systems.
	Measurement Process Fundamentals	4	Learn about measurement process, instrument performance, measurement variation, measurement process capability, types of measurement errors, methods to estimate measurement errors.

	Course	Module	Description
<b>RF and Microwave Fundamentals Curriculum (7250B-600)</b>	Cable and Connector Care	1	Gain an understanding of connector care fundamentals. This course covers requirements for effective connections; benefits and proper use of connectors; and common connector types and specifications.
	Spectrum Analysis	2	Learn the theoretical fundamentals and gain experience doing practical spectrum analysis measurements on 856x, 859x or ESA series spectrum analyzers. In this class we will discuss dynamic range considerations and how to evaluate measurement accuracy.
	Network Analysis Basics	3	Learn the theoretical fundamentals and gain experience performing practical network analysis measurements. Learn the major sources of errors in microwave measurements and their impact on measurement uncertainty.
	Noise Figure Measurements	4	Learn the principles of noise figure measurements and how to maximize performance of your Keysight NFA-series noise figure analyzer for your application. Learn how to avoid measurement errors and quantify uncertainties.
	Signal Generator and Source Basics	5	This course includes theory and practical examples to help you understand the basics of signal generators and their applications in analog and digitally modulated systems.
	Transmission Line Fundamentals	6	Transmission line concepts form the basis for understanding RF and microwave technology. Understand the need for transmission lines and the complexities of dealing with high-frequency systems.
	Power Measurement Basics	7	Learn RF and microwave power measurement principles including why and how to make power measurements. Learn about different sensor types and measurement approaches. Understand power transfer and insertion loss.

	Course	Module	Description
<b>Understanding Optical Transmitters and Receivers and Their Characterizations (7250B-400)</b>	Understanding Lightwave Technology	1	Learn how and why optical devices and networks operate. This course is for engineers who already understand optical basics and want to advance their understanding of optically based systems.
	Understanding DWDM	2	Gain an understanding of optical DWDM devices and how to test them for optimal performance. This course covers DWDM-enabling devices and their role in DWDM networks, performance requirements, specifications and the methods and equipment used to test them.
	Understanding Optical Passive Device Characterization	3	Learn techniques for testing the performance of optical passive components. This course covers component operation, specific test techniques and ways to automate testing.
	Understanding and Characterizing Optical Transmitters and Receivers	4	Learn how to test the latest optical devices. This course covers transmitters; electrical-to-optical (E/O) conversion; modulators and receivers; and optical-to-electrical (O/E) conversion.

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