

## Case Study

Investing in education is the key to the future of innovation. Tektronix is committed to helping university engineering programs around the world give their students and faculty the tools they need to own the future.

# A Passion for Innovation

## Queensboro Community College

### THE CUSTOMER CHALLENGE

As an adjunct professor at Queensboro Community College's electronic engineering program, Enrique Haro was concerned that his students' education was limited by a lack of equipment.

He's a firm believer that talking about engineering will never be as beneficial as hands-on practice and tinkering. For example, in order for students to gain experience building hardware solutions, they needed test equipment to characterize and troubleshoot their designs.

Enrique was also in communication with a variety of potential employers about what sort of skills and experience they might be looking for in a graduate. Their feedback solidified his view of the situation.

Practical experience was crucial to his own engineering journey, and he wanted his students to have the same opportunity. He was specifically interested in teaching them RF analysis, a subset of engineering with high demand in the industry and relatively low supply in universities.

### THE SOLUTION

Haro and QCC partnered with Tektronix to determine which equipment would be the most helpful to their students. Our team worked closely with QCC to deliver an efficient, cost effective, and cutting-edge RF bench solution. The goal was to give students both the tools they needed for any RF project and the experience they needed to have an advantage over other engineering graduates entering the workforce.

After selecting and delivering the brand new RF benches, Tektronix traveled to the school to conduct two separate trainings for students and faculty to ensure that everyone involved was comfortable using the equipment and that it met the program's needs.




With brand new spectrum analyzers, vector signal generators, and vector network analyzers, the students at Queensboro Community College now have the cutting-edge RF bench equipment that they need to succeed.

**To learn more about Tektronix's partnership with Enrique and Queensboro Community College, check out our video at [tek.com/stories](https://tek.com/stories).**

“I’m so proud of the lab because it gives us the opportunity to teach the physical aspects of radio frequency that cannot be taught with simulation.”

– Enrique Haro | Adjunct Instructor & Telecommunications Course Director

## PRODUCTS, SOFTWARE, AND SERVICES PROVIDED

Bench Configuration		
Product	Description	Qty.
	<b>RSA306B USB Spectrum Analyzer</b> » <a href="#">View On Tek.com</a> For compact, affordable, high fidelity and low noise signal analysis	7
	<b>TTR506A Series Vector Network Analyzer</b> » <a href="#">View On Tek.com</a> For fast and accurate RF measurements	7
	<b>TSG4100A Series RF Vector Signal Generator</b> » <a href="#">View On Tek.com</a> For flexible mid-range RF test solutions	7

## TO ROUND THIS OUT, CONSIDER THE FOLLOWING EQUIPMENT FOR RF BENCHES:

### 3 Series Mixed Digital Oscilloscope »

Large HD display and built in spectrum analyzer



### SignalVu PC Software »

for easy validation of RF Designs

### 6500 Series Digital Multimeter »

High-performance, low-cost, touch screen multimeter



### Kickstart Software »

for quick and efficient data capture

### 2230G Series Power Supply »

Testing devices, circuit boards, modules, and products that require multiple power sources

### 31000 Series Arbitrary Function Generator »

Patented real-time wave monitoring and new double pulse test software

**If you want to learn more about solutions for the education lab or this project, visit [tek.com/education](http://tek.com/education) or give our team a call at 1-800-833-9200**

Copyright © 2020, Tektronix. All rights reserved. Tektronix products are covered by U.S. and foreign patents, issued and pending. Information in this publication supersedes that in all previously published material. Specification and price change privileges reserved. TEKTRONIX and TEK are registered trademarks of Tektronix, Inc. All other trade names referenced are the service marks, trademarks or registered trademarks of their respective companies.

**Tektronix**<sup>®</sup>