



# Spectrum Analysis

Course Number: H7215A-169

**Gain a better understanding of spectrum analysis measurements**

## Course Overview

This one-day course presented by Agilent Technologies, Inc. is designed to provide the theoretical fundamentals and in depth hands-on experience on practical spectrum analysis measurements. The content is focused on Agilent's new X-Series spectrum analyzers, MXA N9020A and EXA N9030A. This course will briefly cover our high performance spectrum analyzer PSA E4440A.

## Detailed Course Agenda

- Spectrum analyzer fundamentals
- Sensitivity, resolution, accuracy
- Block diagram
- Demonstrations of spectrum analyzer theoretical concepts
- Tune, zoom, measure
- Resolving equal and unequal amplitude signals
- Noise sidebands
- Measurement of small signals
- Dynamic range analysis
- Spectrum, modulation, S/N measurements and more
- Measurement uncertainties and errors
- Demonstrations of modulation

measurements

- AM/FM measurements
- AM/FM demodulation
- Pulsed RF measurements
- Simplifying complex measurements

## What you will learn

- Gain basic operation skills for the X-Series and PSA Spectrum Analyzers
- Understand the fundamental block diagram and technical specifications of a spectrum analyzer
- Understand dynamic range considerations
- Gain experience evaluating measurement accuracy
- Practical lab experience

## Specifications

### Course Type

User/Application Training

### Audience

Test Engineers, Technicians and Managers who are using spectrum analyzers

## Prerequisites

None

## Course Length

1 day

## Course Format

70% lecture/ 30% lab

## Price

\$495 per student

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