

# PathWave SystemVue Training Class for Phased Array Antenna Design, Beamforming Dataflow and 5G New Radio

Keysight Technologies invites you to join our training on SystemVue training class for Phased Array Antenna design, Beamforming dataflow and 5G New Radio

## Overview

### You will learn:

- Quickly set up various phased array systems and configurations.
- Easily analyze various phased array systems and configurations.
- About the various measurement and statistical evaluations available.
- To make meaningful, 3D plots.
- To link your dataflow design with the phased array design using the RF Link PhasedArray co-simulation component.
- To set up, configure and analyze various beamformer architectures.
- To easily simulate different antenna array configurations.
- To extract the correct measurements from these.
- To configure 5G NR sources for various bandwidths and numerologies.

**Course Type:** User/Application Training

**Audience:** Designers

**Course Length:** 2 days, 8 hours per day.

**Course Format:** The course combines lecture presentations with instructor guided hands-on labs.

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**Date:** TBD

**Delivery:** Virtual/Onsite

**Cost:** Please contact us for pricing at: [eda.training@keysight.com](mailto:eda.training@keysight.com)

**Language:** English

# Schedule

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### Day 1

#### **SystemVue Phased Array**

- Introduction to the Phased Array Analysis
  - Setting up Analysis
  - Tx and Rx Modes
  - New Array Parts
  - Theory of Operation
  - Measurements
  - Spectrasys Simulation of a Phased Array design
  - Performing Statistical / Monte Carlo Evaluations
  - RF Link PhasedArray and Data Flow cosim
  - Theory of Operation
  - Requirements
  - RF Beamforming
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### Day 2

#### **Introduction to Beamforming in dataflow**

- RF and Digital Beamforming Architectures
- Beamforming Weights
- Antenna Array Configuration
- Beam Patterns
- Dynamic and Static 3D Plots and Graphs
- Beam Measurements
- Shared- and Sub-Arrays
- for Multi-Users
- SystemVue Matrix Parts

#### **Introduction to 5G New Radio in SystemVue**

- 5G Introduction
  - 5G NR Signal Generation
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Learn more on our trainings: [www.keysight.com/us/en/products/services/education-services](http://www.keysight.com/us/en/products/services/education-services). For more information on Keysight Technologies' products, applications, or services, please contact your local Keysight office. The complete list is available at: [www.keysight.com/find/contactus](http://www.keysight.com/find/contactus). For registration or information contact your training center at [eda.training@keysight.com](mailto:eda.training@keysight.com).

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