# PathWave RF Synthesis (Genesys) Training

Keysight Technologies invites you to join our training on PathWave RF Synthesis Genesys Training

## Overview

### You will learn:

- The Genesys user interface, features, schematic capture, simulation setup and results display.
- Linear and Non-linear Circuit simulation and Synthesis of different kind of filters
- Electromagnetic Simulation (Momentum)
- System Simulation (WhatIF and Spectrasys)

**Course Type:** User/Application Training

**Audience:** Engineers, designers, and high-level technicians, who need Genesys for design, testing and characterization of circuits and systems.

**Prerequisites:** A basic understanding of circuit and system design principles.

**Course Length:** 3 days, 8 hours per day.

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

### PathWave RF Synthesis (Genesys) Training

**Date:** TBD

**Delivery:** Virtual/Onsite

**Cost:** Please contact us for pricing at: eda.training@keysight.com

**Language:** English

KEYSIGHT

PATHWAVE

# Schedule

**PathWave RF synthesis (Genesys) Training**

| | |
|---|---|
| **Day 1** | **Circuit Simulation and Syntheses**<br>• Learn the Genesys Basics<br>• Get familiar with the Genesys User Interface<br>• Experience the power of the filter synthesis tools<br>• Create lumped and distributed filters<br>• Linear and Nonlinear Analysis and Managing Data<br>• Investigate an Amplifier by linear and nonlinear simulation<br>• Overview of Library and Model management<br>• Using S-Data and SPICE-models<br>• Create your own libraries and parts |
| **Day 2** | **Electromagnetic Simulation**<br>Introduction into Momentum<br>• Theory and typical application<br>• Design Flow incl. Circuit-EM-Co-Simulation<br>Momentum simulation capabilities<br>• Simulation Modes and Options<br>• Investigating the different EM-Ports<br>Antenna simulation and Interface to EMPro<br>• Create a Dipole antenna and display Far Field Pattern<br>• Exporting Layouts to EMPro |
| **Day 3** | **System Simulation**<br>Frequency Planning (WhatIF)<br>• Perform frequency planning for different scenarios<br>RF-Architecture Design (Spectrasys)<br>• Setting up a RF-System and investigate results<br>• Typical System-Applications<br>• Create and investigate a complete FM-Receiver<br>Modulated RF analysis for systems (Spectrasys)<br>• Simulate a Digitally Modulated TX Hybrid Amplifier |

**Learn more on our trainings: 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. For registration or information contact your training center at eda.training@keysight.com.**

**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.**