INTERLLIGENT
RF & Microwave Solutions

Practical RF Training

Introduction:

The course combines theoretical studies with hands-on lab experiments that demonstrate the studied subjects.
We will discuss about test equipment, setup rules, test results reliability and common measurements such as: Noise Figure, IP3, P1dBC.P., THD, SFDR, EVM and Channel power.

Short form syllabus with time allocations:

Day #1	Subject Title	Study Hours	Lab Equipment Required
1	**Introduction:** AWGN, Receiver noise budget, Linearity – P1dBCP, IP3, SFDR, RF Components.	3 Theroy	---
2	**Signal Generator:** Block diagram, ASG Vs. VSG, CW, Pulse Modulations: AM/FM/PM, Freq' Sweep Menu, Signal studio & 5-Pack, Multitone option, Supported measurements.	1 Theory	N5182B
3	**Signal Analyzer basics:** Block diagram, Basic operation, "Span" & "Amplitude", Input attenuator, Utilizations of markers, Display properties, Noise floor, RBW & VBW, Noise & Linearity measurements, Zero Span, Over gain, Setup problems, Cables and connectors.	1 Theory + 3 Practice	N9010A
Day #2	**Subject Title**	**Study Hours**	**Lab Equipment Required**
4	**Vector analysis:** Channel power, ACLR, EVM and Emission Musk for: LTE-FDD, WCDMA signals.	1 Theory + 2 Practice	N5182B + N9010A
5	**Power Meter:** Power & Freq' limits, Basic configuration, Comparison to Signal Analyzer, Power sensors: Average / Peak	1 Theory + Practice	Power Meter
6	**Oscilloscope:** Block diagram, Measurements types, Scaling, Recording	1 Theory + 3 Practice	Oscilloscope