

Course Title: Fundamentals of VLSI Design and Verification Phase 2 **Course Code: EEA 203**

Course Background / Summary:

Topics covered are basic concepts in RF design, scattering parameters, modern integrated circuit technologies, fundamental limitations of the speed of operation of transistors, physics of noise, and impedance matching requirements for the main components of RF Transceiver such as low-noise amplifiers, mixers, oscillators, phase noise, and phase-locked loops.

Course Objectives:

- The objective of this training is to present the concepts of design and analysis of modern RF and wireless communication integrated circuits that cover a wide range of applications including high-speed wireless communications.

Target Audience:

- Anyone interested in gaining a solid knowledge of the key elements of industrial automation to improve their work skills and to further their job prospects:

Course Duration: 10 Days

Course Contents

1.0 Basic Concepts in RF Design

2.0 Transceiver Architectures

3.0 Low Noise Amplifier Design (LNA)