

Course Title: Analog Circuit Design Fundamentals Course Code: EEA 193

Course Background / Summary:

This course is suitable for Electrical Engineers who work in consultation companies, contractors, and maintenance fields in a factory. Electrical Design has a huge demand in many segments like design, manufacture, and installation of power and distribution systems, Sub-stations Design, commercial and Domestic interior lighting

Course Objectives:

- Understand the working principle of active and passive components
- Understand the frequency response of an RLC Circuit
- Design a first order and second order passive filter
- Design a single stage and double stage amplifier

Target Audience:

- Industrial workers from technicians to engineers, etc.
- Teaching staff (vocational & technical teachers), lecturers, etc.

Course Duration: 4 Days

Course Contents

1.0 Basic Circuits Using passive components

5.0 Basic Circuits Using active components

2.0 Transient Response in DC circuit

6.0 MOSFET Multistage Amplifier

3.0 Resonance in AC circuit

7.0 Laboratory Tutorial Exercise: Simulation Tools Application

4.0 Passive Analog Filter