

Course Overview:

This course provides an introduction to electronic drawing covering: basic electric circuit quantities and circuit analysis techniques; semiconductor devices such as diodes, transistors and operational amplifiers and their application in power supplies and amplifiers; digital logic and microcontrollers; and finally electrical energy, machines and power systems. It is designed to give a broad understanding of the principles of electronic engineering. It covers the following material: Basic Circuits/DC Analysis: electrical quantities, components and sources, circuit analysis laws

Course Objective:

1. Analyse simple steady-state DC circuits of resistors, current and voltage sources, capacitors and inductors. 2. Design simple DC power supplies. 3. Analyse and synthesise combinatorial logic circuits; and analyse the operation of short assembly-language programs. 4. Use the principles of electrical energy conversion to analyse DC and AC electrical machines to determine their performance characteristics; analysis of sustainable energy systems such as solar, wind and thermal power generation. 5. Testing of electronic circuits.

Course Outline:

- Safety In The Electronics
- Identify, Calculate, Construct, And Troubleshoot Fundamental Electronic Circuits
- Demonstrate Appropriate Test Equipment Selection
- Identify, Calculate, Construct, And Troubleshoot Basic Power Supply Systems
- Identify, Reading, Analysis, And Troubleshoot Electronic Systems And Circuits
- Identify, Calculate, Construct, And Troubleshoot Digital Systems And Circuits
- Electronic Circuit Analysis

Who Should Attend:

This course is aimed at Electrical technician engineers and craftsmen who wish to extend their Electrical. This course includes the dangers of electricity, electronic principles, and relevant electronic legislation and regulations. There is a significant amount of practical exercise on this course involving disconnection and reconnection of various motors

Training Language:

EN / AR

Training Methodology:

- Presentation & Slides
- Audio Visual Aids
- Interactive Discussion
- Participatory Exercise
- Action Learning
- Class Activities
- Case Studies
- Workshops
- Simulation