

Fundamental of electronics

Pre-request: General Knowledge about electricity

Course duration: 40 Hours

On completing this course you will be able to:

- Understand all basics of electricity
- Difference between AC and DC
- Understand all functions of all electronics component
- Basics of power electronics component
- Testing any component and replace it in any circuit
- Deal with measuring instrumentation such oscilloscope
- Make power supply circuit
- Understand the operation of logic gates
- Training practical with real circuit

Course Content:

- Electrical basics for any control engineer.
- Getting started in electronics.
- Static electricity.
- Electrical current.
- Direct current Electricity.
- Alternating current electricity.
- Measuring AC and DC.
- Wires and cables.
- Switches.
- Relays.
- Moving coil meter.
- Microphones and speakers.
- Resistors.
- Capacitors.
- Resistor and capacitor application.
- Coils.
- Transformers.
- Semiconductors
- Diode
- Transistors

- Transistor types
- Thyristors.
- Diac.
- Triak.
- Photonic semiconductors.
- Photo resistive semiconductors.
- Light emitting diode.
- Solar cell application.
- Digital integrated circuit.
- Logic gates.
- How gate are used.
- Linear integrated circuits.
- Operational amplifier.
- Timers.
- Function Generators.
- Voltage Regulators.
- Work on Oscilloscope.
- How to solder.
- More than 20 practical circuits.