

## Electronics Circuit & Devices

### About NIELIT

NIELIT is an autonomous Scientific Society under the administrative control of Ministry of Electronics & Information Technology (MeitY), Government of India. NIELIT Chandigarh was established in 1978 to provide professional services in the areas of Information, Electronics & Communication Technology (IECT). NIELIT Chandigarh is engaged in development of industry oriented quality education and training programmes in the state-of-the-art areas.

### About Course

The course will bring the concept of Electronics devices, analysis and circuit designing. In this include the study of device characteristics and applications of p-n-junction diodes, rectifier, clipper, and clamper. Implementation of electronics circuit using simulation tools

### Course Objective

The learner will learn the electronics components and electronics circuit Designing. Further, the learner will able to learn simulation of electronics circuit.

### Brief Contents

#### ❖ Introduction to Electronics

- Evolution of Electronic Devices and Integrated Circuit, Applications of electronics
- Need and application of electronics in different areas, Concept of active and passive devices

#### ❖ Semiconductor Devices

- Intrinsic and Extrinsic Semiconductors, conductivity of semiconductors and its temperature dependence
- Structure, principle of operation characteristics and applications of PN-Junction

- Rectifier, Clipper, Clamper, Power Supply
- Circuit Simulation using Proteus VSM

#### ❖ Case study

- Working of a 5V Digital Power Supply circuit
- Usage of Transformer
- Working of rectifier circuit
- Usage of capacitor as a filter
- Regulator
- Introduction to PCB designing using OrCAD

### Eligibility

Knowledge of Computers

### Fee

Rs.600+ GST

### Duration

1 Week

For further details, Contact:

### Facility at Chandigarh

IETE Building, Sector 30-B, Chandigarh 160030  
Phone: 0172-2650121, Mobile: 8988377112

### Permanent Campus

Bada Phull, Birla Farms, Ropar-140001  
Phone: 01881-257005,  
Mobile:7087235351,7009304181,7087235355

Email: [training.chd@nielit.gov.in](mailto:training.chd@nielit.gov.in)

Visit: [www.nielit.gov.in/chandigarh](http://www.nielit.gov.in/chandigarh)