

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, clamper bipolar junction transistors, and Op-Amp.

Course Objective

The learner will learn the electronics components and electronics circuit Designing. Further, the learner will able to learn the working of electronics circuit used in day to day life.

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
 - PN-Junction, Rectifier, Clipper, Clamper, Power Supply
 - Circuit Simulation using Proteus VSM
- ❖ **Case Study**
- ❖ **Transistor and its Biasing**
 - Transistor operation and Characteristics, CB, CC and CE configurations
 - Biasing circuits, Thermal Runaway
- ❖ **Operational Amplifier**
 - Operation, characteristics, inverting and non-inverting configurations
 - Integrator and differentiator, 555 timer
 - Introduction to PCB designing using OrCAD

Eligibility	Knowledge of Computer	Fee	Rs.1000 +GST	Duration	2 Weeks
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For further details, Contact:

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