

# Computer Hardware & Networking

Duration: - 4 Weeks (40 Hours)

Batch Size: 30

## Computer Hardware & Networking

*4 Weeks In-Campus Course*

Medium of Instruction: Bilingual (English & Hindi)

This course is to make the student understand working of computer hardware & networking devices, troubleshooting & maintenance. After completion of this course the student is expected to configure the computer system as per the user requirement and troubleshoot functional problem in computer operation. The main emphasis of the course will be on problem solving aspect i.e., Installation, Configuration & Maintenance.

### Objective

10+2 qualified with Basic Knowledge of Computers.

### Eligibility

### Prerequisite

Basic Knowledge of Computers.

### Course Fees

Rs. 4720/- incl. GST & all other charges.

### Certificate

Certificate will be provided to the participants, based on minimum 75% attendance and on performance (minimum 50% marks) in the online test, conducted at the end of the course.

### Methodology

- ✓ Instructor-led offline classes.
- ✓ Instructor-led hands-on lab sessions.
- ✓ Content Access through e-Learning portal.
- ✓ Assessment and Certification

### How to Apply?

**Step-1:** Read the course structure & course requirements carefully.

**Step-2:** Visit the Registration portal (<https://regn.nielitvte.edu.in/>) and click on apply button.

**Step-3:** Create your login credentials and fill up all the details, see the preview and submit the form.

**Step-4:** Login with your credentials to verify the mobile number, email ID and then upload the documents, Lock the profile and Pay the Fees online, using ATM-Debit Card / Credit Card / Internet Banking / UPI etc.

**Course Content**

Day	Topic	Day	Topic	Day	Topic
Day #01	Introduction to Basic electricity, Number Systems digital electronics.	Day #02	Half-wave and Full-wave Rectifier with filter, SMPS block diagram, working principles, Requirement of SMPS wattage	Day #03	The PC hardware consisting input, processing and output sections, computer hardware components of mother boards, CPU, chip-set, ports, slots, connectors, add-on cards, etc. Protection of PC hardware.
Day #04	Motherboard BIOS/UEFI Features, Boot Sequences, BIOS Upgrades, POST, CMOS setup, various error codes and their causes.	Day #05	Hard disk partitioning, IDE, SATA, SCSI, SAS Interfaces, SCSI controllers and RAID controllers and configuration.	Day #06	Computer organization, Different types of Operating system.
Day #07	Introduction to Microprocessor architecture.	Day #08	Types of Computer Memory, RAM, ROM, Static, Dynamic, SIMM, DIMM, DDR, Cache memory, Virtual Memory etc.	Day #09	File Systems FAT/NTFS, data deletion and data recovery concepts, formatting
Day #10	Various input Devices and their applications, Types of Scanner	Day #11	Types of Output Devices, Visual Display Units, Sound output, Classification of printers.	Day #12	Types of display, CRT, LCD & OLED, LCD backlighting: CCFL & LED, Comparison of popular LCD panels
Day #13	Types of software, Application Software, System Software and device drivers, Virtual Computing.	Day #14	Windows/Linux OS fresh installation, HDD partitioning, Working with explorers, Control panel, System administration	Day #15	What is networking, Basic types of networks, Types of topologies, OSI Model & TCP/IP Suite.
Day #16	Transmission mediums, Types of cables, Modems, Hubs, switches, Wireless Routers, IP configuration and various protocols, file sharing.	Day #17	Data Transmission Mode, Circuit Switching and packet switching, Communication Protocols, Data packet's structure	Day #18	Types of viruses, How antivirus works, Antivirus program installation.
Day #19	System Image backup, Backup and restore.	Day #20	General PC Problems & Troubleshooting rules, Preventive Maintenance		

**Course Coordinator**

**Sh. A.G. Rao (JD-T)**  
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**Course Co-Coordinator**

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**CLICK HERE FOR REGISTRATION**

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