Course Name:
Basics in Hardware and Networking
Course Code: H1

Address:
Info Tech Corporation of Goa Ltd.,
IT HUB, 3rd Floor,
Altinho, Panaji-Goa.
Pin: 403001
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Tel: (0832) 2226024/22241926
Hardware and Networking

1. **Introduction:**
   The Course in Hardware and Networking helps students become industry ready for careers in Hardware and Networking immediately post completion of the course.

2. **Eligibility:**
   A minimum educational qualification of being 10th Pass or B1/B2 from ITKC

3. **Duration:**
   100 Hours. Two Hours each day
   - Theory 25 hours
   - Practical 75 hours

4. **Course Details:**

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<tr>
<th>Type of course</th>
<th>Syllabus</th>
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<tr>
<td>Professional IT Course</td>
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| **Introduction** | o Computer Fundamentals  
                   o Introduction to Computers  
                   o Types of Computers  
                   o Introduction to Input Output Devices  
                   o Introduction to Storage Devices  
                   o Principals of Data Communication |
| **Assembling and Installation** | o Hardware Configuration  
                                       o Introduction to basic components of a typical PC  
                                       o Assembling a PC  
                                       o Formatting, Installing Operating System and other system software |
| **Troubleshooting** | o Basic Trouble shooting during the assembling  
                           o Basic troubleshooting of PC |
| **Networking Fundamentals** | o Introduction to various types of cables and connectors used in networking  
                                      o Introduction to networking and networking concepts, networking topology and protocols  
                                      o The 7 Layer architect  
                                      o Three way handshake  
                                      o 7 Layer components |
ITKC COURSE DETAILS

Course Code: H1

Info Tech Corporaiton of Goa Ltd.

- Repeaters, Hubs, Switches, Bridges, Routers
- WAN
- Hubs vs Switches

- Network Installation and Configuration
  - Installing the NIC Card, MAC Address
  - LAN Standards – Ethernet, Token Ring
  - Structured Cabling
  - LAN Practicals
  - IP Addressing and IP Classes
  - TCP/IP Concepts and configuration of IP Address
  - Joining computer to a AD Domain
  - Basic network troubleshooting

Introduction to Security

- Security truisms
- Security policy
- Strategies for secure network
- Ethics of computer security
- Security threats and levels
- Security plan (RFC 2196)
- Security incident handling, Containment and Eradication
- Principles of security
- Types of attacks
- Cookies
- Specific attacks – sniffing

Classes of attack

- Stealing of passwords
- Social Engineering
- Bugs and backdoors
- Authentication failures
- Protocol failures
- Information leakages
- Viruses and worms
- Denial of service attacks

Computer security

- Viruses, Trogan horse and worms
- Types of viruses
- Protection of computer against virus attack
- Life stage of Virus
- Structure and components of Virus
## Firewall and Proxy Servers

- Kinds of firewalls
- Packet filters
- Application level filtering
- Circuit level gateways
- Dynamic packet filters
- Distributed firewalls
- Filtering Services
- Packet filtering
- Implementing policies

### 5. Fee:

Rs. 8000/- (exclusive of Service Tax)