

Certificate Course in Computer Hardware and Networking

(Program Code: ACCHN)

Objectives:

1. To know fundamentals of Computer and Organization of Hardware and Software.
2. To know fundamentals of networking.
3. To study installation of various drives and operating systems.
4. To be able to identify, connect and configure different types and parts of network.

Course Duration: 30 Hours

Mode of Transaction:

1. Lectures
2. Discussions
3. Demonstrations
4. Practical experimentations

Syllabus:

| Unit No. | Unit | Topics | Duration |
|----------|--|---|----------|
| 1. | Introduction about Computer | Basics of computer, Organization of computer. Software and hardware. Input/output devices. | 4 Hours |
| 2. | Basic Networking Concepts | Network topologies: LAN, WAN, MAN, PAN, CAN, GAN, SAN Networking Model: The OSI model, TCP/ IP Model, Network adapters. Introducing protocols. Cabling and troubleshooting. | 4 Hours |
| 3. | Introduction to various networking devices | Routers, Switches, Modems, Hubs etc., Wired and Wireless technology. | 2Hours |
| 4. | Network basic and configuration | Setting IP addresses, Sharing files and folders. | 2Hours |
| 5. | Introduction to servers, Basics of Internet and Intranet | Types of servers: Files servers, Email Servers, Proxy servers etc. Types of Internet connections: Wi-Fi, 2G, 3G, 4G, WWW, E-mails, Search Engines, Social Networking. Cloud application, Audio-video Conferencing, Voice over Internet Protocol (VOIP), Recovery and backup, Essential security measures. | 6Hours |
| 6. | Practical Session | | 12 Hours |

Assessment and Evaluation:

| Criterion for evaluation | Duration | Marks |
|--------------------------|----------|-------|
| Assignments | 2 | 10 |
| Class Test | 1 Hour | 20 |
| Practical Exam | 3 Hours | 20 |

Award of Grade and Certificate

The class should be awarded to the student on the aggregate marks obtained by him/her at the written and practical examinations and in respect of course the award of class shall be as follows:

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|----------------------------|---------|
| i. Aggregate 70% and above | O Grade |
| ii. Aggregate 60% to 70% | A Grade |
| iii. Aggregate 55% to 60% | B Grade |
| iv. Aggregate 50% to 55% | C Grade |
| v. Aggregate 40% to 50% | D Grade |
| vi. Below 40%. | Fail |
