



ITE (IT Essential) for School Computer Teaching



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Courses & Certification in NetAcad

Curriculum	Description	Certification
IT Essentials	IT Essentials covers the fundamentals of computer hardware and software and advanced concepts such as security, networking, and the responsibilities of an IT professional.	CompTIA A+
CCNA Discovery	CCNA Discovery provides an overview of general networking theory and opportunities for practical application, career exploration, and soft-skills development.	Cisco CCENT Cisco CCNA
CCNA Exploration	CCNA Exploration provides a comprehensive overview of foundational to advanced networking concepts, with an emphasis on theory and practical application.	Cisco CCNA
CCNA Security	CCNA Security introduces the core security concepts and skills needed to install, troubleshoot, and monitor a network to maintain the integrity, confidentiality, and availability of data and devices.	Cisco CCNA Security
CCNP	CCNP teaches the advanced skills needed to install, configure, monitor, and troubleshoot enterprise-sized networks and manage wireless, security, and voice applications.	Cisco CCNP
Health Information Networking	Health Information Networking helps students prepare for networking careers in the healthcare industry.	N/A

Courses & Certification in NetAcad

- IT Essentials
- CCNA Discovery
- CCNA Exploration
- CCNA Security
- CCNP
- Health Information Networking

Well promoted through AiTLE, EDB & others organizations

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- IT Essentials
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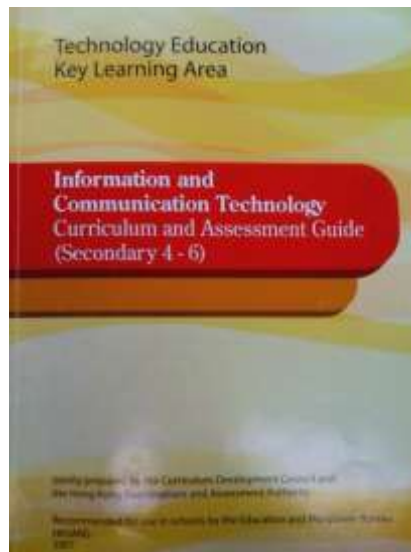
Not related or too difficult for K12

Courses & Certification in NetAcad

- IT Essentials
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A new
resources to
promote /
recommend

Why promote / recommend



Why promote / recommend

The Compulsory Part (165 hours)			
A. Information Processing	(64 hours)	B. Computer System Fundamentals	(25 hours)
C. Internet and its Applications	(28 hours)	D. Basic Programming Concepts	(20 hours)
E. Social Implications	(28 hours)		

The Elective Part (75 hours) (Choose one only)			
A. Databases	B. Data Communications and Networking	C. Multimedia Production and Web Site Development	D. Software Development

Why promote / recommend

EDB ICT Curriculum	ITE 5.0 (Match to topic)	ITE 5.0 (Match to time)
d. Threats and Security on the Internet		15
Know, from the users' perspective, possible security threats on the Internet.	1	
Demonstrate the control of intrusion using security applications on a computer.	1	
Discuss the possible privacy threats on the Internet, and suggest ways to maintain privacy.	1	
Be aware of information encryption technologies so as to prevent eavesdropping and interception.	1	
Explain authentication and authorization as a means to control access of information on the Internet.	1	
Know about security used in electronic transactions.	1	
Be aware of the latest developments in security measures.	1	
Compulsory Part	25	40
	30%	30%

Why promote / recommend

EDE ICT Curriculum	ITE 5.0 (Match to topic)	ITE 5.0 (Match to time)
Develop the basic skills of analyzing problems of a networked environment and performing troubleshooting for it.		
Be aware of the importance of backup in disaster planning and recovery measures.	1	
Know the common hardware and software components of a network backup solution.	1	
ii. Network security		
Describe the potential risks caused by the common network security threats.	1	
Propose effective measures to improve network security for both wired and wireless networks.	1	
Elective Part - Data Communications and Networking	25 63%	44 59%

Why promote / recommend

Cisco ITE5 Curriculum	ICT (Compulsory)	Networking Elective
10.2: Security Procedures	1	1
10.3: Common Preventive Maintenance Techniques for Security	1	1
10.4: Basic Troubleshooting Process for Security	1	1
Chapter 11: The IT Professional		
11.1: Communication Skills and the IT Professional		
11.2: Ethical and Legal Issues in the IT Industry		
11.3: Call Center Technicians		
Chapter 12: Advanced Troubleshooting		
12.1: Computer Components and Peripherals	1	
12.2: Operating Systems	1	
12.3: Networks	1	1
12.4: Laptops	1	
12.5: Printers	1	
12.6: Security	1	1
	47	18
	77%	30%

Why promote / recommend

- So if students study the ITE
 - They can
 - Reinforce their learning on the topics of ICT likes
 - Computer Systems Fundamentals
 - Internet and its Applications
 - Social Implications
 - Some of the topics of ICT → self studies
- On the other hand

Why promote / recommend

- if students is studying ICT
 - They can
 - Have learnt some of the topics of ITE
 - A step forward to professional certification

Why promote / recommend

- Topics fit ICT

Cisco Networking Academy	
IT Essentials	
	Chapter 0: IT Essentials Introduction
→	Chapter 1: Introduction to the Personal Computer
	Chapter 2: Lab Procedures and Tool Use
→	Chapter 3: Chapter 3: Computer Assembly
	Chapter 4: Overview of Preventive Maintenance
→	Chapter 5: Operating Systems
→	Chapter 6: Networks
→	Chapter 7: Laptops
→	Chapter 8: Mobile Devices
→	Chapter 9: Printers
→	Chapter 10: Security
	Chapter 11: The IT Professional
→	Chapter 12: Advanced Troubleshooting

Why promote / recommend

- Structured eLearning / self-learning

Course Modules	
🔍	IT Essentials Introduction
📄	Launch ITE Introduction
📄	ITE 5.0 Skills Review Exam
🔍	Chapter 1: Introduction to the Personal Computer
📄	Launch Chapter 1
📄	ITE 6.0 Chapter 1 Quiz
📄	ITE 5.0 Chapter 1 Exam
🔍	Chapter 2: Lab Procedures and Tool Use
📄	Launch Chapter 2
📄	ITE 5.0 Chapter 2 Quiz
📄	ITE 6.0 Chapter 2 Exam

Why promote / recommend

- Teachers can “manage” the content for student



Why promote / recommend

- Content is well written, with multimedia

Chapter 5: Operating Systems

Operating System Installation

Hard Drive Setup Procedures

As a technician, you might have to perform a clean installation of an OS. Perform a clean install in the following situations:

- When a computer is passed from one employee to another
- When the OS is corrupt
- When the primary hard drive is replaced in a computer

The installation and initial booting of the OS is called the operating system setup. Although it is possible to install an OS over a network from a server or from a local hard drive, the most common installation method for a home or small business is with CDs or DVDs. To install an OS from a CD or DVD, first configure the BIOS setup to boot the system from the CD or DVD.

Structure of a Hard Drive

The diagram illustrates the physical structure of a hard drive. It shows a stack of platters (disks) with a central spindle and motor. The platters are divided into concentric tracks, which are further divided into sectors. The diagram also shows the intersector gap and intertrack gap. A data organization diagram shows a header, data, and trailer. Other components labeled include Synchronization Information and Error Correcting Code (ECC).

Why promote / recommend

- Content is well written, with multimedia

Chapter 8: Mobile Devices

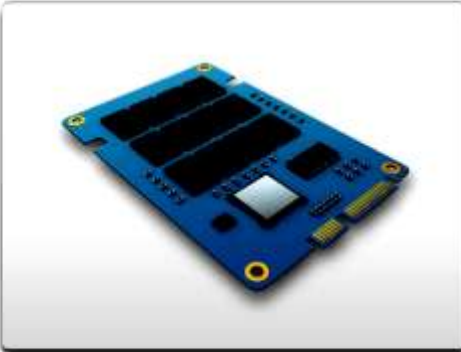
Mobile Device Hardware Overview

Mobile Device Hardware

Mobile devices use the same components found in SSDs to store data. To reduce the size requirements, there is no case surrounding the components. The circuit board, flash memory chips, and memory controller in SSDs are installed directly inside the mobile device. These are some of the advantages of using flash memory storage in mobile devices:

- **Power efficiency** - Flash memory requires very little power to store and retrieve data. This reduces the frequency with which mobile devices need to be recharged.
- **Reliability** - Flash memory can withstand high levels of shock and vibration without failing. Flash memory is also highly resistant to heat and cold.

SSD Board



Why promote / recommend

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Chapter 10: Security

Security Threats

Types of Security Threats

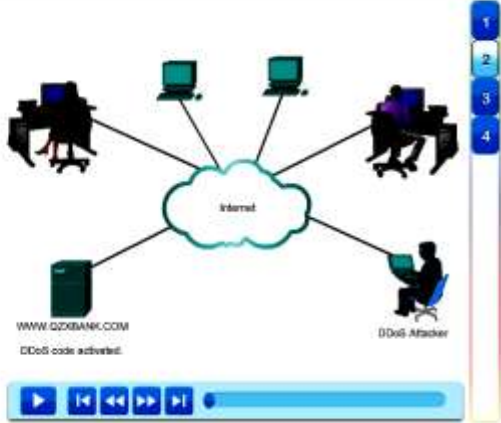
TCP/IP is the protocol suite that controls communications on the Internet. Unfortunately, some features of TCP/IP can be manipulated, resulting in network vulnerabilities.

Denial of Service

DoS is a form of attack that prevents users from accessing normal services, such as email or a web server, because the system is busy responding to abnormally large amounts of requests. DoS works by sending so many requests for a system resource that the requested service is overloaded and ceases to operate, as shown in Figure 1.

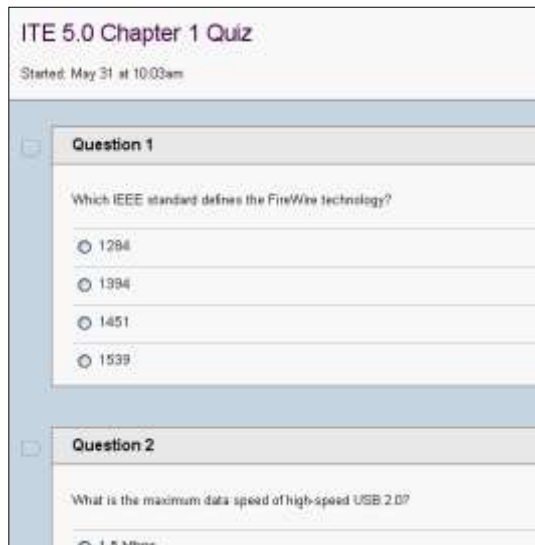
Distributed DoS

A DDoS attack uses many infected computers, called zombies or botnets, to launch an attack. The intent is to overwhelm...



Why promote / recommend

- With Assessments & Gradebook



Why promote / recommend

- With Assessments & Gradebook

Home > JS-EDB-2013-ITE > Gradebook Go back to the old gradebook					
⚙️ <input type="text" value="Filter by student name or secondary ID"/>					
Student Name	Secondary ID	Chapter 1 Exam	ITE 5.0 Chapter 2 Exam	ITE 5.0 Chapter 3 Exam	ITE 5.0 Chapter 4 Exam
		100	Out of 100	Out of 100	Out of 100

Why promote / recommend

