

ACCA4024					
Week	Netacad	Unit(s) Covered	Labs/ Assessments	In-Class Activity (IcA)	Homework (HW)
Week 1 (28-09-20)	Chap 1 & 2	Network Essentials: Introduction to Networks, Network Types, Components and its Applications	Lab 1: Design and Connect a Simple Network and determine IP Address configuration (Use 1 Switch, 2 PCs, 1 Router/ Wireless Router (Optional)) (Packet Tracer)	IcA 1: Identify and Draw the Network Topology of your Home/ Lab (Writing/ Paper work) (Estimated Time: 15 Mins)	HW 1: Complete Introduction to Packet Tracer Course from Netacad.com and submit your Completion Certificate.
Week 2 (05-10-20)	Chap 3	Network Essentials: Principles of Communications, Network Models and Protocols, Ethernet Frames, Local Networks, Routing across Networks.	Lab 2: Design a Simple Network with 2 PC's connected to a Switch and determine the MAC address of the host, view and work with Network connections, configure IPv4 settings. Capture and Analyse ARP data using Wireshark (Optional) (Use 1 Switch, 2 PCs, 1 Router/ Wireless Router) (Packet Tracer)	IcA 2: Establing Communication between devices (Classroom Activity) (Estimated Time: 15 Mins)	HW 2: Your Online Activity Analysis
Week 3 (12-10-20)	Chap 4 & 5	Network Essentials: IPv4 Addressing, IPv6 Addressing, Client Servers, Internet Protocols, Application Protocols.	Lab 3: Observe the conversion of a URL to an IP address and DNS lookup using the nslookup command. (Real Devices - 1 PC with Internet) (Optional)	IcA 3: Understand Binary Conversion using Windows Calculator (Classroom Activity) (Estimated Time: 30 Mins)	HW 3: Draw the Pin type of Ethernet Crossover Cable and Explain in your own words
Week 4 (19-10-20)	Chap 6, 8 & 9	Network Essentials: Building Home Network, Wifi, Wireless Networks, Security in Home Networks, Lan Devices and Internetworking Devices, Working with Cisco Routers and Switches, Troubleshooting and fixing network connectivity problems	Lab 4: Setup a Simple Nework with 2 PC's, Switch and a Router, Configure router and switch using console session and troubleshoot if necessary. (Packet Tracer)	IcA 4: Connecting your Mobile WiFi (Classroom Activity) (Estimated Time: 15 Mins)	TIME TO COMPLETE AND SUBMIT HW1 TO 3
Week 5 (26-10-20)	Chap 7, CE: 1	Blending Network and Cyber Essentials: Network Security, Protecting the Network, Cyber Security, Understand Network and Cyber Security.	Lab 5: Setup a Simple Nework with 2 PC's, Switch and a Router, Configure Firewall settings as required. (Real Devices/ Packet Tracer - 2 PC's, Switch, Router)	-	HW 4: Application Security Analysis
Week 6 (02-11-20)	CE: 2	Cyber Essentials: Cyber Security Cube, CIA Triad, Countermeasures and Security Management Framework	Lab 6: Install Virtual Machine. (Real Devices - 1 PC) Lab 7: Authentication, Authorization, and Accounting (Real Devices - 1 PC with Ubuntu 16.0.4 LTS installed in a VirtualBox or VMware virtual machine)	COMPONENT 2 (Class Test) - Compulsory 1 Hour @ 10.00 AM	HW 5: Packet Tracer Activity - Creating a Cyber World and Communicating in a Cyber World
Week 7 (09-11-20)	CE: 3	Cyber Essentials: Cyber Threats, Vulnerabilities and Attacks	Lab 8: Detecting Threats and Vulnerabilities. (Real Devices - 1 PC with Ubuntu 16.0.4 LTS installed in a VirtualBox or VMware virtual machine)	-	HW 6: Packet Tracer Activity - WEP WPA2 PSK WPA2 RADIUS
Week 8 (16-11-20)	CE: 4, 5	Cyber Essentials: Cryptography, Access Control, Obscuring Data, Data Integrity, Digital Signatures.	Lab 9: Using Steganography. Lab 10: Password Cracking. (Real Devices - 1 PC with Ubuntu 16.0.4 LTS installed in a VirtualBox or VMware virtual machine)	-	TIME TO COMPLETE AND SUBMIT HW4 TO 6
Week 9 (23-11-20)	CE: 5, 6	Cyber Essentials: Availability, Incident Response and Disaster Recovery.	Lab 11: Using Digital Signatures. (Real Devices - PC or mobile device with Internet access)	-	HW 7: Cyber security Attacks
Week 10 (30-11-20)	CE: 7	Cyber Essentials: Defending Systems, Server Hardening, Network Hardening, Physical Security	Lab 12: Remote Access. (Real Devices - 1 PC with Ubuntu 16.0.4 LTS installed in a VirtualBox or VMware virtual machine)	-	HW 8: Scope for Cyber Security in the Industry
Week 11 (07-12-20)	CE: 8	Cyber Essentials: Cyber Security Domains, Ethics	Lab 13: Hardening a Linux System. (Real Devices - 1 PC with Ubuntu 16.0.4 LTS installed in a VirtualBox or VMware virtual machine)	-	TIME TO COMPLETE AND SUBMIT HW7 AND 8

Total Chapters	17
Total Labs	13
Total In-Class-Work	4
Total Home Work	8
Assessments	
Component 1 (Portfolio 2000 Words)	Coursework
Component 2 (Class Test)	MCQ
References: Netacad	Networking Essentials
	Cyber Security Essentials
Additional Course Completion	Introduction to Packet Tracer (Compulsory) 10 Hours
	Networking Essentials (Optional) 70 Hours
	Cyber Security Essentials (Optional) 30 Hours