Course:	Tutor:
Number of students:	Days :
	Time:
Start Date:	Course Group :
End Date:	•

TIME TABLE and SCHEME OF WORK

WK#	Date	Monday Day1	Tuesday Day2	Wednesday Day 3	Online Exam/ Activities to be Completed
		Induction (Welcome to ELA Introduction to Course Stru Introduction to Policies Network Structure, working	2	& Soft Skills	Soft Skills ILP Learning Style Skills Exercise
		Introduction to Personal Computers 1.1 – 1.8	Introduction to Personal Computers 1.9 – 1.10 2A. Safe Lab Procedure and Tool Use 2.1 – 2.3	Lab Session: Using Multi-meter, Disassembling PC, Implement proper tool use	Cisco Ch 1 & 2 Lab Sheets
		Group Activity of Assembling a PC	3 A. Computer Assembly Step -by-Step 3.1 – 3.7 Virtual PC Desktop	Electricity Log Call Log Lab 3	Chapter 3 Lab sheets
		4.A Basics of Preventive Maintenance and Trouble shooting 4.1 – 4.5	5A. Operating Systems 5.1 – 5.4	Review of Chapters 1- 4 5A. Operating Systems 5.5 – 5.6	Chapter 4 Lab sheets

WK#	Date	Monday Day1	Tuesday Day2	Wednesday Day 3	Online Exam/ Activities to be Completed
		6A. Laptops and Portable Devices 6.1 – 6.7	Mail Merge in Word Outlook Configuration	Group Activity for Disassembling Laptop	Chapter 5 Lab sheets
		7 A. Printers and Scanners 7.1 – 7.4	7 A. Printers and Scanners 7.5 – 7.6	Mock exam	Chapter 6 Lab sheets
		Review of Chapters 5- 7	Exam	Progress Review CV Writing	Chapter 7 Lab sheets
		8. Networks 8.1 – 8.3	8. Networks 8.7 – 8.10	Lab Sessions for Chapter 8	none
		Bank Holiday	9. Security 9.1 – 9.4	Group Activity for Researching Security Threats	Chapter 8 Lab sheets
		10. Communication Skills 10.1 – 10.4	Part 2 : 11 Advanced Personal Computers 11.1 - 11.4	Recap of Network and Security Group Activity for Network Configuration (Trip to Server Room and ELATT Network setup)	Chapter 9 Lab sheets
		12. Operating Systems 12.1 – 12.4	12. Operating Systems 12.5 – 12. 6	Group Activity for Network & OS Configuration	Chapter 10 Chapter 1-10 Lab sheets

WK#	Date	Monday Day1	Tuesday Day2	Wednesday Day 3	Online Exam/ Activities to be Completed
		Mock exam	Exam	451 Preparation Practice Literacy and Numeracy Assessment	Chapter 11 Lab sheets
		13. Laptops and Portable Devices 13.1 – 13.4	14. Printers and Scanners 14.1 – 14. 4	Group Activity for Printer Set Up	Chapter 12 Lab sheets
		15. Advanced Networks 15.1 – 15.3	15. More on Networks 15.4 – 15.6	Group Discussion on Different OS & Networks	Chapter 13 Lab sheets
		15. Advanced Networks 15.7 – 15.8	Recap on Networks	Day Out (Excursion to a company TBC)	Chapter 14 Lab sheets
		Computer Building Challenge	Mock	Computer Building Challenge	Chapter 15 Lab sheets
		Exam	Preparation		Chapter 16 Chapter 1-16 Lab sheets
		16. IT Security 16.1 – 16.5	Mock	Exam	Practice 1-10 Practice 1-16
		Course rap up week Achievement Reviews	Mock interviews sessions	Feedback Skills –based exam Hurray! Exit Review and Its all Over	Final 1-10 Final 1-16

General Resources: Projector, Workstations, White Board & Marker, Flip Charts

CHAPTERS	MODULE	OBJECTIVES / CONTENT	RESOURCES / ACTIVITIES / ASSESSMENT	SKILL FOR LIFE/ COURSE REF.
0	Induction Week	Induction to ELATT • H&S • Equal Opportunity • Code of Conduct	Induction Ppt, ILP and LA Soft Skills Questionnaire Access to Learning Styles Site	
1	1 PC Fundamentals	Introduction to the Personal Computer: 1 .1 Explain IT industry certifications 1 .2 Describe a computer system 1 .3 Identify the names, purposes, and characteristics of cases and power supplies 1 .4 -1.7 Identify the names, purposes, and characteristics of input devices, output devices and internal components such as Motherboards, processor, cooling systems, ROM and RAM, adapter cards, storage drives, internal cables, ports and cables 1 .8 Explain system resources and their purpose, IRQ , I/ O Address, and DMA 1.9 Explain binary Number System and relate it to computer speed, RAM etc. 1.10 General Desktop properties • Taking Screen Shot • View System Properties	Chapter 1 Presentation, Chapter 1 Handouts Lab Worksheets: Job_Hunt Research_Computer_Components Individual Computer components Motherboard, Power supply, Adapter card, Processor, Heat Sink, Processor Fan, NIC to show to the learners Additional Handout on 1.8 and motherboard diagrams Chapter 1 Online Exam	MSS1/L1.7 (convert units of measurement in the same system) N1/L2.2 (carryout calculations with numbers of any size using efficient methods) SLc/L1.3 (express clearly statement of fact, explanations, instructions, accounts and
2	2. Safe Lab Procedure and Tool Use	2 .1 Explain the purpose of safe working conditions and procedures: potential hazards, procedures to protect equipment	Chapter 2 Presentation, Literacy session- Health and	descriptions) SLc/L1.3

CHAPTERS	MODULE	OBJECTIVES / CONTENT	RESOURCES / ACTIVITIES / ASSESSMENT	SKILL FOR LIFE/ COURSE REF.
		from damage and data from loss and to protect the environment from contamination	safety presentation worksheet and discussion.	
		2.2 Identify tools and software used with personal computer components and their purposes	Chapter 2 Handouts	
		2.3 Implement proper tool use	Lab Worksheets:	
			Diagnostic_softwareComplete_disassembly	
			PC Lab. Tools e.g. Wrist straps, screw drivers, tool kit, Multi meter etc.	
			Chapter 2 Online Exam	
3	3 Computer Assembly Step	3 .1 Open the case3 .2 Install the power supply	Chapter 3 Presentation,	SLc/L1.3
	-by-Step	3 .3 Attach the components to the motherboard and install the motherboard	Chapter 3 Handouts	Wt/L1.3 (present
		Install a CPU and a heat sink / fan assembly, RAM, motherboard 3.4 Install other components	Virtual Desktop & Laptop Assembly Software	information in a logical sequence,
		internal drives, external bays, optical drive, the floppy drive, adapter cards, NIC, video adapter	Lab Worksheets:	using paragraphs
		card, internal cables, 3.5 Connect the power cables, the data cables 3.6 Close the panel and connect external cables 3.7 Boot computer for the first time Identify beep codes and Describe BIOS setup	 IG_Install Power Supply Install_Motherboard Install Drives Install_Adapter_Cards Install_Internal_Cables Complete_Assembly Boot_the_Computer 	where appropriate) Wt/L1.1 (plan and draft writing)
			Workstations for Disassembly PC hardware components PC Lab. Tools e.g. Wrist straps,	

CHAPTERS	MODULE 4. Basics of Preventive Maintenance and Trouble- shooting	OBJECTIVES / CONTENT 4.1 Explain the purpose of preventive maintenance 4.2 Identify the steps of the troubleshooting process 4.3 Purpose of data protection 4.4 Creating Macro's in Word Application 4.5 Running Applications like Disk Clean up and Disk Defragmenter etc	RESOURCES / ACTIVITIES / ASSESSMENTscrew drivers etc.Electricity LogLiteracy session- write step- by- step computer assembly process. Understanding difficult words strategies.Chapter 3 Online ExamChapter 4 Presentation, Chapter 4 HandoutsVirtual PC with Virtual Machine to access administrative tools.Literacy session- Call LogTroubleshooting LogHandout on how to Create	SKILL FOR LIFE/ COURSE REF. SLc/L1.3 Wt/L1.3
5	5. Operating	5 .1 Explain the purpose of an operating	Macro's	
	Systems	 system Describe the characteristics of modern operating systems and their concepts 5 .2 Describe and compare operating systems to include purpose, limitations, and 	Chapter 5 Presentation, <u>Chapter 5 Handouts</u> Literacy- reading- Understanding how writers achieve their purpose. Using adverts, make	SLc/L1.3
		 Desktop OS, Network OS, Logon Scripts 	comparisons of operating systems whilst identifying language used to achieve purpose; writing-	

CHAPTERS	MODULE	OBJECTIVES / CONTENT	RESOURCES / ACTIVITIES / ASSESSMENT	SKILL FOR LIFE/ COURSE REF.
CHAPTERS	MODULE	 OBJECTIVES / CONTENT 5 .3 Determine operating system based on customer needs such as applications and environments that are compatible with an OS minimum hardware requirements and compatibility with the OS platform 5 .4 Install an operating system hard drive setup procedures Prepare hard drive Create accounts Describe custom installation option Boot sequence files and Registry files Manipulate operating system files 5 .5 Navigate a GU I (Windows) Manipulate item s on the desk top Explore control panel applets 		
			Additional Notes on Operating Systems, Logon Scripts	
		 5 .6 Identify and apply common preventive maintenance techniques for operating system s Create a preventive maintenance plan Schedule a task Backup the hard drive Troubleshoot operating systems Review the troubleshooting process Identify common problems and solutions 	Literacy- creating a preventative maintenance plan & identify common problems and solutions. Understanding descriptive texts.	Wt/L1.3

CHAPTERS	MODULE	OBJECTIVES / CONTENT	RESOURCES / ACTIVITIES / ASSESSMENT	SKILL FOR LIFE/ COURSE REF.
6	6. Laptops and Portable	6.1 Describe laptops and other portable devices such as PDAs and Smart phones	Chapter 6 Presentation,	SLc/L1.3
	Devices	6.2 Identify and describe the components of a laptop6.3 Compare and contrast desktop and laptop	Chapter 6 Handouts Literacy- student presentations- comparing and contrasting	
		components including motherboards, processors, power management, expansion capabilities	components of desktops and laptops.	
		6.4 Explain how to configure laptops Power settings, safe installation and removal of laptop components	Lab Worksheets: • Research Laptop_SmartPhone_PDA	
		6.5 Define the different mobile phone standards6.6 Identify common preventive maintenance	 Complete_Docking_Stations Answer_Laptop_expansion Match_ACPI_Standards 	
		techniques for laptops and portable devices, cleaning procedures optimal operating environments	Research_Laptop_Problems Laptop for Demonstration	
		6.7 Describe how to troubleshoot laptops and portable devices	Literacy- writing- how to trouble shoot laptops and portable devices.	
			Chapter 6 Online Exam	
7	7. Printers and Scanners	7 .1 Describe the types of printers currently available	Chapter 7 Presentation,	SLc/L1.3
		Characteristics and capabilities of printers, printer- to-computer interfaces	Chapter 7 Handouts	
		Describe laser printers, impact printers, inkjet printers, solid ink printers etc	Virtual Printer Assembly Software	

CHAPTERS	MODULE	OBJECTIVES / CONTENT	RESOURCES / ACTIVITIES / ASSESSMENT	SKILL FOR LIFE/ COURSE REF.
		 7 .2 Describe the installation and configuration process for printers Describe how to set up a printer Explain how to power and connect a device using local or network port Describe how to install and update a device driver, firm ware, and RAM Identify configuration options and default settings Explain how to optimise printer performance Describe how to print a test page Describe how to share a printer 7 .3 Describe the types of scanners currently available Describe scanner types, resolution, and interfaces Describe all-in-one devices, flatbed scanners, handheld scanners, drum scanners 7 .4 Describe the installation and configuration process for scanners Powering and connecting a scanner Installing and updating the device driver Configuration options and default settings 7 .5 Identify and apply common preventive maintenance techniques for printers and scanners 7 .6 Troubleshoot printers and scanners 	Lab Worksheets: Install_AllinOne Networked Workstations and Printer & Scanner Chapter 7 Online Exam Literacy- reading to identify the purpose of a text.	
8	8. Networks	 8 .1 Explain the principles of networking Define computer networks, Benefits of networks Types of networks - L AN, WAN, WLAN, Peer-to- peer networks, client/ server networks 	Chapter 8 Presentation, Literacy- reading to understand main points in a text.	SLc/L1.3

CHAPTERS	MODULE	OBJECTIVES / CONTENT	RESOURCES / ACTIVITIES / ASSESSMENT	SKILL FOR LIFE/ COURSE REF.
		 8 .2 Describe basic networking concepts and technologies, bandwidth and data transmission Describe IP addressing Define DHCP Describe Internet protocols and applications Define ICMP 8 .3 Describe the physical components of a network Identify names, purposes, and characteristics of network devices and network cables 8.4 Describe L AN topologies and architectures 8.5 Identify standards organisations 8.6 Identify Ethernet standards wireless Ethernet standards wireless Ethernet or SI and TCP/ IP Data Models 8.8 Configure and Installing NIC and a modem 8.9 Describe the installation of a modem 	Chapter 8 Handouts Lab Worksheets: Answer_Broadband_Qs Diagnose_Network_Problem IP_Address_Classes IP_Address_Classes2 NIC_Driver_Search NIC_Driver_Search2 Lab_Config_NIC_DHCP 3 Workstations Network hardware components e.g. Hub, cables, router, switch etc Create Peer to Peer Network And Create Client Server Network Additional Handout on IP Addressing and subnetting Chapter 8 Online Exam	
		 8.10 Identify names, purposes, and characteristics of other technologies used to establish connectivity Telephone technologies Define power line communication Define Broadband, VoIP Troubleshoot a network 	Literacy- understanding the features of different texts- using ads, memos, emails, articles and letters to identify names, purposes and characteristics of other technologies used to establish connectivity.	

CHAPTERS	MODULE	OBJECTIVES / CONTENT	RESOURCES / ACTIVITIES / ASSESSMENT	SKILL FOR LIFE/ COURSE REF.
9	9. Security	 9 .1 Explain why security is important 9 .2 Describe security threats Define viruses, worm s, and Trojans Define adware, spyware, and grayware Explain Denial of Service Describe spam and popup windows Explain social engineering Explain TCP/ IP attacks Explain hardware deconstruction and recycling 9 .3 Identify security procedures Explain what is required in a basic local security policy Describe wireless security techniques 9.4 Identify common preventive maintenance techniques for security Installing and Updating signature files for anti-virus and anti-spyware software 	Chapter 9 Presentation, <u>Chapter 9 Handouts</u> Literacy- understanding tables with words and symbols- using a table of symbols recognise security threats. Lab Worksheets: • Security_Attacks • ThirdPartyAVSoftware • OS_Software_Updates • RT_Gather_Info Workstations with Internet access Hardware components Chapter 9 Online Exam	SLc/L1.3 Wt/L1.3
10	10. Communicatio n Skills	 10.1 Explain the relationship between communication and troubleshooting 10.2 Describe good communication skills and professional behaviour Determine the computer problem of the customer Display professional behaviour with the customer Focus the customer on the problem during the call Use proper netiquette Implement time and stress management techniques Observe Service Level Agreements (SL As) Follow business policies 	Chapter 10 Presentation, <u>Chapter 10 Handouts</u> Literacy- understanding tables with words and numbers- using a database printout of call centre log, determine the relationship between communication and troubleshooting.	SLc/L1.3

CHAPTERS	MODULE	OBJECTIVES / CONTENT	RESOURCES / ACTIVITIES / ASSESSMENT	SKILL FOR LIFE/ COURSE REF.
		 10.3 Explain ethics and legal aspects of working with computer technology 10.4 Describe call centre environment and technician responsibilities Describe the call centre environment Describe level-one technician responsibilities Describe level-two technician responsibilities Provide overview of field, remote, and bench technician jobs 	Lab Worksheets:• TroubleshootingResources• ControltheCall• CustomerTypes• CustomerPrivacyChapter 10 Online Exam Literacy and soft skills- role- playing trouble shooting using correct netiquette (online) and speaking and listening (on phone).Employability skills incorporating literacy- CV's and Covering letters- Spelling, grammar, subject- verb 	

CHAPTERS M	MODULE	OBJECTIVES / CONTENT	RESOURCES / ACTIVITIES / ASSESSMENT	SKILL FOR LIFE/ COURSE REF.
Pers	vanced sonal nputers	 Review of Chapter 1-10 11.1 Explain safe lab procedure and tool use Review safe working environment and procedures Review names, purposes, characteristics, and safe and appropriate use of tools Identify potential safety hazards and implement proper safety procedures for computer components Describe environmental issues 11.2 Describe situations requiring replacement of computer components 11.3 Upgrade and configure personal computer components and peripherals (case and power supply, motherboard, the CPU and heat sink / fan assembly, RAM, adapter cards, storage devices and hard drives, input and output devices) 11.4 Identify and apply common preventive maintenance techniques for personal computer components Clean internal components & case Inspect computer components and peripherals Troubleshoot computer components and peripherals Review the troubleshooting process Identify common problems and solutions Apply troubleshooting skills 	ASSESSMENT Literacy- understanding explanation texts. Chapter Handouts Lab Worksheets: Job_Opportunities Computer_Components Computer_Components Lab_Install_NIC Lab_Install_NIC Lab_Install_RAM Lab_BIOS_File_Search Lab_Install_Second_HDD RT_Repair Boot Problem Lab_Repair Boot Problem Chapter 1-10 Online Exam Chapter Online Exam	SLC/L1.3

CHAPTERS	MODULE	OBJECTIVES / CONTENT	RESOURCES / ACTIVITIES / ASSESSMENT	SKILL FOR LIFE/ COURSE REF.
12	Operating Systems	 12 .1 Select the appropriate operating system based on customer needs : Describe OS, Network OS, 12 .2 Install, configure, and optimise or upgrade an operating system Compare and contrast a default installation and a custom installation Install Windows XP Professional using a custom installation Create, view, and manage disks, directories, and files 12 .3 Identify procedures and utilities used to optimise the performance of operating systems Browsers 12.4 Set screen resolution and update video driver 12.5 Describe installation of a second operating system 12.6 Describe preventive maintenance procedures for operating systems Schedule automatic task s and updates Set restore points Troubleshoot operating systems Identify com m on problem s and solutions 	Chapter Presentation, Chapter Handouts <u>Lab Worksheets:</u> Advanced_XP_Install Create_and_Convert_Partition Lab_Virtual_Memory Lab_Alternate_Browser Lab_Scheduled_Task Lab_Fix_Operating_System RT_Fix_Operating_System Workstation and Windows Server 2008. Installation Chapter 12 Online Exam	SLc/L1.3
13	Laptops and Portable Devices	 13.1 Describe wireless communication methods for laptops and portable devices such as Bluetooth Technology, Infrared Technology, Cellular WAN Technology, Wi-Fi Technology, Satellite Technology 13.2 Describe repairs for laptops and portable devices 13.3 Select laptop components: batteries, a docking station or port replicator, storage devices, additional RAM 	Chapter Presentation, Chapter Handouts Lab Worksheets: Repair_Center Laptop_Batteries Wk_Docking_Station Wk_Research_DVD_Drives	SLc/L1.3

CHAPTERS	MODULE	OBJECTIVES / CONTENT	RESOURCES / ACTIVITIES / ASSESSMENT	SKILL FOR LIFE/ COURSE REF.
14	Printers and	 13 .4 Describe preventive maintenance procedures for laptops Schedule and perform maintenance for laptops Manage data version control between laptops and desk tops How to troubleshoot a laptop Identify common problems and solutions 	 Laptop_RAM Verify_Work_Order_Info Workstations Wireless router, workstation with wireless adapter and set up a wireless network. Setting a WEP key Literacy- write a preventative maintenance guide for a low computer- literate person- both in formal and informal language. Chapter Online Exam 	
	Scanners	 14.1 Describe potential safety frazards and safety procedures associated with printers and scanners 14.2 Install and configure a local printer and scanner Connect the device to a local port Install and configure the driver and software Configure options and default setting s Verify functionality 14.3 Describe how to share a printer and a scanner on a network Describe types of printer servers Describe how to install network printer software and drivers on a computer Upgrade and configure printers and scanners 14.4 Describe printer and scanner preventive maintenance techniques Determine scheduled maintenance according to vendor guidelines 	Chapter Presentation, Chapter Handouts Lab Worksheets: LAB_Install_Printer_Scanner Lab_Share_Printer_Scanner Lab_Optimize_Scanner_Output SH_Printer_Technician Lab_Fix_Printer Lab_RT_Fix_Printer Literacy- understanding argument texts and identifying points of view. Debating about manufacturing quality of printers and scanners these days vs consumer demand and consumer fault when they go wrong. (Speaking and listening)	

CHAPTERS	MODULE	OBJECTIVES / CONTENT	RESOURCES / ACTIVITIES / ASSESSMENT	SKILL FOR LIFE/ COURSE REF.
		 Describe a suitable environment for printers and scanners Describe cleaning methods Describe checking capacity of ink cartridges and toners Troubleshoot printers and scanners Identify common problems and solutions 	Chapter Online Exam	
15	Networks	 15.1 Identify potential safety hazards and implement proper safety procedures related to networks Fibre-optic safety Cable, cable cutters, and cable cutting safety hazards 	Chapter Presentation, Chapter Handouts	
		 15.2 Design a network based on the customer's needs. Determine a topology, protocols and network applications, the components for your customer's network, cable types, ISP connection type, network cards, network device. 15.3 Implement the customer's network 15.4 Upgrade the customer's network 15.5 Install and configure wireless NIC, wireless routers, 15.6 Describe preventive maintenance procedures for networks 15.7 Troubleshoot the network 15.8 Identify common problem s and solutions 	Literacy- writing to persuade, grammar, punctuation, spelling. Lab Worksheets: Wk_Protocols Wk_ISP_Connections Lab_Config_Browser_Settings Lab_Sharing Lab_Install_Wireless_NIC Lab_Configure_Wireless_Router Lab_Test_Wireless_NIC Lab_Test_Wireless_NIC Lab_Fix_Network_Problem Lab_RT_Fix_Network_Problem Example Network Diagram Chapter 15 Online Exam	

16 Security 16.1 Outline security requirements based on customer needs: local security pardware Chapter Presentation, 16 Security Explain when and how to use security pardware Chapter Presentation, 16.2 Select security components based on customer needs: Describe and compare security techniques, access control devices, firewall types Chapter Presentation, 16.3 Implement customer's security policy Wk_Security_Policy 16.3 Implement customer's security policy Wk_Research_Firewalls 16.4 Perform preventive maintenance on security Describe protection against malicious software 16.4 Perform preventive maintenance on security Describe the configuration of operating system updates Maintain accounts Explain data backup procedures, access to back ups, and secure physical backup material 16.5 Troubleshoot security: Identify common problems and solutions Identify common	CHAPTERS	MODULE	OBJECTIVES / CONTENT	RESOURCES / ACTIVITIES / ASSESSMENT	SKILL FOR LIFE/ COURSE REF.
	16	Security	 customer needs: local security policy Explain when and how to use security hardware Explain when and how to use security application software 16.2 Select security components based on customer needs: Describe and compare security techniques, access control devices, firewall types 16.3 Implement customer' s security policy Configure security settings Describe configuring firewall types 16.4 Perform preventive maintenance on security Describe the configuration of operating system updates Maintain accounts Explain data backup procedures, access to back ups, and secure physical backup material 16.5 Troubleshoot security: Identify common 	Chapter Handouts Lab Worksheets: • Wk_Security_Policy • Wk_Research_Firewalls • Lab_Config_Windows • Lab_Fix_Security_Problem • Lab_Fix_Security_Problem	