Cambridge Technical Level 3 IT & Cyber Security– Scheme of Learning

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LONG-TERM OVERVIEW

YEAR 12			YEAR 13		
Term	Topics	Assessment	Term	Topics	Assessment
1	● **Unit 1 Fundamentals of IT - External Examination** ● LO1 Computer Hardware ● LO1 Computer Components ● LO1 Computer Systems ● LO1 Connectivity Methods ● LO1 Communication Hardware ● LO1 Hardware Troubleshooting ● LO1 Units of Measurements ● LO1 Number Systems ● LO1 Number Conversion **Exam Prep & Consolidation** **Exam Prep; Past Paper Questions** ● LO2 Types of software ● LO2 Application software ● LO2 Utility Software ● LO2 Operating Systems ● LO2 Communication Methods ● LO2 Software Troubleshooting ● LO2 Protocols **Exam Prep & consolidation** **Exam Prep; Past Paper Questions**	● Completed SLRs 1.1 - 1. & 2.1-2.6 to form the basis for assessment ● SLR 1 - 2 exam questions	1	● **Unit 3 continued …** ● LO3 Cyber Security risk management ● LO3 Testing and monitoring measures ● LO3 Cyber Security controls **Exam Prep & Consolidation** **Exam Prep; Past Paper Questions** ● LO4 Responding to an incident ● LO4 Cyber Security incident report **Exam Prep & Consolidation** **Exam Prep; Past Paper Questions** ● **Unit 4 Computer Networks - Internal assessment** ● LO1 Network interfaces ● LO1 Network Types ● LO1 Network components ● LO1 Network Topologies ● LO1 Network Protocols ● LO1 Networking models ● LO1 IP Versions ● LO1 Network addressing ● LO1 Network data units ● LO1 Network security ● LO1 Network virtualisation ● LO2 Network configuration ● LO2 Network services ● LO2 IP Configuration ● LO2 Testing Tools ● LO2 Network Specification ● LO2 Network Plan	● Completed SLRs 3 - 4 to form the basis for assessment ● SLR 3, & 4 exam questions ● Completed research activities for LO1 & LO2
2	● LO3 Types of servers ● LO3 Virtualisation ● LO3 Network Characteristics ● LO3 Connectivity Methods ● LO3 Business Systems	● Completed SLRs 3, 4, & 5 to form the basis for assessment ● Exam questions	2	● LO3 Solution Proposal ● LO3 Performance benchmarking tools ● LO4 Maintenance plan ● LO4 Maintenance issues ● LO4 Troubleshooting ● LO4 Disaster recovery	● Completed assignment work for 1-2 to form the basis for assessment & moderation ● Completed research tasks for LO3 & LO4

	Exam Prep & Consolidation **Exam Prep; Past Paper Questions**L ● LO4 Communication Skills ● LO4 Communication Technology ● LO4 Personal Attributes ● LO4 Ready for Work ● LO4 Job Roles ● LO4 Professional Bodies & Industry Certification **Exam Prep & Consolidation** **Exam Prep; Past Paper Questions** ● LO5 Ethical Issues ● LO5 Operational issues ● LO5 Threats ● LO5 Physical Security ● LO5 Digital Security ● LO5 Safe Disposal of Data & Computing Equipment **Exam Prep & Consolidation** **Exam Prep; Past Paper Questions** **Exam Prep; Past Exam Papers** ● **Unit 1 Exam- Jan series First attempt-1hr 30mins**			● LO4 Software/hardware updates ● Performance Management **Exam Prep; Past Exam Papers** **Exam Prep;Units 2 & 3- Read the Exam Scenario** **Exam Prep; Units 2 & 3- Link theory to Exam Scenario** **Unit 1 Exam - Jan series second attempt- 1hr 30min** **Unit 2 Exam - Jan series second attempt - 1hr 30 min** **Unit 3 Exam - Jan series first attempt - 1 hr**	● Completed assignment work for LO3 & LO4 to form the basis for assessment & moderation
3	● **Unit 2 Global Information** ● LO1 Holders of information ● LO1 Types of information storage media ● LO1 Types of information access storage ● LO1 The Internet ● LO1 Types of WWW Technology ● LO1 WWW information formats ● LO1 Accessibility of WWW ● LO1 WWW Advantages and Disadvantages ● LO1 Comparisons of technologies **Exam Prep & Consolidation** **Exam Prep; Past Paper Questions** ● LO2 Information Styles and their uses ● LO2 Information Classifications ● LO2 Information Management ● LO2 Quality of Information ● LO2 Information Management **Exam Prep & Consolidation** **Exam Prep; Past Paper Questions** ● LO3 Data v Information ● LO3 Categories of Information used by Individuals ● LO3 Categories of Information used by Organisations ● LO3 Stages of Data Analysis	● Completed SLRs 1-3 to form the basis for assessment ● SLR 1-3 exam questions	3	● **Unit 18 Computer Systems - Hardware** ● LO1 Computer hardware components ● LO1 Storage ● LO2 Understanding business requirements ● LO2 Design considerations ● LO2 Backup storage recommendations ● LO2 Load balancing ● LO2 Methods of presentation of proposal	● Completed research tasks for LO1 & LO2 ● Completed assignment work for 1-2 to form the basis for assessment & moderation

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	● LO3 Data Analysis Tools ● LO3 Information System Structure **Exam prep & Consolidation** **Exam Prep; Past Paper Questions**					
4	● LO4 UK Legislation and Regulations to the storage and use of information ● LO4 Consolidation of Legislation and Regulations within the UK ● LO4 Accessibility Legislation ● LO4 Global Information and Protection ● LO4 Green IT ● LO5 Information Sources and Data Types ● LO5 Data Flow Diagrams ● LO5 Impacts affecting the flow of information within IT systems ● LO6 Principles of information security ● LO6 Protection Measures and policies ● LO6 Physical protection measures	● Completed SLRs 4-6 to form the basis for assessment ● SLR 4-6 exam questions	4	● LO3 Health and safety considerations ● LO3 Configuration ● LO3 Preventative maintenance ● LO4 Test Plan ● LO4 Diagnostic software ● LO4 Benchmarking	● Completed research tasks for LO3 & LO4 ● Completed assignment work for 3-4 to form the basis for assessment & moderation
5	**Exam Prep and Consolidation** **Exam Prep; Read the Exam Scenario** **Exam Prep; Link theory to Exam Scenario** **Unit 2 Exam- June series First attempt-1hr 30mins**		5	● Units 4 & 18 Final checks/tidy up and printing ● Internal Standardisation ● External Moderation **Exam Prep; Unit 3 Past Exam Papers** **Exam Prep;Unit 3- Read the Exam Scenario** **Exam Prep; Unit 3- Link theory to Exam Scenario** **Unit 3 Exam June series second attempt-1 hr**	External Moderation MAY/JUNE
6	● **Unit 3 Cyber Security** ● LO1 Cyber security aims to protect information, CIA triad. ● LO1 Types of Cyber Security incidents ● LO1 The importance of Cyber Security **Exam Prep and Consolidation** **Exam Prep; Past Paper Questions** ● LO2 Threats to Cyber Security ● LO2 Types of attackers ● LO2 Motivation for attackers ● LO2 Targets for Cyber Security threats ● LO2 Impacts of Cyber Security incidents ● LO2 Legislation and ethics of Cyber Security **Exam Prep & Consolidation** **Exam Prep; Past Paper Questions**	● Completed SLRs 1-2 to form the basis for assessment ● SLR 1 -2 exam questions			