

Subject Narrative

{Computer Science & iMedia}

	LC1	LC2	LC3	LC4	LC5
YEAR 7	<p>IT and Online Safety</p> <p>Wk 1: Knowing What to Trust Online</p> <p>Wk 2: How to Search Smart</p> <p>Wk 3: Copyrights and Copywrongs</p> <p>Wk 4: Staying Safe Online</p> <p>Wk 5: Cyber Abuse and how to Deal with it</p> <p>Assessment: Google Forms</p>	<p>Computer Systems Hardware and Software</p> <p>Wk 1: Computer hardware</p> <p>Wk 2: How it all works</p> <p>Wk 3: The CPU</p> <p>Wk 4: Understanding binary</p> <p>Wk 5 Storage devices and network connectivity</p> <p>Assessment: Google Forms</p>	<p>Graphics</p> <p>Wk 1: Selection Composition Digital Graphics</p> <p>Wk 2: Target Audience Influence</p> <p>Wk 3: Compression Resolution Dimension Quality</p> <p>Wk 4: File types, Vector Bitmap, Project</p> <p>Wk 5 Project</p> <p>Assessment: Google Forms</p>	<p>Project - Scratch</p> <p>Wk 1: Programming skills - movement</p> <p>Wk 2: Programming Skills - Scoring</p> <p>Wk 3: Programming and design - single and multi-level game</p> <p>Wk 4: Concept design - multi- level game</p> <p>Wk 5 Programming and design - final build</p> <p>Assessment: Game review</p>	<p>Intro to Python programming 1</p> <p>Wk 1: Sequence, Logic and Order</p> <p>Wk 2: Decomposition and Flowcharts</p> <p>Wk 2: Flowcharts Pseudocode</p> <p>Wk 3: Python -Introduction P2</p> <p>Wk 4: Python - Data Types and Arithmetic</p> <p>Wk 5 Python – Selection</p> <p>Assessment: Google Forms</p>

<p>YEAR 8</p>	<p>Data Representation</p> <p>Wk 1: Introduction to Data Representation Wk 2: Adding Binary Numbers Wk 3: ASCII Character Codes and Code Breaking Wk 4: Bitmaps and Cryptic Pictures Wk 5: Representing Sound With Binary Wk 6: Revision and Assessment</p> <p>Assessment: Google forms</p>	<p>Python Programming 2</p> <p>Wk1: Remembering inputs, outputs, variables, data types Wk2: Remembering IF statements Wk3: understanding While loops Wk4: Understanding For loops Wk5: Fitting the bits together... Wk6: Revision Assessment</p> <p>Assessment: Google forms</p>	<p>Mobile App development</p> <p>Wk1: App for that Wk2: Introduction to Tappy Tapp App Wk3: School Lab Studios - Finding errors Wk4: User input / App development Wk5: App Development Wk6: Project completion</p> <p>Assessment: Mobile app</p>	<p>From Clay to silicon</p> <p>Wk1: Across time and space Wk2: Lights and Drums - sending messages Wk3: Binary digits Wk4: Numbers in Binary Wk5: Large quantities - Storing data Wk6: Turing's Mug</p> <p>Assessment: Google forms</p>	<p>Project animation with blender</p> <p>Wk1: Move, rotate scale, and colour Wk2: Animation, timeline and parenting Wk3: Complex colours and models Wk4: Organic modelling Wk5: Lights, camera and render Wk6: Project</p> <p>Assessment: Project</p>
<p>YEAR 9 CS</p>	<p>Systems architecture of the CPU Unit 1.1</p> <p>Wk1: CPU and the Fetch Execute Cycle Wk2: Computer Systems and the Von Neumann Architecture Wk3: Understanding Program counter in the FEC and its characteristics Wk4: Performance of the CPU and Embedded systems Wk5: Examples of</p>	<p>Algorithms Unit 2.1</p> <p>Wk 1: Introduction to Algorithms Wk 2: Design creating and refining algorithms Wk 3: Design creating and refining algorithms Wk 4: Linear and binary searches Wk 5: Sort algorithms Wk6: Revision and Assessment</p>	<p>Data Representation Unit 1.2</p> <p>Wk1. RAM and ROM and its impact on performance, Virtual memory Wk2: Secondary Storage Wk3: Data conversion from Binary to Decimal Wk4: Image representation Wk5: How sound is stored, Data compression and file</p>	<p>Programming Unit 2.2</p> <p>Wk 1: Variables and operators Wk 2: Sequence and selection Wk 3: iteration and string manipulation Wk 4: File handling and records Wk 5: Sql and Arrays</p>	<p>Computer networks, connections and protocols Unit 1.3</p> <p>Wk1: Understanding LAN and WAN Wk2: Understanding components of LAN and Client server network/Peer to Peer Wk3: The Internet, and Topologies</p> <p>Network Security Unit 1.4</p>

	<p>Embedded systems and their uses</p> <p>Wk6: Revision and Assessment</p>		<p>types</p> <p>Wk6: Revision and Assessment</p>		<p>Wk 4: Network security and social engineering</p> <p>Wk 5: Network security</p> <p>Wk6: Revision and Assessment</p>
YEAR 10 CS	<p>System Software Unit 1.5</p> <p>Ethical, legal and environmental impacts of digital technology Unit 1.6</p> <p>Wk 1: functionality an Operating System Wk 2: o User management and</p> <p>Wk 3: Utility Software Wk 4: impacts and cultural issues of digital technology Wk 5: Privacy and Data Protection Act</p> <p>Wk6: Revision and Assessment</p>	<p>Boolean Logic Unit 2.4</p> <p>Programming Languages and integrated development environment 2.5</p> <p>Wk 1: Boolean Logic Wk 2: Truth Tables Wk 3: low-level and high-level languages. Wk 4: Compilers and Interpreters, Wk 5: Understanding IDE Tools</p> <p>Wk6: Revision and Assessment</p>	<p>Algorithms Unit 2.1</p> <p>Wk 1: Developing algorithms using pseudocode Wk 2: Developing algorithms using flow diagrams Wk 3: Interpret, correct or complete algorithms Wk 4: Design creating and refining algorithms Wk 5: Design creating and refining algorithms</p> <p>Wk6: Revision and Assessment</p>	<p>Producing Robust Programs Unit 2.3</p> <p>Wk 1: Defensive design considerations Wk 2: Input validation Wk 3: Sub programs Wk 4: Naming conventions/indentation Wk 5: Commenting</p> <p>Wk6: Revision and Assessment</p>	<p>Revision LC 5</p> <p>Week 1 – Revision of Unit 1.1 -1.2 Week 2 - Revision of Unit 1.3 – 1.4 Week 3 – Revision 1.5 – 1.6 Week 4 – Revision 2.1 – 2.2 Week 5 – Revision 2.3 – 2.5</p> <p>Week 6: -Assessment</p>

YEAR 11 CS	<p>Programming project - 2.2</p> <p>WK 1 - Wk 6 Project given OCR for students to compile a program using the programming language Python</p>	<p>Programming project 2.1</p> <p>WK 1 - Wk 6 Project given OCR for students to compile a program using the programming language Python</p>	<p>Revision Paper 1</p> <p>Revision</p> <p>Wk1 : Systems Architecture, Wk2: Systems Architecture, and data representation Wk3: Computer networks, connections, protocols and network security Wk4. System software and utility Wk5: Boolean logic Wk6: Ethical, legal and environmental impacts of digital technology:</p> <p>Assessment</p>	<p>Revision Paper 2</p> <p>Wk1: Algorithms, Wk2: Programming concepts Wk3: Producing robust programs Wk4: Boolean Logic Wk5: Programming languages and IDE Wk6: Assessment Paper 1 Wk 7: Assessment Paper 2</p>	Exam
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<p>YEAR 9 CIM</p>	<p>R097 Creating an Interactive Multimedia product (IMP)</p> <p>Wk1 - Wk3: Task 1 Review of existing IMP Wk4 - Wk6: Task 2 Planning the IMP</p> <p>Wk7: Submission of Task 1 and Task</p>	<p>R097 Creating an Interactive Multimedia product (IMP)</p> <p>Wk1-Wk3: Task3 Developing skills in a presentation software. Wk4-Wk6: Creating the IMP</p> <p>Wk7: Submission of Task 3</p>	<p>R097 Creating an Interactive Multimedia product (IMP)</p> <p>Wk1 - Wk3: Review and submission of of IMP</p> <p>R097-complete</p> <p>R094 – Visual Identity and Digital Digital Graphics</p> <p>Wk4 - Wk7: Task 1 Understanding the purposes and properties of Digital Graphics</p>	<p>R094 - Creating Digital Graphics</p> <p>Wk1 - Wk3: Task 2 Plan the creation Digital Graphics</p> <p>Wk4 - Wk7: Develop the skills of using Photoshop</p>	<p>R04 - Creating Digital Graphics</p> <p>Wk1 - Wk3: Create a Digital Graphic</p> <p>Wk4-Wk7: Review and Submit final Product</p> <p>Wk7: Submission of R082</p> <p>R094-complete</p> <p>R097 submission to Exam board</p>
<p>YEAR 10 CIM</p>	<p>R093 – Creative iMedia in the media industry</p> <p>Wk 1-3: Understand the purpose and content of pre-production Wk 4 - 5: :Plan pre-production</p> <p>Assessment : Mock exam</p>	<p>R093 – Creative iMedia in the media industry</p> <p>Wk 1: Plan pre-production Wk 2 - 3:Produce pre-production documents Wk 4 - 6: Review pre-production documents</p> <p>Assessment: Mock assessment</p>	<p>R085 - Web design</p> <p>Wk4 - Wk7: Task 1 Understanding the purposes and properties of Web sites</p>	<p>R085 - Web design</p> <p>Wk1 - Wk3: Task 2 Plan the creation Web pages</p> <p>Wk4 - Wk7: Develop the skills of using Dreamweaver</p>	<p>R085 - Web Design</p> <p>Wk1 - Wk3: Task 3 Create a website</p> <p>Wk4-Wk7: Create assets for a website</p> <p>R082- Submission to Exam board</p>

YEAR 11 CIM	R085 - Web Design Wk1 - Wk3: Task 3 Implementation of multimedia website Wk4-Wk7: Testing and improvements	R085 - Web Design Wk1 - Wk3: Task 4 Review and Submit final Product Wk4-Wk7: Submission of R085 to Exam board	Preparation for final submission of R085		
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Homework based on prior knowledge

Quizzes to keep topics in working memory

Mock exams include and LC test multiple choice