

Programme of Study, updated Dec' 2020

Computer Science and ICT

	Term 1	Term 2	Term 3
KS3 Y7	<ul style="list-style-type: none"> Introduction to ICT and best practice on Computers Touch Typing - Computer Literacy Skill Scratch programming - Game Design and Development <i>more in-depth project</i> 	<ul style="list-style-type: none"> Spreadsheets - Computer literacy and life skill 	<ul style="list-style-type: none"> <i>PhotoPea graphic project</i>
KS3 Y8	<ul style="list-style-type: none"> Python Programming - Game design and Story development 	<ul style="list-style-type: none"> Vector graphics unit; Understanding the uses of vector graphics, learning how to use software for vector graphics. Creating unique and personalized vector graphics to solve a brief. 	<ul style="list-style-type: none"> Web Design - layout skills and meeting a client brief
KS4 Y10 CS	<ul style="list-style-type: none"> Introduction to Python Coding. Data Representation - Binary, Hex, Denary, Converting, Compression, Images, Sound Algorithms - Flow charts, Pseudocode, searching, sorting, trace tables 	<ul style="list-style-type: none"> Algorithms - Flow charts, Pseudocode, searching, sorting, trace tables Computational Logic - logic Gates, Truth tables System Architecture - CPU, FDE cycle Memory - RAM and ROM, Virtual Memory Secondary Storage - Optical and Magnetic, Solid State, Characteristics 	<ul style="list-style-type: none"> Python Programming - Recap and preparation for summer. Wired and wireless networks - LAN and WAN, Connection to the internet, the Internet, Client-server and Peer - Peer Network Topologies - Protocols, Layers System Security - Threats, Preventions,
KS4 Y11 CS	<ul style="list-style-type: none"> Coursework Recap on last year work, Knowledge organisers, focus on areas that were not performed well in mocks. Ethical, legal, social, Environmental issues 	<ul style="list-style-type: none"> System Software -Operating systems, utility software Robust programming Translators and Facilities - Programming languages, translators, IDEs. Revision, Focus on Algorithms 	<ul style="list-style-type: none"> Revision, All topics, specified to target areas that majority of students struggle with.
KS4 Y10 ICT	<ul style="list-style-type: none"> Introduction - key course skills R082 - Graphical Image. Focus on teaching how to use photoshop while in school. (Lockdown) focus on Exam unit until OCR announce whether students allowed to complete work on coursework from home 	<ul style="list-style-type: none"> (Lockdown) focus on Exam unit until OCR announce whether students allowed to complete work on coursework from home 	<ul style="list-style-type: none"> (Lockdown) focus on Exam unit until OCR announce whether students allowed to complete work on coursework from home
KS4 Y11 ICT	<ul style="list-style-type: none"> R085 - Web design coursework 	<ul style="list-style-type: none"> R086 - Multimedia interactive coursework 	<ul style="list-style-type: none"> Recap for any students retaking exam Catchup on any students not completed course.