

Programme of Study

Computer Science and ICT

Gathered together, that all may thrive

	Term 1	Term 2	Term 3
KS3 Y7	 Introduction to ICT and best practice on Computers Touch Typing - Computer Literacy Skill Scratch programming - Game Design and Development in depth project 	 Completion of Scratch Game Spreadsheets - Computer literacy and life skill Publisher Unit - Focus on professional presentation skills 	Vector graphic project looking at logos and advertising design in real world context.
KS3 Y8	Python Programming - Game design and Story development	 Photoshop graphics unit. Learning key skills building from the Vector unit last year. Creating unique and personalized photoshop design to solve a brief that is linked to current topic of interest in the school. 	Web Design - layout skills, professional working environment and meeting a client brief
KS4 Y10 CS	 Introduction to Python Coding. Data Representation - Binary, Hex, Denary, Converting, Compression, Images, Sound Algorithms - Flow charts, Pseudocode, searching, sorting, trace tables 	 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 	 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	 Practice Coursework to help practice Programming and algorithms. Recap on last year work, Knowledge organisers, focus on areas that were not performed well in mocks. Ethical, legal, social, Environmental issues 	 System Software -Operating systems, utility software Robust programming Translators and Facilities - Programming languages, translators, IDEs. Revision, Focus on Algorithms 	Revision, All topics, specified to target areas that majority of students struggle with.
KS4 Y10 ICT	 Introduction - key course skills R081 exam unit topics covered in class Introduction to Photopshop starting to build skills in the software. 	 Focus on work structure for R082(graphics) coursework, how to complete what the coursework is asking Introduced to actual set scenario for the coursework focusing on First 3 tasks 	 Completion of R082 task 4 and any catchup required from last term. Focus on R081 exam unit, looking at theory and exam technique ready for exam in June. Introduction to website unit.
KS4 Y11 ICT	 R085 - Web design coursework Start focus learning on how to complete coursework reminder on how to use software Brief delivered to students first 3 tasks to by completed by Christmas. Exam Practice to be sat in January 	 January Exam(1st attempt for this year group) Completion of R085 website coursework. R082 review and recap focus on completing sections that had been disrupted last year 	 Recap for any students retaking exam Catchup on any students not completed course.