

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 7	<p>Online safety</p> <p>Online Safety introduces our year 7s to knowledge that protects them from harm by the devices, networks and the people using this technology (third parties) through awareness, education, information and technology. Year 7s will be introduced to cyber bullying via messaging, Peer pressure and cyberbullying, Consensual and non-consensual sharing of nude and semi-nude images, Grooming and blackmail and the impact of social media on our self-esteem.</p>	<p>Online safety</p> <p>Year 7s will be introduced to the topics of sexual harassment, Digital footprint & PEGI, be made aware of their "Screen time", County lines and Child criminal exploitation and Radicalisation.</p>	<p>Scratch coding</p> <p>Fundamentals of coding including computational thinking, sequence, selection and iteration and basic movements.</p>	<p>Scratch coding</p> <p>Inputs and variables, creation of small programs.</p>	<p>Microsoft Word and Google apps</p> <p>introduction and use of Google classroom.</p>	<p>Microsoft Word and Google apps.</p> <p>Orchard Park High School uses a range of Google applications for everyday school use. Year7 will be introduced to and learn how to use Microsoft Word, Google docs and Google drive.</p>
Year 8	<p>Binary and number systems</p> <p>Number systems including binary and hexadecimal.</p>	<p>Binary and number systems</p> <p>ASCII and algorithms.</p>	<p>Networking</p> <p>Networking including, LAN and WANs, Ring and bus.</p>	<p>Networking</p> <p>Mesh and star network, wired and wireless networks and server and client networking models.</p>	<p>Protocols</p> <p>Introduction to various networking protocols including HTTP, SMTP, FTP and POP3.</p>	<p>Protocols/Cyber attacks</p> <p>Introduction to various cyber attacks including a virus, trojan, spyware and eavesdropping.</p>
Year 9	<p>Logic</p> <p>Introduction to AND, and OR what they look like and how they are used.</p>	<p>Logic</p> <p>Introduction to the NOT gate and simple circuits found in the CPU.</p>	<p>Python</p> <p>Introduction to Python coding including Variables, Input and selection.</p>	<p>Python</p> <p>Further learning of Python concepts including Sequence, Selection and Iteration.</p>	<p>Advanced Python</p> <p>Flowcharts and sub programs.</p>	<p>Advanced Python</p> <p>Pseudocode and further advanced Python coding concepts.</p>
Year 10	<p>Memory and storage</p> <p>Primary storage (Memory), Secondary storage, Units, Data storage, compression.</p>	<p>Systems architecture/Boolean</p> <p>Architecture of the CPU, CPU performance, Embedded systems.</p>	<p>Programming fundamentals</p> <p>Variables and constants, Data types, Additional programming techniques.</p>	<p>Networks</p> <p>Networks and topologies, Wired and wireless networks, protocols and layers.</p>	<p>Network security</p> <p>Threats to computer systems and networks, Identifying and preventing vulnerabilities.</p>	<p>Systems software/Algorithms</p> <p>Operating systems, Utility software.</p>
Year 11	<p>Programming fundamentals/IDE</p> <p>Defensive design, Testing.</p>	<p>Ethical, legal, cultural and environmental impact</p> <p>Legislation relevant to Computer Science, Impacts of digital technology on wider society.</p>	<p>Programming fundamentals</p> <p>Project work/revision.</p>	<p>Revision</p> <p>Revision topics based on student feedback and testing during the course.</p>	<p>Revision</p> <p>Revision topics based on student feedback and testing during the course.</p>	<p>Revision</p> <p>Revision topics based on student feedback and testing during the course.</p>