

Year 8 ICT and Computer Science

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Topics	Introduction Staying safe online	Computer Systems	Control Systems	Introduction to Python	3D Graphics Design	3D Graphics Design
Assessment	Complete 3 x MCQ (E-Safety, Basic Computer Skills and Introduction to MS Office)	Student work booklet that includes written questions. MCQ Practical project (PowerPoint presentation)	Student work booklet that includes written questions. MCQ Flowol projects	Student work booklet that includes written questions. MCQ Coded solution to a set project	Student work booklet that includes written questions. MCQ Sustainable school project in Google Sketchup.	

Building on Prior Learning	<ul style="list-style-type: none"> Re-cap on their understanding of how to stay safe online - build on the material delivered in middle school. Due to the range of ICT skills we encounter upon entry, students are fully trained on the basics required when using technology across all subjects. Building on from the Spring 1 unit (Control Systems) in which look at how to solve problems using code (Computational Thinking)
Links with other subjects	<ul style="list-style-type: none"> Close links with Product Design/Engineering through programming and handling hardware (PC components) Basic ICT skills applicable across all subjects. Geography - Use of sustainability as a topic for the Summer Term 1 and 2 unit.
Extracurricular opportunities	<ul style="list-style-type: none"> Computing Club - Run twice per half term for middle school students and KS3. Cyber Discovery - Online student-led course that is of interest to students who enjoy problem solving. Cyber Competitions - National competitions run each year for girls and boys in which they are actively encourage to participate.
A successful learner in this subject will demonstrate	<ul style="list-style-type: none"> Well organised - ability to store files with appropriate naming conventions in correctly named folders. Resilient - technology can be temperamental and it's encouraging students to not give up.
Impact on personal development	<ul style="list-style-type: none"> To become logical thinkers, problems solvers and will help them to develop resilience. Provided with the basic ICT skills that they need to operate later on in their educational life (KS4/KS5) and in the workplace.



Ways to support student learning in this subject

- Encourage the use of technology at home, provide an opportunity for students to use our facilities that they may not be provided with at home.
- Homework completed on time and to the expected standard.
- Help students understand the 'bigger picture' - technology is becoming more prominent in our everyday lives and because they can use a smartphone they assume they know everything they ever need to about the subject.
- Change their mind-set - there is evidence that they're not receiving the best experience at middle school and it's switching students off before they even walk through the door.