

KS3 ICT

Course Outline for Y7, Y8 & Y9:

During the three years students will be studying units that will build on what they did at KS2; learning both ICT and Computer Science. The first two year of CS & ICT is broken up into various units, from which students learn and develop a variety of skills using generic software packages, such as E-mail, Spreadsheets and Database to Programming in Scratch and Python.

During year 9 they will build on these skills by contextualising their skills and undertaking project based work to find a solution to set problems.

	Year 7	Year 8	Year 9
Autumn 1	Email & E-Safety – Composing emails, sending emails, receiving emails, managing emails, email etiquettes. Digital footprint, recognizing and avoiding risks and safe communication	Spreadsheets – Functions (Max, Min, Sum, Average) Rows, columns, calculations, cell referencing, formatting cells, Formulas, Graphs and Charts	Multimedia Project – Building on previous skills to create an interactive multimedia solution. Keys skills: Reviewing existing multimedia products, Understanding client briefs, Mind Maps, Mood boards, Design, Development (Hyperlinks, navigation, hotspots, external links, images, timer, master slide, embedding video and sounds) Testing, Test plan and Evaluating products.
Autumn 2	Scratch – Creative thinking, problem solving, Programming constructs (variables, loops, conditions) and logical reasoning will be used in the development of programs/games	Small Basic – Syntax and commands, variables and data types, control structure(loops) selection, sequence and iterations, input and outputs, procedures and debugging	
Spring 1	PowerPoint – create interactive PowerPoint (Transitions, animations, hyperlinks, navigation, Timer, hotspots, master slide) and presentation skills	Hardware & Software – CPU, storage, Fetch, decode and execute cycle, Memory, Binary, peripherals, Networks (LANs and WANs)	
Spring 2	Animation – Frames (create edit and delete) , stop motion, pose, play and modify figures, editing skills, frame by frame animation	Database – Creating data sets, querying data and producing reports, Understanding tables, forms, query, reports, Primary and Foreign keys, Sort and Search, creating Records	Python Programming Project – Learning how to code through text-based programming. Identifying and problem-solving using code. Key skills: Programming constructs, Input, print statements, comments, If Statements, Loops, File handling, Functions and Procedures, Lists and developing programs.
Summer 1	Hardware & Software – data storage, binary, components (RAM, ROM, CPU) Embedded systems, software (operating systems, applications, input and outputs	Website – HTML, CSS, Tables, embedding files, Navigation, style sheets, design and developing web pages.	
Summer 2			

Assessment and feedback:

- Students will be assessed at the end of each unit. The tests will be practical where they demonstrate key skills and concepts learnt. It will help to ensure understanding is retained for them to build on.

How parents/carers can help:

- Provide your child with resources at home such as books, Internet access and revision material.
- Having a constant dialogue with your child about their learning will help them consolidate their understanding.
- Check and help with homework where possible.
- Encourage your child to attend computer club and enrichment sessions
- Lots of useful videos and help guides on YouTube and SharePoint



Points of contact:

- Your child's IT teacher or
- Mr N Jamal, Head of Department njamal@tcolc.aspirelp.uk

