TVED Long Term Curriculum Map

Intent for TVED Computing

Our ambition is for our children to be digitally literate and to develop digital agency across a range of domains and tools creatively. We want to develop well rounded digital citizens who can navigate and shape their digital world responsibly and safely to be digital creators, not digital consumers. Our curriculum will equip children with the attitudes, knowledge and skills to succeed in an increasingly digital world in education, home and the workplace. The curriculum will, throughout each unit, be underpinned by consistent and relevant E-Safety and Digital Literacy teaching with links made to the PHSE curriculum.

The computing curriculum is designed with three clear strands:

- Computer science – programming strand.
- Information Technology (IT) – this is broken into the teaching of three different digital artefacts (text and image, visual and audio)
- Digital literacy (this is embedded across all units and delivered as part of our PSHE curriculum)

Outcomes

By the end of KS1 most children will be able to:	By the end of KS2 most children will be able to:
• understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions • create and debug simple programs • use logical reasoning to predict the behaviour of simple programs • use technology purposefully to create, organise, store, manipulate and retrieve digital content • recognise common uses of information technology beyond school • use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies.	• design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts • use sequence, selection, and repetition in programs; work with variables and various forms of input and output • use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs • understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration • use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content • select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information • use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 1	Computer Science	IT – Text and Image	Computer Science	IT – Visual	Computer Science	IT – Audio
	Can I explain what an algorithm is and create one to move a person?	Can I make a poster that includes text and a picture?	Can I programme a Beebot to reach a specific destination?	Can I create a simple movie with a voiceover?	Can I move a sprite using blocks and commands in Scratch Jr?	Can I create sound and music in an app for a given theme?
Year 2	Computer Science	IT – Text and Image	Computer Science	IT – Visual	Computer Science	IT – Audio
	How do I write an algorithm to move a robot to a set destination?	How do I digitally present information about a topic? Can you use a checklist?	How do I produce sequences and work with sprites in Scratch Jr?	How do I create and edit a simple movie?	How do you produce and edit sequences in Scratch?	How do I use an app to create a performance?
Year 3	Computer Science	IT – Text and Image	Computer Science	IT – Visual	Computer Science	IT – Audio
	How do I produce multiple sequences and work with sprites in Scratch?	How do I create an informative poster/flyer using digital technology? How do I work with basic spreadsheets?	How do I write algorithms to move a robot using multiple sequences of commands?	How do I create a movie for a specific audience?	How do I program sprites to interact with an event?	How do I create a multi-layered tune?
Year 4	Computer Science	IT – Text and Image	Computer Science	IT – Visual	Computer Science	IT – Audio
	How do I create a story using timed sequences?	How do I create a multi-layered document? How do I create an animated presentation?	How do create shortcuts in code using loops?	How can I create a stop motion animation? How can I choose appropriate online content to use?	How do you use a coding app to move a programmable toy?	How do I create a voiceover track with multiple layered instruments?
Year 5	Computer Science	IT – Text and Image	Computer Science	IT – Visual	Computer Science	IT – Audio
	How do I program commands so that arrow keys control a sprite?	How do I produce an eBook incorporating a spreadsheet table?	How do I use 'if' and 'then' commands to control a quiz?	How do I create objects in virtual/ augmented reality?	How do I program a programmable toy to complete a specific task?	How do I create a short podcast with multiple sections? How do I perform with other children on a 'jam' session?
Year 6	Computer Science	IT – Text and Image	Computer Science	IT – Visual	Computer Science	IT – Audio
	How do I use variables in games to affect how the game is played and designed?	How do I use my computing knowledge to support revision and recall?	How do I use my computing knowledge to create a design project?	How do I use my computing knowledge to support careers knowledge?	How do I use my computing knowledge to support the work of others?	How do I use my computing knowledge to help prepare for Key Stage 3?