



St. Wilfrid's
R.C. College

ICT Curriculum

*Excellentia per fidem,
per scientiam, per adiuvatum*

Excellence through faith, learning and support

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| Year 7 | Cycle 1 Using Computers Safely | Cycle 2 E-Safety | Cycle 3 Scratch Game Development |
| | Learn how to use computers safely. Investigate PC security, the safe use of email and e-safety. Then moving onto social media, online profiles and how to search the web effectively | Build on students understanding from KS2. A good opportunity to develop students knowledge on cyberbullying, how to identify secure web-sites, the risk of people online, and SMARTBots | Uses a graphical programming language to help students learn to write code and engage in creative thinking. Provides students with the opportunity to develop an understanding of fundamental programming concepts such as variables, sequencing, selection and iteration. |
| Extended writing opportunity: Writing like a Computer Scientist | | | |

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| Year 8 | Cycle 1 AppLab | Cycle 2 PowerPoint (Creative Project) | Cycle 3 Word processing |
| | Students will create an application whilst learning the importance of programming constructs such as sequencing, If Statements and Repetition. | Introduction to Microsoft PowerPoint and how to use the tools and features effectively. Learning how to create a PowerPoint using different graphics, transitions and animations. | Introduce students to the use of word processing and using MS Word effectively. Learning how to edit a document, styles and formatting, inserting elements and constructing tables |
| Literacy: Writing a letter to Blue Peter | | | |

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| Year 9 | Cycle 1 Understanding Computers | Cycle 2 Spreadsheet Modelling | Cycle 3 Python Coding |
| | Learners will learn about the different elements of the a computer, including the CPU. They will be introduced to binary numbers and conversions. They will learn about primary and secondary storage and networking concepts. | Students will develop spreadsheet modelling skills that can help in further education the real world. They will develop skills in formatting and formulae. They will design charts and use pivot tables for a scenario | Introduce learners to text-based programming with Python. Further develop their understanding of arithmetic operations, selection, and iteration from their Scratch Cycles in Y7 & Y8. |
| Extended writing opportunity: Writing like a Computer Scientist, the dangers of social media | | | |

Year 10

Creative imedia: Firstly students will study 'Visual identity and digital graphics'. This unit will give students a foundation on which to build up their knowledge and skills of creating media. This is assessed by completing a set assignment.

In this unit students will learn to how to develop visual identities for clients and use the concepts of graphic design to create original digital graphics to engage target audiences.

Topics include:

- o Develop visual identity
- o Plan digital graphics for products
- o Create visual identity and digital graphics

Visual identity and digital graphics This is assessed by completing a set assignment.

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Topics include:

- o Develop visual identity
- o Plan digital graphics for products
- o Create visual identity and digital graphics

Year 11

Creative imedia: Students will complete ' Visual Identity and Digital Graphics then begin to prepare for their examination for Interactive digital media. At the end of year 11 students will sit an external examination In this unit students will learn about the media industry, digital media products, how they are planned, and the media codes which are used to convey meaning, create impact and engage audiences.

Topics include:

- o The media industry
- o Factors influencing product design
- o Pre-production planning
- o Distribution considerations

Year 12

Cambridge Technical : Firstly students will study Unit 1: Fundamentals of ICT, where students will learn about computer hardware, software, IT systems, employability skills in an IT environment and Ethical and operational issues and threats to computer systems. Students will study Unit 2 alongside this and understand where information is held globally and how it is transmitted, understand the styles, classifications and management of global information, the benefits of global information to organisations and individuals and the legal framework governing the storage and use of information and understand the process and flow of information. Students will sit examinations for Unit 1 and Unit 2 at the end of Year 12. Students will also have the opportunity to begin to develop an ICT product as part of a coursework unit for Unit 9: Product Development.

Year 13

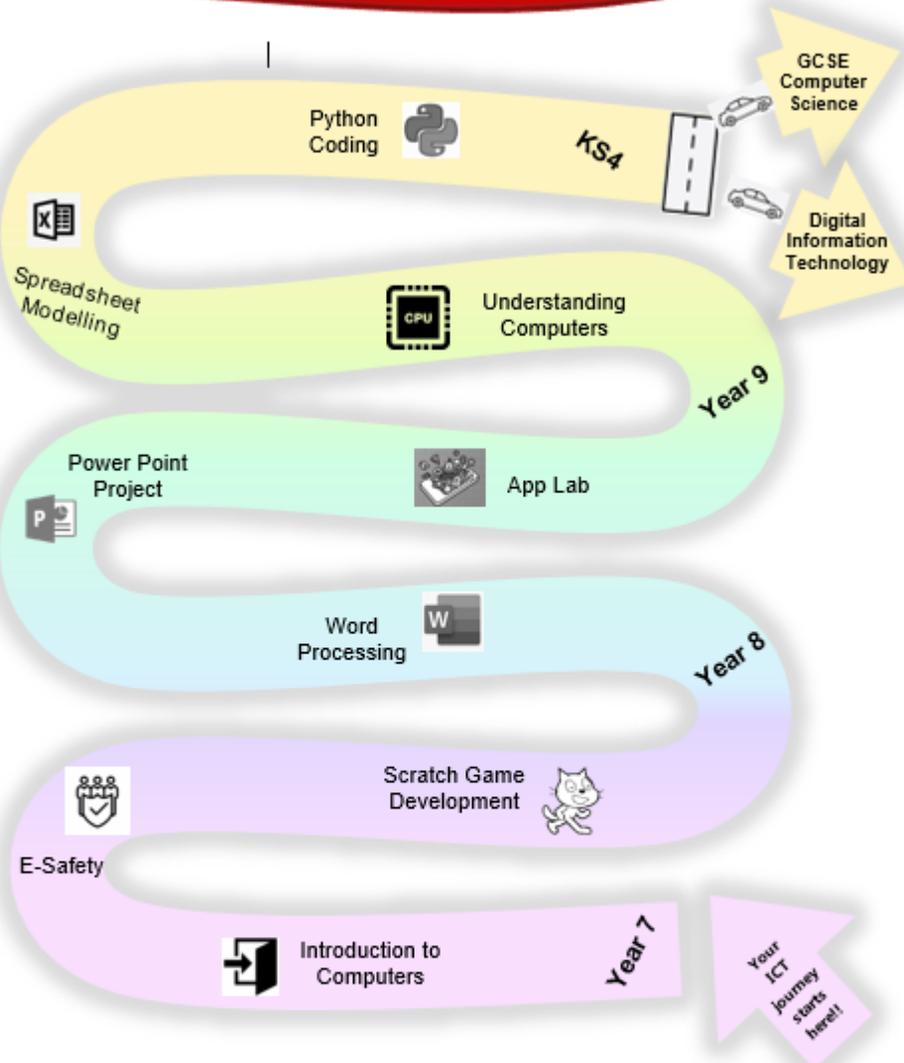
Cambridge Technical: Students will begin to study towards Unit 3 Cyber Security: Students will learn what is meant by cyber security, understand the issues surrounding cyber security, understand measures used to protect and manage against cyber security instances. Students will sit this examination in January. Finally students will complete their product development and study towards the last unit; 'The Internet of Everything', whereby students will learn about how the internet is impacting people and society and come up with a concept to extend the internet of everything.

Learning Journey



Bishop Chadwick
Catholic Education Trust

Curriculum Narrative: ICT



| Why do computer scientists read? | Write like a computer scientist | Key Terminology |
|---|---|--|
| To investigate how to be safe online | Writing code meeting syntactical rules | Year 7 Passwords, Data, Social Networking, Cyberbullying, Variables, Scripts. |
| To interpret spreadsheets | Typing letters, emails and presentations for a scenario | Year 8 Format, Style, Edit, Creative, Graphics, Animation, Transition |
| To read programming manuals | Writing coding blocks | Year 9 Elements, CPU, Binary, Networks, Model, Conditional Format, Algorithm, Casting, Loops, Validation |
|  | Inputting data into spreadsheets | |