Computing Curriculum Key Stage 3

Intent:

The curriculum at Christ the King College will deliver a high-quality computing education equipping pupils to use computational thinking and creativity to understand and change the world. Computing has deep links with mathematics, science, and design and technology, and provides insights into both natural and artificial systems.

The core of computing curriculum is computer science, in which pupils are taught the principles of information and computation, how digital systems work, and how to put this knowledge to use through programming. Building on this knowledge and understanding, pupils are equipped to use information technology to create programs, systems and a range of content.

The curriculum has been carefully orientated to relate to current affairs and topics will be linked in with Christian events throughout the academic year. These are inclusive of Christmas, Easter and All Souls Day.

The curriculum also ensures that pupils become digitally literate – able to use, and express themselves and develop their ideas through, information and communication technology – at a level suitable for the future workplace and as active participants in a digital world. Alongside this teaching content, Christian values are embedded throughout. These values encourage the safe, sensible and productive use of computer systems.

Computing at Christ the King College allows progress to be made by all learners, providing ambitious and diverse opportunities for learning in computing.

Curriculum Outline Key Stage 3

Year 7

- Core skills - typing, computer orientation
- Computational Thinking - problem solving (linked to whole school project)
- E-Safety - Keeping safe online
- Programming concepts - introduction to Scratch
- Real world scenario #1
- Digital Literacy
- Introduction to binary

Year 8

- Internet searching and project planning
- Programming concepts - the building blocks of a program
- E-Safety - Keeping safe online
- Algorithms - Solving bigger problems
- Hardware and Software - learning about how our computers work #1
- Binary and logic
- Real world scenario #2

Year 9

- Python Programming / Careers in programming
- E-Safety - Keeping safe online
- Hardware and software #2
- Digital Literacy #3
- Binary & binary addition
- ICT core skills (preparing for GCSE)