

KS3 - KS4 Sequencing skills and content

Sequencing

Our KS3 series of units has been written to satisfy the National Curriculum for Computing whilst providing an ideal foundation for academic and vocational qualifications at KS4.

School and department leaders are advised to have a clear rationale behind the skills and content delivered at KS3 in order to provide the strongest foundation for courses further up the school, and in life and work beyond the classroom.

KS3 Teaching Units

Using computers safely, effectively and responsibly
Introduction to coding through Kodu
Control system with Flowol
First Steps in Small Basic
Spreadsheet modelling
Programming with Gamedesigner
Games programming in Scratch
App development in AppShed
Understanding computers
Creating a video
Introduction to Python
HTML and website development
Computer crime and cyber security
Networks
AI and machine learning
Database development
Graphics
Animation in Flash
Sound manipulation in Audacity
Modelling in Small Basic
Computational thinking and logic
Python: Next steps

Core KS4 GCSE Course Content								
Fundamentals of algorithms	Programming	Fundamentals of data representation	Systems architecture	Computer networks and connections	Cyber security	Relational databases and SQL	Ethical, legal and environmental impacts	Languages and IDEs
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Common KS4 Vocational Course Content										
Pre-production skills	Creating digital graphics	User interface design	Audience needs and purpose	Design principles	Project planning techniques	Data processing and modelling	Modern technologies	Communications	Data threats and cyber security	The wider implications of digital systems
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