

Subject Name:

Computer Science and Information Technology

Key Stage 4 (GCSE and/or B Tech)

Curriculum Intent Statement

Our intention is to equip pupils to develop their computational thinking skills and creativity to solve a variety of problems. To build an understanding of the workings of digital systems and the importance of online safety and its impact. Our teaching of both Computing and ICT will provide students with the future-proof skills and knowledge of using and creating digital technologies that will prepare and enable them to fully participate in a technology-driven world.

Autumn Term 1

GCSE Computer Science

Programming project NEA

- Select a programming task
- Design solution
- Develop solution in programming language
- Test solution
- Evaluate program

BTEC IT

Component 2

- Importing data
- Spreadsheet formulae
- Cell referencing
- Lookup functions
- Start Assignment B tasks

Component 3

- Communication technologies
- Cloud technologies and computing
- Selection of platforms and services
- Implications for organisations when choosing cloud technologies

Autumn Term 2

GCSE Computer Science

System software and security

- Network threats
- Identifying and preventing vulnerabilities
- Operating system software
- Utility software

BTEC IT

Component 3

- Internal and external threats to digital systems
- Protection methods
- Security policies

Component 3

- Sharing data
- Impact of technology on environment
- Equal access

Spring Term 1	
GCSE Computer Science	BTEC IT
 Ethics Ethical and cultural issues Computers in the modern world Legislation and privacy 	Component 3 • Legal requirements • Net neutrality • Intellectual property Component 3 • Notation • Flow diagrams and DFD • Interpreting diagrams February exam
Spring Term 2	
GCSE Computer Science	BTEC IT
Revision for May exams	 Component 2 Data validation Conditional formatting Complete assignment B tasks
Summer Term 1	
GCSE Computer Science	BTEC IT
Revision for May exams End of course	Component 2
Summer Term 2	
GCSE Computer Science	BTEC IT
Course ended	Course ended

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