THE BULWELL ACADEMY

Key Stage 3 Curriculum Information

ICT LEAD:
dominic.hayton@bulwellacademy.org.uk

Year 7 ICT Curriculum

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Topic	**Effective Digital Citizens: E-safety, Using computers & the Internet**	**The Big Project (Basic Skills)**	**Unifrog**	**Using Microsoft Office**	**Input/Outputs & Memory**	**Algorithms and Decomposition**
Knowledge Covered	• Use of School System (including MS Teams) • Secure password • Positive use of social media and the internet - self-promotion • Trusting online information • Digital Footprint	• Identify a target audience • Select tools in Word, Presentation software; Desktop publisher, to produce a range of documents for a target audience • Being able to evaluate the effectiveness of their documents	• Who Am I • Exploring Possibilities • What is a career? • Understanding an entrepreneur • What is work life balance? • Career and the future	• Understanding different formatting tools • Inputting pictures • Using copy and paste • Creating basic spreadsheets	• Types of computers • Hardware components of the computer system • Software that run on the hardware • Input, process, and output systems • Networks – packets, routers, switches, internet protocols	• An introduction to algorithms • Computational thinking • Problem solving, decomposition and scratch overview • Game developing
Online Resources	• Microsoft Teams • Teach-ICT • SAM Learning • Unifrog	• Seneca • BBC Bitesize • idea.org.uk		• Code.org • Scratch.mit.edu • Craig n Dave		

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Year 8 ICT Curriculum

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Topic	**E-safety Software and Hardware**	**Presentation**	**Unifrog**	**Using Multi-media: Digital Signage and App Design**	**Turtle Programming & Algorithms**	**Text Based Game Programming**
Knowledge Covered	• Personal data – Digital Footprint • Appropriate use of software • Differences between hardware and software • Computer crime & security • Using social media positively • Internet web browsers and search engines	• Understand different uses of Microsoft PowerPoint • Designing a appropriate presentation • Develop presentation skills with a brief	• What are my interests? • Jib applications • Challenges and rewards of work • Creating the life you want • What does success mean to me? • Careers and the climate	• How a range of application software is used to carry out designated tasks • Copyright and Advertising • Investigating graphics • Bitmap • Vector • Design process • Adapting an image: Creating and Editing Graphics	• Computational thinking • Constructing solutions (algorithms, using flow charts and pseudocode) • Using logical reasoning to predict outputs • Iteration and Selection • Loops and selection • Functions • Parameters • Lists	• Introduction to text-based games • Using loops • Using iteration • Write simple programs • Syntax errors and debugging • Using simple arithmetic statements • Using logical expressions
Online Resources	• Microsoft Teams • Teach-ICT • SAM Learning • Unifrog		• Seneca • BBC Bitesize • idea.org.uk		• Code.org • Cypher Discovery • Turtle.ox.ac.uk	

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Year 9 ICT Curriculum

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Topic	**Boolean Logic & E Safety**	**Mail Merge**	**Unifrog**	**Spreadsheets**	**Programming Algorithms**	**Further Programming techniques in Python**
Knowledge Covered	• Understanding digital footprint • Boolean Logic • Logic Puzzles • E-safety • Keeping safe on social media • Data protection Act • GDPR • Computer Misuse Act	• Writing professional letters • Understanding mail merge • Using spreadsheets and mail merge to 'autograph hunt'	• What are my skills • What comes after school • Decimal Making • Taking control of your career journey • Working and earning- managing your money • What is the labour market and why is it important	• Adapting and using formatting tools • Creating and adapting spreadsheet • Understanding formulas • Adapting and using given formula • Creating a practical and useful spreadsheet given a brief	• Testing & Success Criteria • Programming Techniques • Program Development • Networks • Network topology • Encryption • Caesar Cipher • Hashing • Decoding Ciphers • Encryption Ethics • Public Key Cryptography	• Effective coding: Developing meaningful solutions to problems • Program Development • Reconnecting with Python – writing simple programs to display messages • Creating lists in Python • Common Operations • Using iteration • Strings • Testing solutions • Evaluating future solutions
Online Resources	• Microsoft Teams • Teach-ICT • SAM Learning • Unifrog	• Seneca • BBC Bitesize • Web.mit.edu			• Code.org • Cypher Discovery • Bournetocode.com	

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