



THE CURRICULUM OFFER

Subject: **INFORMATION & COMMUNICATION TECHNOLOGY (ICT)**

Department: Business, ICT & Development

Introduction

The ICT department at The Bulwell Academy understands the importance of ICT across all aspects of working life and, in order to prepare our students for this, we provide an enriched curriculum both at Key Stage 3 and Key Stage 4 in ICT and Computer Science.

The ICT department aims to encourage students to become both independent enquirers and creative thinkers. The work is designed to challenge the students to create ICT solutions to key tasks and problems in the real world.

In our dedicated ICT suites, students are taught how to become efficient users of digital technology ranging from essential office skills to programming and sequencing. In this ever changing digital world our ultimate objective is to move students from being consumers of information to becoming producers of products and solutions. This global reliance upon ICT and Computing means that there is a growing demand for professionals who are qualified in this area.

When student's first start at the Academy our main priority in ICT is to ensure that students are familiar with and confident when using the school network, that they understand the importance of Internet Safety and using the web efficiently. An ICT contract is discussed and signed by each student - this outlines the expectations and code of conduct for using all forms of ICT whilst in the Academy.

Currently there are three ICT and Computing specialist teachers who teach both Key Stage 3 and 4, with other members of staff who focus on teaching just Key Stage 3. The day-to-day running of the department is overseen by the Teaching and Learning Leader, Miss Kelly, who is passionate about the development of ICT and Computing and the opportunities that studying it can give to students. The Teaching and Learning Leader is supported by the Vice Principal, Mr Gibson, who is equally passionate about developing ICT and Computing further.

ICT Staff Team

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|-----------------------------------|--------------------|
| Vice Principal | Mr James Gibson |
| Head of ICT | Miss Emma-Jo Kelly |
| Teacher of ICT | Ms Natasha Cooper |
| Teacher of ICT | Ms Paula Pickering |
| Teacher of ICT | Mr Scott Roberts |
| Teacher of Computer Science & ICT | Mr Liam Bolster |

Contact Us

To contact a member of ICT, please email:

firstname.surname@bulwellacademy.co.uk

Or telephone the school's reception on 0115 964 7640. Our Receptionist will take a message and ask the staff member to contact you when they are able. It is likely that your call will not be returned until after the end of the teaching day.



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Key Stage 3 Curriculum (Years 7 & 8)

The ICT department offers a KS3 curriculum that aims to develop students' ICT capability by bringing together a range of technical competence, developing creativity, computing skills and using software applications. It involves information gathering, presentation and technical processing skills, underpinned by key concepts related to the nature of information and technology.

The students carry out various activities aimed at:

- Computational thinking
- Finding information
- Developing Ideas
- Communicating Information
- Evaluating



YEAR 7

In year 7, students receive two lessons of ICT per week.

They will use a range of software to develop skills in planning and designing, spreadsheet modelling, game design, data handling, movie making and presentation design together with e-safety education.

The Year 7 curriculum is structured in the following way:

- Initial Baseline Activity (Mascots)
- Web Awareness
- Creating Games in Kodu
- Digital Literacy 1 – Excel
- PC Basics
- Wonders of PhotoPlus and Graphics
- Ingenious Inventions
- Data Handling

YEAR 8

In year 8, students receive two lessons of ICT per week. They will create and develop skills in planning and designing, understand computer hardware and software, design animations together with e-safety education, create a small website, develop industry standard comics using desktop publishing and use all their skills in a more advanced integrated project based on a 'Theme Park' that looks at spreadsheet modelling, logo design, map design, interactive quiz games and storing data in a structures way.

The Year 8 curriculum is structured in the following way:

- Initial Baseline Activity (Reward stickers)
- Animation (E-Safety)
- Game Control Virtual Pet
- Digital Literacy 2 – Database
- PC Basic Extended
- Python Magic
- Digital Literacy 3 – Integrated Project (Theme Park)
- Grand Designs





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Key Stage 4 Curriculum (Years 9, 10 & 11)

GCSE ICT

Students follow the [Edexcel GCSE ICT](#) course. This course gives students the chance to strategically select software for a variety of tasks and collate a portfolio of evidence alongside written tasks that challenge our students and gives them chance to show both theoretical and creative knowledge around ICT.

GCSE Computer Science

Students follow the [OCR GCSE Computer Science](#) course. This course offers a varied and interesting introduction to a range of computing related themes - the course is not just about programming. It aims to develop students' analytical and logical thinking skills, whilst also enhancing knowledge of a range of areas such as multimedia file storage, computer networking and the software development cycle. Following this course, students are well equipped to study the subject at A-Level.

Alongside the above qualifications we also offer more software specific qualifications like [ECDL](#) and [Edexcel Functional Skills in ICT](#).

YEAR 9

Year 9 ICT

Year 9 begins with a skills unit to help students consolidate their learning from Key Stage 3 and prepare them for their Key Stage 4 study. This unit looks at:

- Making the most of your computer
- Managing Information storage
- Searching for Information
- Designing, combining and presenting information
- Structuring data
- Conditional Formatting, Vlookups and If statements
- Charts and Graphs
- Publishing and Marketing
- Email Etiquette
- Using ICT to collaborate

Following on from above, students focus on the Online World unit:

- Online services
- Online Advertising
- Online Communication
- Online Documents
- Cloud Computing
- The Internet
- World Wide Web
- Email
- Data Exchange
- Data Storage
- Issues with Operating online
- Possible Threats to Data

Year 9 Computer Science

- Computation Thinking
- Hardware and Software
- Python Programming
- Logic and Binary



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YEAR 10

Year 10 ICT

- Entertain Me (Theory)
 - + Home network components
 - + Setting up networks
 - + Home entertainment systems
 - + Buying a home entertainment system
 - + Features of games consoles
- Controlled Assessment
 - + Sources Table
 - + Investigation
 - + Digital Poster
 - + Reports
 - + Modelling
 - + Digital Advert
 - + Website Design and Creating
 - + Evaluation



Year 10 Computer Science

- Python Programming extended
- Networks
- Algorithms, Flow charts, Pseudocode
- Systems, Reliability and Standards



YEAR 11

Year 11 ICT

- Let's Communicate
 - + Internet as a work tool
 - + Choosing a computer
 - + Mobile phones
 - + Socialising on the Internet
 - + Internet Safety
 - + Digital Divide
- Smart working
 - + Safe Workspace
 - + Anytime, Anywhere
 - + Collaborative working
 - + Software Choices
 - + Backing up data
 - + Communicating with others
- On the move
 - + Planning a trip
 - + Keeping in touch
 - + Solving a hitch
 - + Finding the way
 - + Connecting
- Shopping Experience
 - + Online shopping
 - + Shopping accounts
 - + Is it safe to pay online
 - + Avoiding online fraud
 - + Is my data safe?



We build different revision resources and fully prepare students for their examination.

Year 11 Computer Science

- Building their Controlled Assessment Python Project
- Revision techniques and topics



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Links for Learning

- Mind map maker • <http://www.bbc.co.uk/schools/gcsebitesize/maps/index.shtml>
- Data Protection Act • <http://www.bbc.co.uk/education/guides/z6kj6sq/activity>
- Computer Misuse Act • <http://www.bbc.co.uk/education/guides/zt8qtfr/revision>
- Key Terms ICT game • <http://www.reviseict.co.uk/revision/invaders.shtml>
- General practice paper game • <http://www.reviseict.co.uk/revision/exampractice.shtml>
- Revision websites
 - www.bbc.co.uk/bitesize/gcse/ict/
 - <http://www.teach-ict.com/gcsehome.html>
 - <http://www.reviseict.co.uk/revision/>
 - <http://www.gcse.com/ict/>
 - https://getrevising.co.uk/revision-cards/edexcel_gcse_ict_unit_1

Other important information

The ICT qualifications are undergoing transformation and qualification might change. This document will be updated with any changes.

