

GREAT BARR ACADEMY

A SPECIALIST SCIENCE COLLEGE



IGNITING

POTENTIAL



COMPUTER SCIENCE



DEPARTMENT ETHOS

The IT & Computing Department consists of 5 highly dedicated teachers that are relentless in their pursuit of excellence for every child. We are a strong and enthusiastic team that work closely, sharing ideas and resources ensuring we continually develop our ideas, introducing new and innovative strategies to the classroom. Helping to shape analytical learners that can apply logic and problem solving skills to maximise their potential across their learning and in future careers.

Engagement is paramount:

- Where students look forward to their lessons with staff who are enthusiastic and passionate about Computer Science and IT.
- Where we can offer qualifications that are accessible and engaging for all and equip students with the skills that will help them to achieve what they want out of life
- Where we ignite an interest in technology and innovation.

The department prides themselves on enabling all of our learners to embrace the art of Computer Science in order to help them keep pace with the ever changing digital world.



COMPUTER SCIENCE

CONTACT US

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List of Topics Covered

Year 7

Term 1 - Networks and Communication 1

Term 2 - Algorithms

Term 3 - Hardware and Processing & My Digital World

Year 8

Term 1 - Networks and Communication 2

Term 2 - Programming Project

Term 3 - Sketch-Up – Machine City

Year 9

Term 1 - Computer Components, Networks and Application/Utility Software

Term 2 – Computer Security, UK Computer Legislation and Algorithms

Term 3 – Python Programming – Assigning Values, IF Statements and Computational thinking

List of Topics Covered

KS4

GCSE

Computer Science

Component 01: Computer systems

Component 02: Computational thinking, algorithms and programming

Component 03: Programming project

KS4

Cambridge Nationals in Creative iMedia

Compulsory Units

Unit 1: Pre-production skills

Unit 2: Creating digital graphics

Choose 2 of the following options:

Unit 3: Storytelling with a comic strip

Unit 4: Creating a digital animation

Unit 5: Creating interactive multimedia products

Unit 6: Digital photography

KS5

BTEC Nationals in Information Technology

Compulsory Units

Unit 1 – Information Technology Systems (Exam)

Unit 2 – Creating System to Manage Information (Controlled Assessment)

Unit 3 – Using Social Media in Business

Choose 1 of the following 2 options:

Unit 5 – Data Modelling (Coursework)

Unit 6 – Website Development (Coursework)

KS5 AS/A Level

Computer Science 2 year course

Component 01: Computer Systems

Component 02: Algorithms and Programming

Component 03: Programming Project