

# ICT & COMPUTING

## Course Content

### KS3

In Years 7, 8 & 9, the learners will study the



following topics:

- Programming with Scratch
- Programming with Python
- Computer systems
- Computing hardware
- Software
- Representation of data in computer systems
- Databases
- Computer communications and networking

Learners engage with the above topics, all of which are then explored in greater depth at GCSE level. In particular, priority is given to programming in first Scratch and then Python. By the time learners reach KS4, they will be sufficiently grounded in Computer Science to approach the GCSE with the confidence to succeed, and have enough programming skills to succeed at GCSE Controlled Assessments. Homework is set every two weeks in KS3.

### KS4

#### GCSE in Computing

Learners who take GCSE Computing will complete two controlled assessments, which contribute to 60% of their final grade. These comprise a range of written and programming tasks on two challenging projects. The remaining 40% of their final grade comes from a Computer Science exam, taken at the end of the course. This paper exam lasts 1.5 hours and tests knowledge and understanding of Computer systems, hardware, software, data, databases, communications and programming.

Learners follow the OCR syllabus.

#### How Learners Are Assessed

Learners are assessed both on the quality of their Controlled Assessment work, which combines programming and written research tasks. The final assessment for each Controlled Assessment is a written document.

#### Homework

Homework is essential in supporting the learner's progress and to determine their understanding of the course. Homework is given in various ways: it might be completing research on a class blog (and providing peer feedback), or on a worksheet (e.g. of exam questions), or on a topic quiz on the school's VLE, 'Show My Homework'. Homework is intended to be an extension of study done in the lesson or a preparation for the next lesson, and it provides an opportunity to develop independent study skills. It is set at least once weekly in KS4.

#### Revision, Intervention and Enrichment

At present, learners can participate in a Computing club, run weekly after school. Learners who are assessed to be underachieving at KS3-4 are invited to these after school sessions.