# Computer Science Curriculum Intent at Brownhills Ormiston Academy.



## The department's vision:

The overarching aim of our curriculum is to enrich pupils with a range of skills to be successful in life, beyond school. Pupils must leave us with the confidence to access a whole range of knowledge and applications. The curriculum is designed to meet and exceed the National Curriculum as well as to build challenge as pupil progress through the different years of school, and with a view of giving pupils access to whichever pathway they choose to take beyond.

As a department with subject specialists in Computer Science we actively promote innovation – both in the teaching and learners' thinking – and we strive to build independent learners. Topics are generally divided into projects. All projects aim to take pupils through the process of learning, developing, applying and evaluating. Assessment is always focused on improvement and reteaching gaps in knowledge where misconceptions can arise. We actively promote careers and revisit topics within lessons and the curriculum area - to ensure the needs of all learners are met.

Our curriculum is sequenced, rigorous and provides great excitement and challenges and focuses on the core fundamentals of being a great computer scientist, whilst following British Values.

We actively encourage wider opportunities for our pupils within Computer Science and have introduced the IDEA Digital Enterprise Award, we also have several exciting technological opportunities for our pupils to experience throughout the school calendar such as talks with Dell Technologies and Stone Computers; not to forget the games programming and robotics clubs.

#### Assessment:

### **Key Stage 3:**

Pupils will complete half termly assessment which will include key vocabulary tests, recall quizzes and end of unit assessments. The end of unit assessments will be a written exam or computer skills assessment to develop key examination skills for Key stage 4.

### **Key Stage 4:**

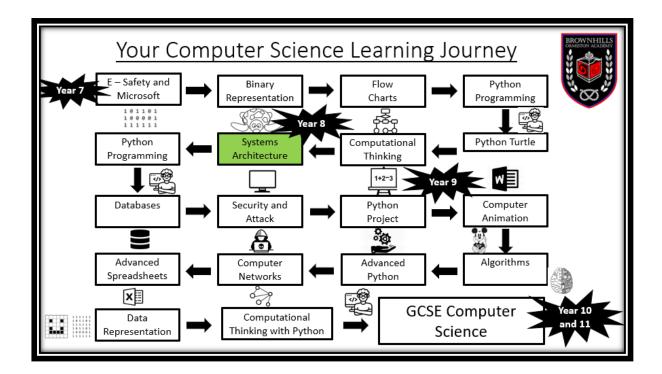
Pupils will complete end of unit assessments covering the topics taught and mock exam. Pupils take a GCSE exam at the end of the course, in which the assessment objectives are examined. Pupils will also complete coursework in Year 11 if taking the vocational ICT route.

### Sequencing of lessons:

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During Key Stage 3 pupils will study a sequenced set of modules as shown below:



During Key Stage 4 pupils following OCR J277 Computer Science will explore a structure consisting of computer Systems, computational thinking, algorithms and programming. There will be weekly programming lessons embedded into the weekly timetable to ensure fluency in programming.