SUBJECT GCSE Computer Science	**YEAR** 10 & 11

HEAD OF DEPARTMENT Mr I Cole

COURSE LEADER Mr A Birkett

GROUPING POLICY Mixed ability in option blocks

EXAM BOARD AQA

ASSESSMENT: 80% External Examination; 20% Controlled Assessment

Link to Specification: http://www.aqa.org.uk/subjects/computer-science-and-it/gcse/computer-science-8520

COURSE CONTENT

What will my child learn?

Computing is an enormous importance to the economy and the role of Computer Science as a discipline itself and as an 'underpinning' subject across science and engineering is growing rapidly.

Computer technology continues to advance rapidly and the way that technology is consumed has also been changing at a fast pace over recent years. The growth in the use of mobile devices and web-related technologies has exploded, resulting in new challenges for employers and employees. For example, businesses today require an ever-increasing number of technologically-aware individuals. This is even more so in the gaming, mobile and web related industries and this specification has been designed with this in mind.

Students studying this course will learn how to create applications that:

- Run on mobile devices
- Operate in a web enabled environment.

In addition they will:

- Learn how to create simple computer games
- Gain an understanding of the fundamental concepts around creating software applications
- Have opportunities to work collaboratively.

The qualification gives students an understanding of key computing concepts and the fundamentals of programming. The course would best suit a student looking to study a science and / or a competent mathematician.

It focuses on students creating applications, such as mobile and web apps and computer gaming. The students will create applications to solve problems based on real life scenarios and will test how well their solution meets the needs of the user.

ASSESSMENT

How will my child's work be assessed?

80% of the qualification is assessed at the end of Year 11 through two external examinations.

Paper 1: Computational Thinking and Problem Solving

- 40% of the marks
- Externally assessed (90 min examination)

Paper 2: Computing Fundamentals

- 40% of the marks
- Externally assessed (90 min examination)

In both examinations, all questions will be compulsory and will be taken from across the subject content. Each exam will include a range of types of questions from very short to extended answer.

Non- Exam Assessment

The development of a computer program along with the programming code itself which has been designed, written and tested by the student to solve a problem. An original report must be produced which outlines the development of the software.

- 20% of the marks
- Internally assessed, externally moderated
- Approximately 20 hours of controlled assessment.

Progression Routes:

The demand for skilled Computer Science students is continually growing and outstripping supply. Computer Science graduates are highly in demand by employers both in the UK and abroad.