

# Computer Science

**COURSE LEADER** Miss R Woodruff

**COURSE** A Level Computer Science (OCR)

**HOW IS THE COURSE DELIVERED?** Students cover two topics alongside one another, ensuring they develop their practical programming skills as well as theoretical knowledge simultaneously.

New content will be taught in class using group discussion, small introductory exercises, topic worksheets and practice exam questions. Each lesson will include extension work and additional reading to assist further understanding of each topic beyond what is covered within the lesson.

There will be frequent assessments, covering a combination of the most recent topic and all previous topics. This will ensure students have the opportunity to hone revision strategies, practice exams and identify any target areas early enough to have a positive impact.

Towards the end of Year 12, the second topic being covered each term will be replaced by the Non-Examined Assessment (coursework). An excellent opportunity for students to produce a solution to a problem they care about and in any programming language they are passionate about.

**WHY SHOULD I TAKE THIS COURSE?** We are currently living in The Digital Age, where technology and both the access to and control of information is the driving force behind our modern society.

You name it, computing influences and affects everything we do. From science, technology, manufacturing, research, medicine, advertising, socialising, travel, defence, aerospace, agriculture, retail to anything else you can think of.

Computing involves everyone, in every walk of life, which means the career possibilities with this

qualification are endlessly transferable, highly sought after and often competitively paid!

**COURSE OVERVIEW** Although this is a practical course, 80% of the course will be assessed through written examinations at the end of the two years of study.

20% of the course will be assessed through the Non-Examined Assessment, a coursework project started at the end of Year 12.

**Paper 1 (Computer Systems) – 40%, 2:30 hours**

System architecture, software development, exchanging data, data types/structures/algorithms, legal/ethical/cultural/environmental impacts.

**Paper 2 (Algorithms and Programming) – 40%, 2:30 hours**

Computational thinking, problem solving and programming, algorithms to solve problems.

**NEA – 20%**

Analysis, design, development, testing, evaluation.

**“In the sixth form, students confidently present their ideas. They discuss and debate, which helps refine their thinking and develop their knowledge. Sixth form students view the world critically. They understand how important it is to use evidence to support their thinking. This will equip them well in the future”** Ofsted, 2022