Curriculum Information Bramcote College

Year Group: 8

Subject: Computer Science

Objectives/purpose	The curriculum has been designed from KS3 to ensure students learn the fundamentals of ICT and Computing. We believe our curriculum is not only ambitious but it also allows for ample challenge regardless of the students' ability. We have integrated the national curriculum computer science strands within our schemes of work at KS3. We believe these skills are not only beneficial to the student across the entire curriculum but also gear students up with the right skills and knowledge to progress into KS4 and in the future, the wider world.

The curriculum plan can be seen to build on knowledge gained in previous units of work. The schemes of work are planned carefully, so that knowledge and skills are effectively interleaved, this is designed to reduce the students cognitive load which should over time enhance the student's knowledge, understanding, skills and confidence.

The KS3 curriculum is a steady inclined introduction into the main areas of computer science which will enable students to progress if opting for GCSE Computer Science as an option.

In Year 8 we begin by examining the hardware and software required to create a computer system and then investigate some of the ethical issues surrounding the use of Computing in the modern world by focusing on the impact of technology on Crime. In the Spring Term we focus on a creative project and ask the students to use Photoshop to create a series of images using the various features available in the software. The rest of the year is then dedicated to computer programming both block and text based. |
Autumn Term	**Topic 6 Hardware and Software** **Topic 7 Computer Crime and Cyber Security**
Spring Term	**Topic 8 Photoshop - Undertake creative projects** **Topic 9 Programming**
Summer Term	**Topic 10 Introduction to Python**
How is progress measured?	Throughout the schemes of work students, are frequently asked to recall information in a series of low stakes testing scenario's this builds to a practical and theoretical summative assessment which requires them to recall key information and demonstrate the practical skills they have developed. Each topic of work is underpinned with a

	knowledge organiser which is available from the start of the unit of work.
How is the subject externally examined? (KS4 and KS5)	No formal external assessment is linked to this course.
Extending Learning at home	https://www.bbc.co.uk/bitesize/subjects/zvc9q6f https://www.sololearn.com/ Knowledge organisers Craig N Dave https://www.youtube.com/channel/UC0HzEBLlJxlrwBAHJ5S9JQg
Support Available	There is a weekly Computer Science Coding Club Support is available in lessons on request.
Useful web addresses and book resources/revision guides	https://www.bbc.co.uk/bitesize/subjects/zvc9q6f https://www.sololearn.com/ Knowledge organisers – made available to all students Craig N Dave https://www.youtube.com/channel/UC0HzEBLlJxlrwBAHJ5S9JQg Collins Computer Science Revision Guide

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