Computer Science & ICT

Year 7 - 11
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In this subject, students are introduced to core principles of Computer Science and develop skills in problem solving and computational thinking. These skills are highly regarded by colleges & universities. The curriculum builds on skills learned in primary school in Computer Science/ICT while also ensuring that students new to the subject are appropriately supported. Following on from more visual programming environments, programming skills are further developed using high-level textual programming languages such as Python.

We offer these Opportunities:

During **Year 7**, Students are introduced to the Google classroom environment and then go on to develop an understanding of Computer Science methods in the real world. Students will decompose and model aspects of real-world situations, and as a result be able to design, build and test a fully-programmed solution to a problem. They will learn about basic hardware and software and ESafety I also covered.

In **Year 8**, students will be able to reflect today's global world. Students will develop further their knowledge and understanding of how computers work and they will be introduced to higher level programming languages.

In **Year 9**, Students will be preparing for the possibility of taking GCSE Computer Science if they choose the subject. Students will be able to apply computational thinking in context, evidenced in examined and non-examined assessment. This is supported by a comprehensive coverage of computer science principles.

During **Year 10,** students will develop 'underpinning' concepts which are useful in many subjects, for example mathematics, science and engineering as they prepare for their GCSE. The rigorous approach of the subject will facilitate a smooth transition to the next level of study. There is also a large element of practical programming and computational thinking. There will also be opportunities for interesting trips such as the National Museum of Computing or the Emirates Aviation Experience.

Year 11 supports progression to further education. The content will enable students to move on to GCE Computer Science or BTEC Technical Levels in Computing with a clear knowledge and understanding of the subject.

Our Successes:
In the past few years the Computer Science results were good, we had many students who received high grades in the subject due to their perseverance throughout the year.