In Computing we aim to provide an engaging, challenging, well sequenced curriculum which is broad and balanced, covering a range of computing and ICT topics. We aim to develop our students into 21st Century Digital Citizens who are able to use digital technology safely and responsibly, and to teach

it works.

We aim to engender a love of learning, self-belief and aspiration through 4 key intentions:

• The Removal of Barriers to Learning

• Developing Skills for Learning

• Developing Personal Attributes

• Enriching Student Experiences and Broadening their Horizons

The Computing and IT Department's core purpose at KS3 is to deliver an engaging and challenging curriculum through outstanding teaching and learning. Our aim is for students to develop skills and knowledge in digital technologies and computer science, to prepare them for a future in a world where the use of this technology is fully embodied.

Students are given the opportunity to develop their computer coding and digital technology skills, allowing them to take their studies onto KS4 and beyond, developing skills that can be applied in a range of career paths and industries.

In Year 9, Computer Science is delivered via 1 lesson per week as part of the Computer Science and Economics Suite.

Students cover the following topics:

Exploring the fundamental technologies behind websites. Students will learn the basic skills required to create a web page using HTML, adding key elements such as titles, headings, images, hyperlinks and tables. Students will also learn the fundamental principles of CSS, using these to style key components of a web page.

Students will take a PC apart and explore the key components that make up computer systems. Students will cover the role of components such as the CPU, RAM and secondary storage.

In this topic students will learn about algorithms and how to
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and pseudocode. Key algorithms

for searching and sorting data are explored.

Building on the text-based programming skills with small basic in year 8, students will cover key programming constructs such as sequence, selection and iteration using the Python programming language.
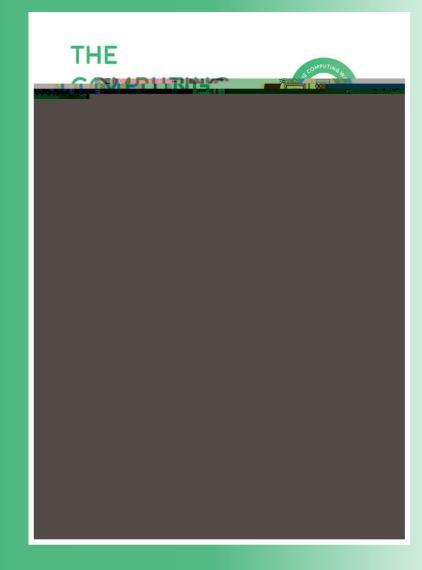
In this topic students will explore computer systems in more detail, developing an understanding of what the CPU does and factors
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This topic also covers RAM, ROM, Network Security, systems software and ethical issues around technology.

Here students will cover a range of topics linked to algorithms and programming. These include computational thinking techniques, data representation and programming fundamentals

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COMPUTING

Have your say!

Students are assessed at the end of each topic, roughly once per half term. Assessments are in a variety of formats including short and long answer written questions, multiple choice questions and practical tasks.

The Computing Way is designed to help students become young subject specialists and has a key focus on the vital skills needed to achieve their full potential in this subject area.