COMPUTING

CURRICULUM 2018-19

KEY STAGE 3

At Key Stage 3, students will complete the following project-based units:

Year 7:

1. Introduction to One Note
2. E-Safety & creation of an interactive multimedia presentation
3. Microbit programming using blocks
4. Understanding computers
5. Digital Literacy – Festival project

Year 8:

1. Introduction to One Note
2. Digital Graphics
3. Programming using code
4. Creation of multi-page comics
5. Digital Literacy – Florida project

Within each unit of work, pupils complete formative assessments which inform the actions needed to ensure maximum progress. At the end of each project, pupils complete a written assessment relating to the theoretical content of the unit. Bands are awarded for practical work and assessments within each unit of study. Pupils also complete a summer exam that is formally assessed. Pupils can further develop their computing skills by accessing and practising with a wide range of industry standard software such as *Photoshop*, *Dreamweaver*, and *Serif Movie Plus*. They can develop coding and programming skills by accessing online resources such as the *Hour of Code.* Attendance of extra curricular clubs will allow pupils to gain knowledge of using Raspberry Pi's and Python programming.

KEY STAGE 4

At Key Stage 4, students can opt to study one of two ICT based GCSEs, either GCSE OCR Computer Science *or* BTEC Creative Imedia.

GCSE Computer Science focuses on the mastery of programming and understanding of computer

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systems. Students completing the Computer Science course in 2018 and 2019 will be formally assessed on the following units:

- *Computer Systems*: Externally assessed written exam worth 50% of final grade
- *Computational thinking, algorithms, and programming*: Externally assessed written exam worth 50% of the final grade

To stretch their learning, students should practise, practise, practise! The students that do well in Computing are the ones that keep practising the programming skills they have learnt within lesson and have the determination to keep experimenting.

Those students who have elected to study BTEC Creative Imedia, will be equipped with a range of creative media skills and provided with opportunities to develop, (in context), desirable, transferable skills such as research, planning, and review as well as working with others and communicating creative concepts effectively. Through the use of these skills, learners will ultimately be creating fit-for-purpose creative media products.

Pupils will complete the following units:

- Unit R081: Pre Production Skills

  -Understanding pre-production skills used in the creative and digital media sector.

  -Developing understanding of the client brief, time frames, deadlines, and preparation techniques that form part of the planning and creation process.

- Unit R082: Creating Digital Graphics

  -Where and why digital graphics are used and what techniques are involved in their creation.

- Unit R084: Storytelling with a comic strip

  -Comic strips are as popular today as they have ever been in their history. They have evolved from their origins in the early part of the 20th century from simple story strips to become whole genres of interest which span the world. This unit will enable learners to understand the basics of comic strip creation. They will interpret a client brief, use planning and preparation techniques and ultimately create their own comic strip using digital techniques.

- R087: Creating interactive multimedia products

  -This unit will enable learners to understand the basics of interactive multimedia products for the creative and digital media sector. They will learn where and why interactive multimedia is used and what features are needed for a given purpose. It will enable them to interpret a client brief, and to use time frames, deadlines and preparation techniques as part of the planning and creation process when creating an interactive multimedia product.

  -On completion of this unit, learners will understand the purpose and properties of interactive

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multimedia products, be able to plan and create an interactive multimedia product to a client's requirements and review it, identifying areas for improvement

Students will be assessed via an externally assessed written exam on Unit R081, which counts for 25% of their final grade, and three centre assessed tasks, one on each of the remaining units that are each worth 25% of the final grade.

To stretch their learning, students can investigate the different purpose, uses and audience for digital media across the UK. This could include the development of apps on phones and tablets, social media and its impact on the world, or the development of comic book narratives in popular culture. They can also enhance their creative skills when using software such as Photoshop, Fireworks, and Dreamweaver by viewing tutorials videos on YouTube, which will develop their knowledge and understanding of the tools used to create digital products.