



KS₃ BUSINESS, COMPUTING & ICT CURRICULUM INTENT

HGCSC Mission

Exceptional education for every child, every day

COMPUTER SCIENCE DEPARTMENT CURRICULUM INTENT

As teachers of Computer Science, we aim to develop Computer scientists who can be digitally literate citizens, Problem solve, Critically Think and understand and respect the wider computing world, its opportunities and its responsibilities.

CURRICULUM AIMS

DIGITALLY LITERATE CITIZENS	PROBLEM SOLVERS	CRITICAL THINKERS	WIDER COMPUTING WORLD <small>(Including responsibilities and Opportunities)</small>
<p>We aim to teach pupils the basic and advanced skills needed to comfortably use digital technology in education and employment.</p> <p>This includes appropriate use of Software, online etiquette and appropriate online communication (Informal, formal and professional communication).</p>	<p>We aim to give pupils the opportunity to problem solve at all levels.</p> <p>This includes mastering decomposition, pattern recognition and abstraction as well as being able to confidently debug (Subject level)</p> <p>We want pupils to confidently link these skills to other areas of education and employment.</p>	<p>We aim to develop pupil's independence in linking ideas and concepts in and out of the classroom.</p> <p>This includes recognising key programming fundamentals, providing extended responses when questioned, and the ability to self-evaluate.</p>	<p>We aim for pupils to be explicitly aware of the links between their study and employment both in and out of the computing industry.</p> <p>We aim for pupils to be advocates of safe, ethical and culturally appropriate use of digital technology. This includes safe online conduct at all stages of education and employment.</p>

3 YEAR PLAN

Give an overview of what your curriculum will achieve (in the classroom and through enrichment opportunities):

The Key Stage 3 (KS3) curriculum has been designed to expose students to the Key Stage 4 (KS4) qualifications that we offer in our department to allow them to choose the subjects if they wish at KS4.

Pupils in Y7 will have the opportunity to work on varied aspects of business, ICT and computing. Their digital literacy and online safety will be the focus upon beginning the year, with focus moving to more advanced skills in the development of programming skills and the ability to recognise different levels of data quality. All lessons will have similar outcomes and objectives but will be scaffolded and stretched based on individual needs and abilities within the mixed classes that the department teaches.

Pupils in Y8 and 9 will have the opportunity to continue work on varied aspects of both ICT and computing. Their digital understanding and online safety will continue to be the focus upon beginning the year, followed by the study of business theories, data analysis and Computer programming using varied languages. All topics will sequence but will vary in depth and rigor year on year.

Elements of Year 9 will be sequenced in these topics to give pupils a well-rounded understanding of the computing and programming fundamentals to prepare pupils for KS4 courses in Business, Digital Information Technology and Computer Science.

SKILLS

List the main skills pupils will learn and develop over the curriculum:

- To be digitally literate (Including the ability to use appropriate digital software and hardware to complete a task)
- To evaluate, critique and assess key computing issues.
- To work independently and collaboratively on given projects
- To decompose and abstract multiple problems independently.
- To build resilience and reduce the fear of failure when using digital hardware and software.
- To recognise the difference between appropriate and inappropriate use of technology

KNOWLEDGE

List the main subject knowledge pupils will learn and develop over the curriculum:

- Pupils will know a wide range of subject specific vocabulary (tier 3) and be able to use and recognise it accurately.
- Pupils will be able to use Tier 1 and 2 vocabularies appropriately in a computing context.
- Pupils will understand key computing processes and the reasons why these are conducted.
- Pupils will develop and remember knowledge of key computing concepts using recall that builds on prior learning and scaffolds their understanding.
- Pupils will develop knowledge of key computing terminology and be able to apply this knowledge to given case studies. Scenarios, and extended response questions.