



# IT 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 whom are able to 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>

## 5 YEAR PLAN

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

Pupils in Y10 have the option to select either GCSE Computer Science or BTEC Digital information Technology.

The curriculum at KS3 includes elements of both qualifications so that pupils are armed with the fundamentals that can be built upon in both subjects. In Y10 and 11, in both subjects, pupils will be exposed to expectations in question level response from the beginning of the year, this will allow them the opportunity to apply knowledge in the correct way to maximise exam and controlled assessment performance.

BTEC Digital information technology, pupils will draw upon previous content from KS3 to work on two project-based assignments based on data analysis and computer fundamentals, and a written exam, encompassing knowledge of how IT has impacted modern working practices, Computing Law and legislation.

The skills learnt from KS3 especially the skills developed using Microsoft Excel and PowerPoint will allow students to successfully complete the two coursework components and the theory units such as Safe Working Practices and Impact of ICT will allow give them a foundation in theory topics needed to complete Component 3.

## 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.