



Buile Hill
Academy

Enriching Lives, Inspiring Ambitions

Curriculum Guide For Parents: Computing



Consilium
Academies



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Our Vision and Approach in Computing

“We need technology in every classroom and in every student and teacher’s hand, because it is the pen and paper of our time, and it is the lens through which we experience much of our world.”

David Warlick

We believe a high-quality Computing education equips our young people to use computational thinking and creativity to understand and change the world. Computing provides insights into both natural and artificial systems, something of which is becoming more common on a daily basis.

The core of computing is computer science, pupils will be taught the key principles of information and computation, how digital systems work, and how to put this knowledge to use through the use of programming and how those programs help solve a variety of issues.

Students will build on this knowledge and understanding; pupils are equipped to use information technology to create programs, systems and a range of content.

At Buile Hill Academy our computing curriculum is constantly developing to encompass the new technologies that are release alongside important and key elements of digital literacy. Our new curriculum will provide students with new exciting challenges that will empower both students and teachers, this will ultimately allow students be creative and use their imagination. According to Douglas Engelbart (early computer pioneer) “the digital revolution is far more significant than the invention of writing or even printing.” Computing expertise has become one of the most important areas of contemporary learning and it is essential that our pupils learn and can apply the theories of computational thinking and become computer literate in the process.



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		Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Key Stage 3	Year 7	Topic 1 – Impact of Technology	Topic 2 – Using Media - Gaining Support	Topic 3—How do Computers Work Part 1	Topic 4 -How do Computers Work Part 2	Topic 5 - Networks	Topic 6 - Modelling Data - Spreadsheets
	Year 8	Topic 1 - Computer Systems	Topic 2 - Mobile App Development	Topic 3 - Developing for the web	Topic 4 - Media—Bitmap & Vector Graphic	Topic 5 – Data Representation	Topic 6 – Intro to text Based Programming
	Year 9	Topic 1 - Cyber Security	Topic 2 - Data Science	Topic 3 - Text Based Programming	Topic 4 - Representations Audio/Visual	Topic 5 - Physical Computing	Topic 6 – Future Technologies
Key Stage 4	Year 10 CS	Systems Architecture	Computer Networks, connections and protocols	Network Security & System Software	Ethical, Legal, cultural and Environmental impacts of digital technology	Algorithms	Programming Fundamentals
	Year 11 CS	Producing robust programs & Boolean Logic	Systems Architecture & Memory Storage	Networks	Revision	Revision	Revision
	Year 10 BS	<p>R067 (TA2): Market research; data; market segmentation*</p> <p>R068 (TA1): Market research; sampling methods; Using research tools; Review market research</p>	<p>R068 (TA2): Identify customer profile</p> <p>R068 (TA3): Create a design mix; Review and finalise design</p>	<p>R067 (TA3): Cost, revenue, profit and loss; break-even; cash*</p> <p>R068 (TA4): Financial viability</p>	<p>R068 (TA5): risks and challenges</p> <p>R068: NEA Assessment (working on)</p>	<p>R067 (TA4): Marketing mix; advertising medium; promotion*</p> <p>R069 (TA1): Branding; opportunities and threats</p> <p>R068: NEA Assessment (submit for moderation)*</p>	<p>R067 (TA4): PR; selling; product lifecycle; pricing strategies*</p> <p>R069 (TA2): Promotional plan and materials</p>
	Year 11 BS	<p>R069 (TA3): Planning a pitch and presentation skills</p> <p>R069 (TA3): Practice pitch; feedback; professional pitch</p> <p>R069 (TA4): Review brand, pitch, and skills</p> <p>R069: NEA Assessment (working on)</p>	<p>R067 (TA1): Entrepreneurial characteristics; risk and reward</p> <p>R069: NEA Assessment (working on)</p>	<p>R067 (TA5): Ownership; capital; support</p> <p>R067 (TA3): Cost, revenue, profit and loss; break-even; cash</p> <p>R069: NEA Assessment (submit for moderation)*¹</p>	<p>R067 (TA2): Market research; data; market segmentation</p> <p>R067 (TA4): Marketing mix; advertising medium; promotion; PR; selling; product lifecycle; pricing strategies</p>	<p>R067: Exam revision</p> <p>R068: Resubmission opportunity*¹</p> <p>R069: Resubmission opportunity*¹</p>	<p>R067: Exam revision</p> <p>R067: Examination (final opportunity)</p>



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What our students will learn

Computing at Buile Hill Academy aims to create;

Successful learners, who enjoy learning and problem solving, make good progress and achieving excellence. Responsible digital citizens who can make a positive contribution to society. Computing has become a fundamental building block of education, which enables all other subjects to work in one way or another. Technology is part of the 21st century society and from the moment learners begin their educational journey, computing takes a vital pivotal role within that. Computing is much more than just using a piece of technology, it focuses on problem solving, building resilience, creativity and teamwork. Our young people are going to be competing for the same careers in the future, the Office of National Statistics states that 1.5 million people are at risk of losing their jobs to automation. Computing is vital to ensure that the new jobs the automation will bring can be accessed by our young people. Computing is an ever evolving subject that has changed from ICT to Digital Literacy and then on to Computer Science. In order to ensure our students are prepared for future life we ensure the taught curriculum covers IT, Digital Literacy and Computer Science together.

How you can support your child's learning in Computing:

Students will have a knowledge organiser for each of their schemes of learning. Students can use these to test themselves on the core content throughout the term.

In addition to the use of knowledge organisers, students can carry out extra research.

Students must ensure they complete all homework to a high standard and take pride in their documentation.

Websites you can visit:

<https://www.bbc.co.uk/bitesize/subjects/zh3rkqt>

<https://www.reonline.org.uk/>

<https://isaacomputerscience.org/>

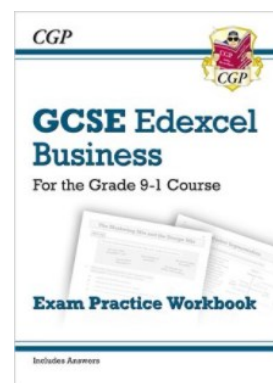
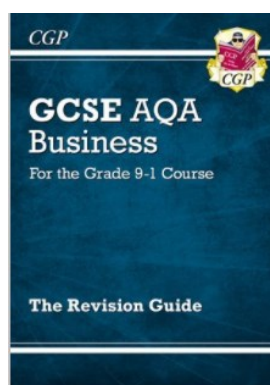
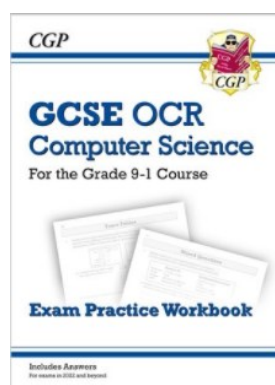
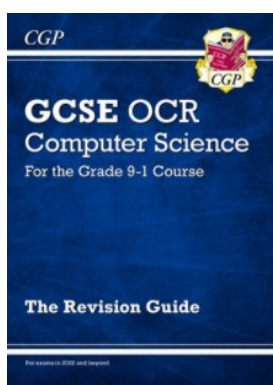
<https://senecalearning.com/en-GB/blog/gcse-computer-science-revision/>

<https://revisecomputerscience.com/>

<https://revisionworld.com/gcse-revision/business-studies>

<https://www.gcsebusiness.com/>

Books you can purchase:



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