

## Curriculum Map - KS5 Computer Science

**Subject: Computer Science**

**Year Group: Year 13**

	Autumn 1		Autumn 2		Spring 1		Spring 2		Summer 1		Summer 2	
	C 1	C 2	C 1	C 2	C 1	C 2	C 1	C 2	C 1	C 2	C 1	C 2
Content <i>Descriptive/ propositional knowledge</i>  <i>'knowing that'</i>	Programming Project		1.5 Computing related legislation, cultural, Ethical & moral issues	2.1 Elements of computational thinking	C1 Revision	2.2 Problem solving and programming  C2 Revision	Contingency C1 Revision	Contingency C2 Revision	Revision C1/C2  Study leave		Exams	
Skills <i>Ability knowledge</i>  <i>'knowing how'</i>	Learners are expected to demonstrate their ability to analyse, design, develop, test, evaluate and document a program		know how to assess the individual moral, social, ethical and cultural opportunities and risks of digital technology in a given scenario	know the key concepts of computational thinking: i.e Thinking abstractly  Thinking ahead  Thinking procedurally  Thinking logically  Thinking concurrently	Revision of key content from C1	able to use algorithms to describe problems and standard algorithms	Revision of ALL content from both units		Exam techniques			

Key Questions	How will I test my solution?  How will I get feedback from my stakeholders?	What are the Environmental effects of technology?  What ethical issues are related to Artificial intelligence	What are the key concepts of computational thinking	Where are the gaps in my knowledge? How can I best fill those gaps?	What is the best way to express an algorithm?	What areas do I need to revisit to strengthen my knowledge?  Which revision techniques work best for me?	How long is allocated for each exam?  How will my programming knowledge be assessed?	
Assessment  End of topic tests	The assessment materials for this qualification provide learners with the opportunity to demonstrate their ability to construct and develop a sustained line of reasoning and marks for extended responses are integrated into the marking criteria.	End of topic tests 1.5.1, 1.5.2	End of topic tests 2.1	Full exam past papers/Practice questions and feedback	End of topic tests 2.2, 2.3	Full exam past papers/Practice questions and feedback during lessons		
Literacy/ Numeracy/ Future	<p>Emphasis on the mathematical skills used to express computational laws and processes</p> <p>This qualification is suitable for learners intending to pursue any career in which an understanding of technology is needed.</p> <p>Students typically go on to degree level study in fields such as computer science, Cyber security, data science, mathematics, business.</p>							
Enrichment	<p>Cyber Discovery Challenge (new challenges every year).  <a href="https://joincyberdiscovery.com/">https://joincyberdiscovery.com/</a>  Virtual visit - Amazon Fulfilment Centre  <a href="https://www.hackerrank.com/">https://www.hackerrank.com/</a></p>							