## Year 11 Computer Science Revision Timetable Mock Exams November 2025

## Exams

You will have two mock exams.

1 hour Paper 1 Principles of Computer Science

1 hour Paper 2 Application of Computational Thinking on screen assessment

## You will be set weekly revision homework tasks that will be accessed via Teams

## **Revision Resources:**

Smart Revise <a href="https://smartrevise.online/">https://smartrevise.online/</a>

Quizlet <a href="https://quizlet.com/join/NjTer8TpC">https://quizlet.com/join/NjTer8TpC</a>

Isaac computer science <a href="https://isaaccomputerscience.org/">https://isaaccomputerscience.org/</a>

Ada Computer science <a href="https://adacomputerscience.org/">https://adacomputerscience.org/</a>

Revision sessions Monday lunchtime and afterschool in L2

Week	Topic	Revised & Tested?
von Neumann stored program concept and the		
role of main memory (RAM), CPU (control unit,		
arithmetic logic unit, registers), clock, address bus,		
data bus, control bus in the fetch-decode-execute		
cycle		
Embedded Systems understand the concept of an		
embedded system and what embedded systems		
are used for		
29 <sup>th</sup> September 2025	Secondary Storage	
	Understand the role of secondary storage and the	
	ways in which data is stored on devices (magnetic,	
	optical, solid state)	
6th October 2025	Operating Systems	
	Understand the purpose and functionality of an	
	operating system (file management, process	
	management, peripheral management, user	
	management)	
13 <sup>th</sup> October 2025	Utility Software	
	Understand the purpose and functionality of utility	
	software (file repair, backup, data compression,	
	disk defragmentation, anti-malware).	
	Robust Software	
	understand the importance of developing robust	
	software and methods of identifying vulnerabilities	
	(audit trails, code reviews)	

20th October 2025	Programming Techniques	
	Write algorithms that use variables and constants.	
	understand the benefits of using Subprograms	
	Data types	
	Flowcharting and programming constructs	
	sequence and repetition	
	Flowcharts, pseudocode*, program code) that use	
	sequence, selection, repetition (count-controlled,	
	condition-controlled) and iteration (over every item	
	in a data structure)	
	Arithmetic, relational operators and logical	
	operators	
27 <sup>th</sup> October 2025	Half term	
3 <sup>rd</sup> November 2025	Data Representation	
	Binary	
	Unsigned integers and two's complement signed	
	integers	
	Convert between denary and 8-bit binary numbers	
	(0 to 255, -128 to +127)	
	Binary Addition and subtraction	
	Binary Shifts add together two positive binary	
	patterns and apply logical and arithmetic binary	
	shifts	
	HEX why hexadecimal notation is used and be able	
10th Name and an 0005	to convert between hexadecimal and binary	
10 <sup>th</sup> November 2025	Data Representation	
	Character Sets how computers encode characters using 7-bit ASCII	
	<b>Bitmaps</b> how bitmap images are represented in binary	
	(pixels, resolution, colour depth)	
	<b>Sound</b> how analogue sound is represented in binary	
	(amplitude, sample rate, bit depth, sample interval)	
	Data Storage (bit, nibble, byte, kibibyte, mebibyte,	
	gibibyte, tebibyte) and be able to construct	
	expressions to calculate file sizes and data	
	capacity requirements.	
	Compression need for data compression and	
	methods of compressing data (lossless, lossy)	
<sup>17th</sup> November 2025	Paper 2: Programming Practice	
	Mock Paper 1	
24 <sup>th</sup> November 2025	Mock Paper 2	