

Curriculum Journey 2025-2026

Subject: Computer Science

Exam board: OCR J277

Year 10	Half Term 1	Half term 2	Half Term 3	Half Term 4	Half term 5	Half Term 6
Topic	Programming fundamentals	Programming fundamentals	Programming and IDE's	Programming and algorithms	Systems architecture	System software
Vocabulary	Variables Constants Input Output Operators Data types Casting Sequence Selection Iteration	String manipulation Count controlled Condition controlled Boolean logic Data MOD DIV Array	Integrated development environments High level language Machine code Sub program Procedure Function File handling	Computational thinking Abstraction Decomposition Searching algorithm Sorting algorithm Pseudocode Binary Unit Hexadecimal Binary shift	CPU Register Primary storage Secondary storage RAM ROM Virtual memory Optical Magnetic Solid state Embedded system	Operating system Memory management User interface Peripheral management Device driver User management Utility software Compression Encryption Defragmentation
Assessment	Milestone 1 x2 Recall rally	Milestone 2 x2 Recall rally	Summative assessment 1 x2 Recall rally	Milestone 3 x2 Recall rally	Summative assessment 2 x2 Recall rally	Milestone 4 x2 Recall rally
Links to prior learning	Python and programming units in KS3	Continuation of HT1 Python and programming units in KS3	Continuation of HT1 and HT2 Python and programming units in KS3	Computer systems, Python and programming units in KS3	Computer systems units in KS3	Computer systems unit in Y9



Catholic Social Teaching					Option for the poor Care for creation	Option for the poor Care for creation
Careers and Personal Development links	Career links: Programmers Personal development links: Digital literacy Resilience Critical thinking Problem solving	Career links: Programmers Personal development links: Digital literacy Resilience Critical thinking Problem solving **Bebras challenge	Career links: Programmers Personal development links: Digital literacy Resilience Critical thinking Problem solving	Career links: Programmers Personal development links: Digital literacy Resilience Critical thinking Problem solving **Coding challenge	Career links: Computer hardware engineering Personal development links: Digital literacy Critical thinking Problem solving Attention to detail	Career links: System administrator Personal development links: Digital literacy Critical thinking Problem solving Attention to detail