



SUBJECT: Curriculum Overview

Year 13

Term	Topic studied	What will I learn?	How will I be assessed?	Wider reading:
Autumn – Term 1	SLR 18 – Thinking Abstractly SLR 19 – Thinking Ahead SLR 20 – Thinking Procedurally SLR 21 – Thinking Logically SLR 22 – Thinking Concurrently	Abstract data modelling; anticipating inputs and outputs; decomposition and algorithm design; logical reasoning and truth tables; managing concurrent processes	Flipped learning via Craig’n’Dave; structured tasks; in-class questioning; SmartRevise quizzes; past exam paper questions; NEA project proposal and planning	Craig’n’Dave SLRs 18–22, SmartRevise, OCR H446 Spec, NEA planning documents
Autumn – Term 2	SLR 23 – Programming Techniques	Advanced programming in C# using modular design, robust error handling, defensive techniques, data validation, file I/O, and procedural structure	Flipped learning, SmartRevise assessments, code reviews, pair programming tasks, live coding challenges, NEA progress reviews	Craig’n’Dave SLR 23, C# NEA reference projects, SmartRevise
Spring – Term 3	SLR 24 – Computational Methods	Problem-solving strategies: divide and conquer, backtracking, brute force, heuristics, performance	Exam-style questions, flipped learning exercises, SmartRevise, group	Craig’n’Dave SLR 24, OCR Computational Thinking Guide, SmartRevise

		modelling and dry-running code	problem-solving, integration with NEA computational planning	
Spring – Term 4	SLR 25 – Algorithms SLR 26 – Advanced Algorithms	Dijkstra’s, A*, depth/breadth-first traversal, linear and binary searches, merge/quick/bubble sorts, performance analysis using Big-O notation	Timed algorithm questions, whiteboard walkthroughs, SmartRevise, flipped learning tasks, mock paper prep	Craig’n’Dave SLRs 25–26, OCR Past Papers, SmartRevise
Summer – Term 5	NEA Final Submission and Exam Revision	Final NEA write-up including testing, evaluation, and user feedback; full exam preparation for Paper 1 and Paper 2; gap analysis using SmartRevise	Final NEA assessment submission; class-based and individual revision using past papers and SmartRevise; teacher-led intervention sessions	OCR NEA Checklist, OCR Mark Scheme, Craig’n’Dave Revision Playlists, SmartRevise, Past Exam Papers