



Department:	Computer Science				
Year 10 Course summary:					
<p>In Year 10, the emphasis is on covering the majority of the Unit 1 theory. Students are introduced to a wide variety of technical terms and concepts, covering the intricate workings of the CPU, the OS and the compilation process. Equally important is the continued development of practical skills, albeit with a greater focus on exam-style questions and tasks. Towards the end of the year, students undertake a practice NEA style project (15 hours) in order to familiarise themselves with the work regime, structure and extended scope of the challenge.</p> <p><b>New Topics Covered:</b></p> <p>1.1 Systems Architecture  1.2 Memory  1.7 Systems Software  1.8 Ethical, Legal, Cultural and Environmental Concerns</p> <p>2.1 Algorithms – continued work, especially sorting and searching methods  2.2 Programming Techniques – continued work on arrays, records and files  2.3 Producing Robust Programs – continued work on testing and sanitisation</p> <p>Assessment of students’ work focuses on confirming knowledge and understanding of new material, including regular topic tests and practice essays. Practical skills are assessed through programming “showcases” of key algorithms (searching, sorting) and longer projects.</p> <p>There are a number of extra-curricular opportunities available to students. There are two lunchtime support sessions each week, opportunities to assist with Digital Schoolhouse workshops for local primary schools and an “open access” policy for students’ own programming projects. Students may also take part in the popular Esports competitions.</p>					
IST Assessments:					
Michaelmas 1	Michaelmas 2	Lent 1	Lent 2	Summer 1	Summer 2
Flowchart and pseudocode task	File handling task	Practice NEA part 1(needs to change for 2019)	Practice NEA part 2 (needs to change for 2019)	CPU essay	Database project