

Programme of study for Year 13 Computer Science

Autumn (1 st term) Topic	Autumn (2 nd term) Topic	Spring (1 st term) Topic	Spring (2 nd Term) Topic	Summer (1 st term) Topic	Summer (2 nd term) Topic
<p>Component 1 Unit 1: 1.2.1 Systems Software (Part abcde) 1.3.3 Networks</p> <p>Component 2: 2.3.1 Algorithms: Analysis, Big (O) notation, Linear search, Binary search. Bubble & Insertion sort</p> <p>Component 3: (NEA) Project analysis- Project Design</p> <p>Skills: Research, planning, time management.</p>	<p>Component 1: 1.3.4 Web Technologies</p> <p>Component 2: 2.3.1 Standard Algorithms: Merge and Quick sort Graph traversal algorithms, 2.3.1 Optimisation Algorithms</p> <p>Component 3: (NEA) Project Implementation and Testing</p> <p>Skills: Time Management</p>	<p>Component 1: 1.2.1 Systems software (fgh) 1.2.2 Applications General Part (a-f) 1.4.1DataTypes 1.2.4 (Part c) LMC</p> <p>Component 2: Component 3: (NEA) Project Testing and Evaluation</p> <p>Skills: Research and knowledge of Current Affairs. Logical thinking</p>	<p>Component 1: 1.4.3 Boolean algebra</p> <p>Component 2: Revision 2.2.2Computational Methods(f)</p> <p>Skills: Study skills</p>	<p>Component 1: EXAM</p> <p>Component 2: EXAM</p> <p>Skills: Research and responsibility for self study</p>	Sign off
<p>End of term 1 evidence to cover: Mini Revision Tests / Project</p>		<p>End of term 2 evidence to cover: Mock exam</p>		<p>End of year evidence to cover:</p>	
<p>Rationale for sequence: Helping students understand the time complexity of algorithms they may produce and use in their project. New topic networking</p>	<p>Rationale for sequence: Better understanding of the WWW & Internet Understanding more challenging standard algorithms. Progressing project.</p>	<p>Rationale for sequence: Boost to project progress Deepen understanding of Binary for –ve numbers and fractional parts</p>	<p>Rationale for sequence: Simplifying complex boolean logic statements. Looking at common uses of optimisation algorithms. Final project work</p>	<p>Rationale for sequence: Gearing up revision based on need</p>	<p>Rationale for sequence:</p>
<p>Home – Learning: Related to topic covered or revision Project analysis- Project Design</p>	<p>Home – Learning: Related to topic covered or revision Project Implementation and Testing</p>	<p>Home – Learning: Related to topic covered or revision Project work</p>	<p>Home – Learning: Revision</p>	<p>Home – Learning:</p>	<p>Home – Learning:</p>

Reading / High Quality Text: Technical language using manuals	Reading / High Quality Text: Technical language using manuals. News articles related to Legal moral ethical issues	Reading / High Quality Text: Technical language using manuals. News articles related to Legal moral ethical issues	Reading / High Quality Text: Text:	Reading / High Quality Text:	Reading / High Quality Text:
Numeracy: Order of Magnitude	Numeracy: Page ranking calculations	Numeracy: Boolean expressions	Numeracy:	Numeracy:	Numeracy:

Enrichment / opportunities to develop cultural capital (including careers, WRL and SMSC):

Consider taking a MOOC to help with Uni Course at the end of the year.