Curriculum Plan (AQA GCSE Computer Science)

Year 10	Knowledge (Topics covered, NC links)	Subject Skills	Key Assessment	Literacy and Numeracy	School values (Attitude / Achievement / Community / Endeavour)	Extra curricular opportunities	Personal development (Character, SMSC, Fundamental British values, Careers guidance, healthy living, Citizenship, equality and diversity, financial capability, preparation for next stage)
Term 1	**Algorithms:** Decomposition & abstraction Flowcharts & pseudocode Sorting algorithms Searching algorithms Programming basics: Data types Sequence & selection Iteration (FOR) Iteration (WHILE)	Independent enquiry skills Team working skills Creative thinking skills Reflective learning skills Effective participation skills Self-management skills	End of unit assessments: **Algorithms** **Half term one** **Programming** **(Half term two)**	We recognise the importance of developing high level literacy and numeracy skills and for this reason all topics that are delivered have a focus on the development of students' literacy and numeracy skills.	Attitude – Students are expected to come to lessons with the attitude to learn in order to ensure that they reach their full potential. Achievement – We celebrate the successes of our students using epraise Endeavour – Students are given opportunities to practice their skills both inside and outside of their class. Perseverance is essential when learning any computing	iDEA Dukeof York Inspiring Digital Enterprise https://idea.org.uk/ Coding club Cyber Discoveries	Basic ICT skills essential/ICT literacy for future success in many subjects and job roles. Developing the student's digital fluency and the ways in which they can become more confident and safe digital citizens. Aiming to create digitally literate students who have the ability to use and express themselves and develop their ideas through, information and communication technology – at a level suitable for the future workplace and as active participants in a digital world. • **Respect civil and criminal law** - • **laws relating to the use of IT and the internet** • **Appreciate viewpoints of others on ethical issues**

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					language – practice is the key.		• **Acceptance and engagement with fundamental British Values of democracy** • **Contribute positively to life in modern Britain**
Term 2	**Computer Systems:** Boolean logic System architecture The CPU Memory Secondary storage **Programming (3):** Arrays and Records	Independent enquiry skills Team working skills Creative thinking skills Reflective learning skills Effective participation skills Self-management skills	**End of unit assessments:** Computer systems PPEs	We recognise the importance of developing high level literacy and numeracy skills and for this reason all topics that are delivered have a focus on the development of students' literacy and numeracy skills.	Attitude – Students are expected to come to lessons with the attitude to learn in order to ensure that they reach their full potential. Achievement – We celebrate the successes of our students using epraise Endeavour – Students are given opportunities to practice their skills both inside and outside of their class. Perseverance is essential when learning any computing language –	iDEA Dukeof York Inspiring Digital Enterprise https://idea.org.uk/ Coding club Cyber Discoveries	Basic ICT skills essential/ICT literacy for future success in many subjects and job roles. Developing the student's digital fluency and the ways in which they can become more confident and safe digital citizens. Aiming to create digitally literate students who have the ability to use and express themselves and develop their ideas through, information and communication technology – at a level suitable for the future workplace and as active participants in a digital world. • **Respect civil and criminal law -** • **laws relating to the use of IT and the internet** • **Appreciate viewpoints of others on ethical issues**

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Term 3	**Data Representation (I):** Storage units & binary numbers Binary arithmetic Denary – binary – hex conversion Character sets	Independent enquiry skills Team working skills Creative thinking skills Reflective learning skills Effective participation skills Self-management skills	**End of unit assessments:** Data Representation SQL	We recognise the importance of developing high level literacy and numeracy skills and for this reason all topics that are delivered have a focus on the development of students' literacy and numeracy skills.	Attitude – Students are expected to come to lessons with the attitude to learn in order to ensure that they reach their full potential. Achievement – We celebrate the successes of our students using epraise Endeavour – Students are given opportunities to practice their skills both inside and outside of their class. Perseverance is essential when learning any computing language –	iDEA Dukeof York Inspiring Digital Enterprise https://idea.org.uk/ Coding club Cyber Discoveries	Basic ICT skills essential/ICT literacy for future success in many subjects and job roles. Developing the student's digital fluency and the ways in which they can become more confident and safe digital citizens. Aiming to create digitally literate students who have the ability to use and express themselves and develop their ideas through, information and communication technology – at a level suitable for the future workplace and as active participants in a digital world. • **Respect civil and criminal law** - • **laws relating to the use of IT and the internet** • **Appreciate viewpoints of others on ethical issues** • **Acceptance and engagement with**

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	SQL/Databases **Learn about how to use SQL and some simple functions work working with database**						