Year 9 Curriculum Overview			
Rationale: The Year 9 curriculum is designed to give students an introduction to the field of cyber security whilst developing further their prior learning on programming skills (both HTML and Python), computational thinking, how to stay safe online, data representation and historical events from Year 7 and Year 8 whilst preparing them for further study at GCSE and the world of work.			
Term/Length of Time	**Outline**	**Assessment/Teacher Feedback Opportunities**	**Homework and Literacy resources**
Autumn 1	**Cyber Security** Students will gain an understanding of the main concepts of cyber security through an online platform called 'Cyber Explorers' developed by the Department for Digital, Culture, Media and Sport (DCMS).	MS Forms based end of unit assessment. Mixture of Open and Closed questions with an additional focus on keywords/literacy	**Minimum homework expectation - to be set on G4S** Completion of revision activity using Seneca Learning or bespoke learning activity **Optional homework tasks and Literacy resources** Creation of revision resource (e.g. mind map) to be submitted alongside compulsory activity Complete some Bronze Award badges on the iDEA Award to showcase digital literacy and employability skills. Once complete students can move to Silver and then Gold certificates Access BBC Bitesize and research more into this topic Complete an activity on Hour of Code Watch an episode of BBC Click on the BBC iPlayer Additional Reading for Budding Computer Scientists: Choose a book from this recommended reading list some of which can be found in the department or the library
Autumn 2	**Introduction to Python Programming** Students will recap on prior learning form Year 8 and develop their understanding and	MS Forms based end of unit assessment. Mixture of Open and Closed questions with an additional focus on keywords/literacy	**Minimum homework expectation - to be set on G4S** Completion of revision activity using Seneca Learning or bespoke learning activity **Optional homework tasks and Literacy resources**

	capabilities in using a high level programming language by exploring the use of selection and iteration.		Creation of revision resource (e.g. mind map) to be submitted alongside compulsory activity

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Access BBC Bitesize to recap on programming basics and research more into the topic of selection here and iteration here

Complete an activity on Hour of Code

Watch an episode of BBC Click on the BBC iPlayer

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| Spring 1 | **Searching and Sorting Algorithms**
Students will learn about the standard searching algorithms (Binary and Linear) and standard sorting algorithms (Bubble, Merge and Insertion).
Students will need to be able to understand the main steps of each algorithm and apply the algorithm to a given data set. | MS Forms based end of unit assessment.
Mixture of Open and Closed questions with an additional focus on keywords/literacy | **Minimum homework expectation - to be set on G4S**
Completion of revision activity using Seneca Learning or bespoke learning activity

Optional homework tasks and Literacy resources
Creation of revision resource (e.g. mind map) to be submitted alongside compulsory activity

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Spring 2	**HTML Programming - Web Page** Students will recap and embed their understanding on how to create a simple webpage from Year 7. In addition, students will learn about the use of CSS and DIV tags to improve web page layout.	MS Forms based end of unit assessment. Mixture of Open and Closed questions with an additional focus on keywords/literacy/numeracy	**Minimum homework expectation - to be set on G4S** Completion of revision activity using Seneca Learning or bespoke learning activity **Optional homework tasks and Literacy resources** Creation of revision resource (e.g. mind map) to be submitted alongside compulsory activity Complete some Bronze Award badges on the iDEA Award to showcase digital literacy and employability skills. Once complete students can move to Silver and then Gold certificates Access BBC Bitesize to recap on learning from Year 7 here and learn about the new Year 8 topics here Complete an activity on Hour of Code Watch an episode of BBC Click on the BBC iPlayer Additional Reading for Budding Computer Scientists: Choose a book from this recommended reading list some of which can be found in the department or the library

| Summer 1 | **Cyber Missions** Students will take their cyber security skills development to the next level after completing cyber explorers. Students begin by learning how to investigate compromised systems and secure networks. This is done through a series of engaging activities, games, quizzes and puzzles, helping students develop their problem solving, attention to detail and cyber security skills. Students will get to grips with the Computer Misuse Act and are introduced to the National Cyber Agency's Cyber Choices program, which aims to teach them how to make the right decisions in how they use technology legally and ethically. These cyber security skills will allow students to contribute to a safer society in their future world of work. This unit of learning is developed by the Department for Digital, Culture, Media and Sport (DCMS). | MS Forms based end of unit assessment. Mixture of Open and Closed questions with an additional focus on keywords/literacy/numeracy | **Minimum homework expectation - to be set on G4S** Completion of revision activity using Seneca Learning or bespoke learning activity

Optional homework tasks and Literacy resources Creation of revision resource (e.g. mind map) to be submitted alongside compulsory activity

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Summer 2	**Creating a Non-Linear Story Game Using Twine** This unit aims to provide students with the skills to use Twine software to create interactive, nonlinear stories. It allows students to create a visual novel through its story builder. In addition to being heavily linked to literacy it allows students to learn basic coding to create a narrative with branching paths. The platform provides an easy way for students to create their own digital stories and adventures.	Verbal teacher feedback on production of a branching, non-linear story/game. Recognition and rewards for additional activities completed beyond the classroom.	**Minimum homework expectation - to be set on G4S** Completion of revision activity using Seneca Learning or bespoke learning activity **Optional homework tasks and Literacy resources** Creation of revision resource (e.g. mind map) to be submitted alongside compulsory activity Complete some Bronze Award badges on the iDEA Award to showcase digital literacy and employability skills. Once complete students can move to Silver and then Gold certificates Develop your Twine adventure/story by following this video playlist Complete an activity on Hour of Code Watch an episode of BBC Click on the BBC iPlayer Additional Reading for Budding Computer Scientists: Choose a book from this recommended reading list some of which can be found in the department or the library