		LTP forKS3 computing		
		Y7	**Y8**	**Y9**
Autumn 1	Key area of understanding	• **Technology at school** • **Making things move** • **Being safe and responsible online**	• **Making things move** • **Being safe and responsible online**	• **Making things move** • **Being safe and responsible online**
	Knowledge & skills development	❖ **Logging into Purple Mash and using a virtual platform.** ❖ Identify what technology is. ❖ Can identify technologies in school. ❖ Can compare old and new technologies. ❖ Can explain that an algorithm is a set of instructions. ❖ Can work out what is wrong when the steps are out of order in instructions. ❖ I can make predictions of what is going to happen in a program. ❖ Creating a secure password.	❖ Can explain an algorithm is a set of instructions to complete a task. ❖ Carefully plan an algorithm so it will work when written in code. ❖ Design a simple program using 2Code that achieves a purpose. ❖ Find and correct some errors in a program. ❖ Can say what will happen in a program. ❖ Can spot something in a program that has an action or effect something. ❖ Physical bullying and technology.	❖ Can make a real-life situation into an algorithm for a program. ❖ Can design an algorithm carefully, thinking about what I want it to do and how it can be turned into code. ❖ Can identify an error in my program and fix it. ❖ Can experiment with timers in programs. ❖ Can identify the difference between the effect of a timer or repeat command in a code. ❖ Know that a variable stores information while a program is running. ❖ Can read programs with several steps and predict what it will do. ❖ Uploading images.
Autumn 2	Key area of understanding	❖ **Database and graphics** ❖ **Being safe and responsible online**	❖ **Database and graphics** ❖ **Being safe and responsible online**	❖ **Handling data** ❖ **Being safe and responsible online**
	Knowledge & skills development	❖ Understand that data can be represented in picture format. ❖ Can contribute to a class pictogram. ❖ Can discuss what a pictogram shows. ❖ Use a pictogram to record the results of an experiment. ❖ Identifying familiar and unfamiliar people.	❖ Show that the information provided on pictograms is of limited use beyond answering simple questions. ❖ Use yes/no questions to separate information. ❖ Construct a binary tree to separate different items. ❖ Use a binary tree to answer questions. ❖ Use a database to answer more complex search questions. ❖ To use the Search tool to find information. ❖ Protecting personal data (Identification).	❖ Can collect data and input it into software. ❖ Can analyse data using features within software to help create a formula. ❖ Can present data and information using different software to create databases or graphs. ❖ Can consider what the most appropriate software to use when given a task. ❖ Can create purposeful content and attach this to emails. ❖ Downloading music.
Spring 1	Key area of understanding	• **Being safe and responsible online** • **Digital animations**	• **Being safe and responsible online** • **Digital animations**	• **Communicating with the world** • **Being safe and responsible online**
	Knowledge & skills development	❖ Know the difference between a traditional book and an e-book. ❖ To add animation to a story. ❖ Add sound to a story, including voice recordings and music. ❖ Adding backgrounds and copying and pasting pages ❖ Share e-books on a class display board. ❖ Identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies.	❖ To look at the impressionist style of art (Monet, Degas, Renoir). ❖ Recreate pointillist art and look at the work of pointillist artists such as Seurat. ❖ To look at the work of Piet Mondrian and recreate it using the Lines template. ❖ To look at the work of William Morris and recreate it using the Patterns template. ❖ To explore surrealism and eCollage. ❖ Protecting personal data (Images). ❖ Identify where to go for help and support when	❖ Can carry out searches to find digital content on a range of online systems. ❖ Can consider what the most appropriate software to use when given a task. ❖ Online gaming.

			they have concerns about content or contact on the internet or other online technologies.	
Spring 2	**Key area of understanding**	• **Music and videos** • **Being safe and responsible online**	• **Music and videos** • **Being safe and responsible online**	• **Email** • **Being safe and responsible online**
	Knowledge & skills development	❖ To explore, edit and combine sounds. ❖ To add sounds to music already created to change it. ❖ How music can be used to express feelings and create music which depicts feelings. ❖ To upload and record own sounds. ❖ Age restrictions for games and films.	❖ To identify and discuss the main elements of music. (Pulse, rhythm and tempo). ❖ To understand and experiment with rhythm and tempo. ❖ To create a melodic phrase. ❖ To compose a piece of music. ❖ Social media and keeping safe (Facebook).	❖ Can identify different ways that the internet can be used for communication. ❖ Can use email to respond to others appropriately and attach files. ❖ Can create purposeful content and attach this to emails. ❖ Can explain the importance of having a secure password and not sharing it with others. ❖ Can explain the negative consequences of not keeping passwords safe and secure. ❖ Can use communication tools respectfully and use good etiquette. ❖ Fake news.
Summer 1	**Key area of understanding**	• **Handling data** • **Database and graphics** • **Being safe and responsible online**	• **Handling data** • **Database and graphics** • **Being safe and responsible online**	• **Database and graphics** • **Being safe and responsible online**
	Knowledge & skills development	❖ Can navigate around a spreadsheet. ❖ Explain what rows and columns are. ❖ Can enter data into cells. ❖ Use the 'lock' tool to prevent changes to cells. ❖ Can use a counting tool. ❖ Can include audio in a spreadsheet. ❖ Cyber bullying and technology.	❖ Can you copying and pasting to create spreadsheets. ❖ Use tools in a spreadsheet to automatically total rows and columns. ❖ Use a spreadsheet to solve mathematical puzzles. ❖ Can use a spreadsheet to calculate monetary values. ❖ Can create a table of data on a spreadsheet. ❖ Can use data to create graphs. ❖ Social media and keeping safe (Instagram).	❖ Can collect data and input it into software. ❖ Can analyse data using features within software to create formulas. ❖ Can present data and information using different software to create branching databases. ❖ Can create purposeful content and attach this to emails. ❖ Online influencers and vloggers.
Summer 2	**Key area of understanding**	• **Communicating with the world** • **Being safe and responsible online**	• **Communicating with the world** • **Being safe and responsible online**	• **Computer hardware and graphics** • **Being safe and responsible online**
	Knowledge & skills development	❖ Understand typing terminology. ❖ Understand the correct way to sit at a keyboard. ❖ Learn how to use the top, home and bottom row keys. ❖ Spatial awareness of how to type with each hand. ❖ Verbal bullying and technology.	❖ Identify the purpose of writing a blog. ❖ Plan the theme and content for a blog. ❖ Changing the visual properties of a blog. ❖ Understand the importance of regularly updated a blog. ❖ Identify e-safety issues with writing and commenting on blogs. ❖ Social media and keeping safe (Whatsapp).	❖ Can identify input and output devices. ❖ Identify technology in our environment. ❖ Online payments.

The above LTP demonstrates the progression and curriculum offer for the core of learners within the identified year group.

MTPs, that can be viewed and discussed upon request, provide in depth details for the full range of St Hugh's learners.

All writing in red shows the sequential learning of safety embedded across every year group.

		Edexcel BTEC LTP for KS4 computing	
		Y10	**Y11**
Autumn 1	**Key area of understanding**	❖ **Making things move** ❖ **Being safe and responsible online**	❖ **Making things move** ❖ **Being safe and responsible online**
	Knowledge & skills development	❖ Can turn a real-life situation to solve into an algorithm, using a design that shows how I can accomplish this in code. ❖ Can use repetition in code using a loop that continues until a condition is met such as the correct answer being entered. ❖ Can use timers within my program designs to create repetition effects. ❖ Can use selection (decisions) in programming. ❖ Use variables within a program and know how to change the value of variables. ❖ Can identify errors in code by using different methods, such as steeping through lines of code and fixing them. ❖ Can read programs that contain several steps and predict the outcomes with increasing accuracy. ❖ Can create purposeful content and attach this to emails.	❖ Can make more complex real-life problems into algorithms for a program. ❖ Can test and debug a program as it's created. ❖ Convert algorithms that contain sequence, selection and repetition into code that works. ❖ Use sequence, selection, repetition, and some other coding structures. ❖ Can organise my code carefully for example, naming variables and using tabs. ❖ Can use logical methods to identify the cause of any bug with support to identify the specific line of code. ❖ Can make appropriate improvements to digital work created. ❖ Influences of technology on health and well-being.
Autumn 2	**Key area of understanding**	❖ **Communicating with the world.** ❖ **Being safe and responsible online**	❖ **Communicating with the world.** ❖ **Being safe and responsible online**
	Knowledge & skills development	❖ Know what a Powerpoint is. ❖ Add text and format it. ❖ Insert slides into a presentation. ❖ Insert video and audio. ❖ Can add transitions. ❖ Can add timings. ❖ Social media and keeping safe (TikTok).	❖ Know what a word processing tool is used for. ❖ Add and edit images in a word document. ❖ Use word wraps with text and images. ❖ Change the appearance of text. ❖ Add features to enhance the look of a word document. ❖ To use and insert a table. ❖ How to use templates and convert to PDFs. ❖ Changing page layouts. ❖ Influences of technology on the environment.
Spring 1	**Key area of understanding**	❖ **Handling data** ❖ **Being safe and responsible online**	❖ **Handling data** ❖ **Being safe and responsible online**
	Knowledge & skills development	❖ Can format a cell. ❖ Make conversions. ❖ Can learn and use simple formulas. ❖ Combine tools to make activities. ❖ Use a spreadsheet to model a real life situation. ❖ Make automatic calculation in cells. ❖ Social Media (Gaming).	❖ Using the formula wizard to add a formula to a cell to make a calculation. ❖ Copy and paste within cells. ❖ Using function tools to test a hypothesis. ❖ Using a spreadsheet software to answer questions. ❖ Identifying secure websites by using a privacy setting.

	Key area of understanding	❖ **Communicating with the world.** ❖ **Being safe and responsible online**	❖ **Databases and graphics** ❖ **Being safe and responsible online**
Spring 2	Knowledge & skills development	❖ How font size and style can affect the impact of a text. ❖ Use simulated scenarios to produce a news report. ❖ Use simulated scenarios to write for a community campaign. ❖ Identity theft ❖ How to stay protected online from fraud. ❖ How digital uploads lead to a digital footprint.	❖ How to search for information in a database. ❖ Sort, group and arrange information in a database so it is easy to read, understand and interpret. ❖ Create a statistics report using data from a database and sharing it with an audience. ❖ Screen time (What is the recommended daily usage?).
	Key area of understanding	❖ **Making things move** ❖ **Digital animations** ❖ **Being safe and responsible online**	❖ **Digital animations** ❖ **Being safe and responsible online**
Summer 1	Knowledge & skills development	❖ Can read programs that contain several steps and predict the outcomes with increasing accuracy. ❖ Can learn specific coding language for specific apps/devices. ❖ Create letters and shapes. ❖ Be able to use a repeat function. ❖ Can use and build procedures. ❖ What makes a good animation or cartoon? ❖ How animations are created by hand. ❖ Use onion skinning for animation. ❖ Using stop motion techniques. ❖ Share digital work into a blog.	❖ Use a CAD computer program or app for 3D design. ❖ Explore the effect of moving points when designing a product. ❖ Designing a product for a specific purpose. ❖ Understand the logistics of printing and making. ❖ Designing and handling net designs. ❖ Making payments online.
	Key area of understanding	❖ **Computer hardware and software** ❖ **Being safe and responsible online**	❖ **Communicating with the world.** ❖ **Being safe and responsible online**
Summer 2	Knowledge & skills development	❖ Understand that network and communication components can be found in many different devices which allow them to join the internet. ❖ Understand the purpose of a search engine and the main features within it. ❖ Can look at information on a webpage and make predictions about the accuracy of information contained within it. ❖ Recognise the main component parts of hardware which allow computers to join and form a network. ❖ Can work collaboratively to create content and solutions. ❖ Plagiarism.	❖ Using visual representations when generating and discussing complex ideas. ❖ Creating a concept map and selecting an appropriate app/software. ❖ Presentation features when sharing information with an audience. ❖ Understand the concept of virtual collaboration. ❖ GDPR regulations and taking personal information off site.

The above LTP demonstrates the progression and curriculum offer for the core of learners within the identified year group. Students will not be taught directly from accreditation specifications.

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