

Computing in Year 9 at Cottenham Village College. Our aim is for every child in Cottenham Village College to have a world-leading computing education. We believe our pupils should know the fundamental principles of computer science and be encouraged to engage with digital technologies which will equip them for life and at work. Our curriculum has been designed to be inclusive and allow pupils the opportunity to problem-solve, create and use collaborative skills.

At Cottenham VC, we routinely use a range of strategies to formatively assess and give feedback about our learners' progress. In computing, these strategies include low-stake quizzes, questioning in class, homework, observations in lesson and the use of digital worksheets and workbooks on Teams.

Y9 Autumn Term	Topic	Topic
Key subject knowledge:	IT and the world of work	Media – video editing
Key disciplinary knowledge:	Learners will use their IT skills to create a business proposal which demonstrates good understanding of the marketing mix, cash-flow forecasting and the importance of profit and return on investment. The unit will facilitate a deeper understanding of the methods employed by organisations to demonstrate cash-flow forecasting and spreadsheet budgeting. The project ends with a final business proposal and presentation which is used to persuade others to invest in their business venture.	By completing this unit learners will gain a greater understanding of how video editing is used to make the media products that we consume. Sessions will take learners through the basics of camera angles and techniques, analysing advertisements and manipulating short videos using the open-source, cross platform software Shotcut.
Summative Assessment Strategies	KS3 Assessment skills demonstration in lesson and on Teams. Multiple-choice knowledge quiz Homework	KS3 Assessment skills demonstration in lesson and on Teams. Multiple-choice knowledge quiz

Y9 Spring Term	Topic	Topic
Key subject knowledge:	3D Games Design	Networks
Key disciplinary knowledge:	Computer games, special effects, advertising, and architecture have been revolutionised by computer-based 3D modelling and animation. In this unit, learners will discover how professionals create 3D animations using the professional software package, Maya.	Computer networks have become an integral part of our daily lives. This unit allows learners to explore how a computer network works from the hardware required to the protocols used for communication
Summative Assessment Strategies	KS3 Assessment skills demonstration in lesson and on Teams. Multiple-choice knowledge quiz Homework	KS3 Assessment skills demonstration in lesson and on Teams. Multiple-choice knowledge quiz

Y9 Summer Term	Topic	Topic
Key subject knowledge:	Python - Lists	HTML
Key disciplinary knowledge:	<p>This scheme of work teaches students how to use lists when working with Python. They will learn about:</p> <ul style="list-style-type: none"> • Setting up and using lists • The purpose of index positions within a list • Inserting, adding, removing, modifying items in a list • Searching for items in lists • Using numerical data with lists • Using the random module to select items from a list • Using the range function to select items from a list • Using random choice to select items from a list 	Pupils will gain an understanding of how websites are displayed within a browser using HTML. Students should be able to then create a very simple HTML page and display it in the web browser, create hyperlinks between pages stored locally, and experiment with CSS by applying styling to tags.
Summative Assessment Strategies	KS3 Assessment skills demonstration in lesson and on Teams. Multiple-choice knowledge quiz	KS3 Assessment skills demonstration in lesson and on Teams. End-of-year assessment

