Computing department curriculum intent

Department curriculum intent:

Our Vision: we are aiming to make sure that all students:
- ♣ Can understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation
- ♣ Can analyse problems in computational terms, and have repeated practical experience of writing computer programs in order to solve such problems
- ♣ Can evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems
- ♣ Are responsible, competent, confident and creative users of information and communication technology.

It is the aim of the department to enable students to develop skills and knowledge in computer science and digital technologies to prepare them for a future in a world where the use of this technology is fully embodied.   We wish to enthuse students to have an understanding far deeper than the interface that they currently operate, particularly in our current climate where Computing skill and understanding has become even more crucial.

We aim to enable students to develop a love of learning for the subject and an understanding that there are no limits to their own development in programming and IT. An important life skill for anyone is to problem solve. Using the strands of computational thinking will aid learners with their Computer Science studies and, as it is embedded within everyday life activities, they will understand that they cannot run before they can walk.   Students will be given guidance on how to work safely online so that it will be second nature to carry out all the necessary steps for their own safety as well as those around them.

At KS3, students are given the opportunity to develop their computer coding and digital technology skills. Learning the language of code is an important added bonus as students who develop their coding skills will be able to grasp the magic behind the computers. This will allow them to take their studies onto KS4 and to Further and Higher education if they desire and ultimately secure a career within a large range of industries. Our KS3 Computing curriculum covers the full range specified by the DFE and prepares our KS3 for GCSE by including challenging tasks or topics found in the next level of education, such as quick sort, recursion and big O notation, which is more often seen at GCSE and A level. Additional aspects, such as Machine learning, allow students to have a deeper understanding of how the digital world works around them. Covering aspects such as looking for the cables that connect their computers to the server in school, looking out for the 3G/4G mast in their area and comparing rural vs urban data transfer speeds forges a connection to their local environment.

At KS4, we offer 2 pathways, GCSE Computing and Cambridge technical in Creative imedia, thus catering for the 'Programmers' and the 'creatives'. In the past, we have drawn inspiration from their local area via their Controlled assessment briefs, for example, the photography unit for the summer exam series 2020, we had planned for and were ready to photograph Settle town architecture and had liaised with local businesses to identify potential issue areas. A previous website unit had students looking for activities in their local area to encourage teens to rediscover their local area.

At KS5, Cambridge Technical in IT, students can, and do, draw from experience in both GCSE Computing and Creative imedia to develop an in depth understanding of Computing fundamentals and Global data. They undertake 3 creative projects, including the opportunity to program via the games unit, thus allowing them to undertake a variety of career pathways in the IT industry.

Year 7

Overall curriculum intent for year 7: To become confident in the use of Settle College's online network and productivity tools (365, Teams and Arbor), to be aware of online risks and how to counter them and to develop and apply skills in various software to create digital products (Web page, video, scratch).

	Half term 1	Half term 2	Half term 3	Half term 4	Half term 5	Half term 6
Intent for the half term	Know my way around the school's network and learning platforms Apply knowledge to use them appropriately		Understand how to keep yourself safe online and be a responsible Internet user Develop skill in specialist software		To know what an algorithm is and write them using pseudocode and flowcharts Learn programming constructs and apply them to develop a game	
Content mapping	One drive, email, Word, PowerPoint and Teams chat, assignments and meetings	Teams class notes, sway to plan research create a web publication, iDEA	Packet switching, internet risks (personal), video creation, internet risks and prevention to devices and data,	HTML and CSS web authoring	Flowcharts and pseudocode, program analysis, programming constructs, game development on Scratch	
Disciplinary knowledge	Select, use and combine software on a range of digital devices to create digital products, that accomplish given goals, including collecting, analysing, Evaluating and presenting data Use search technologies effectively, be discerning in evaluating digital Content		Use technology safely, respectfully and responsibly	evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems	Apply the fundamental principles and concepts of computer science, including abstraction, sequence, selection and repetition, logic & algorithms Design, write and debug programs that accomplish specific goals Use logical reasoning to find and correct errors in algorithms and programs.	
Assessment mapping (Quizizz every lesson)	PowerPoint	Sway end of unit test	esafety video & internet risks Classnotes page	Web page end of unit test	Flowcharts worksheet Program analysis	Scratch game end of unit test
Personal development mapping 15. Sense of enjoyment – all sections	2&21. equality of opportunity-social development-collaborative work on PowerPoint and what makes good peer feedback	5. Developing pupils' character- emphasis on accessing all apps at home. (troubleshooting& encouraging independence)	1. Responsible, respectful and active citizens 7. Recognise online and offline risks	11&12. Careers/next stage - this is what web developers need to use to make websites 16. Creativity	11&12. Careers/next stage - this is what programmers use to plan their applications	16. Creativity
Disciplinary literacy	To understand that you don't pack lots of information in a presentation; Identify	Writing to inform SPAG	Writing to inform	Accuracy in text	Analysis Accuracy in text	Evaluating

	key information and present appropriately. When to use bullet points.		Aiming information at a target audience		
Numeracy links			Reading and ordering numbers during packet switching. If time, check sum calculation.	Hex number system used to assign colour value to webpage. Use of values to determine asset sizes.	Logic, following a step by step sequence or creating one.	Values in programming, predicting program flow = addition and subtraction, X and Y co-ordinates, negative numbers
Cross-curricular links to other subjects	PowerPoint – talk about other subjects and what they mean/are				Languages – audio to be recorded in another language
Careers	Use of Teams and Office 365 prepares our students in using the most widely used productivity software in the working environment.		Link to web development industry	Link to application development industry
Support for all *All lessons are on Classnotes and can be viewed using immersive reader	Step by step demos/videos, how to guides, effective use of TAs and lots of opportunities to practice the same skill set.	Information for the tasks and key words are on class notes pages*, Step by step demos/videos, how to guides, effective use of TAs	Algorithm place mat provided, algorithms worked out in pairs and on the board. Class notes *	Step by step demos/videos, how to guides, effective use of TAs
Challenge ideas	Either improving on work or challenging them to work out how to do something extra on each application i.e. add a video on class notes	Challenging them to work out how to do something extra on each task – i.e. you have covered the main risks, find out what these extra risks are.	Challenging them to work out how to do something extra at each stage – e.g. once they have a web page with colour, how do they change that colour? How can they add google font styles?	Algorithm place mat has a challenge task Challenging them to work out how to do something extra at each stage of their game

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Year 8

Overall curriculum intent for year 8: Develop understanding in how computers and networks work. Know how binary is used to represent numbers, text and images. Develop skills in key specialist software, used in GCSE. Further develop understanding and use of programming constructs via the use of Python.						
	Half term 1	**Half term 2**	**Half term 3**	**Half term 4**	**Half term 5**	**Half term 6**
Intent for the half term	Develop understanding in how computers and networks work	Understand Binary representation of images Develop photoshop skills	Develop project development process (imedia)	Develop skill and understanding of programming constructs using a based programming language	Develop project development process	Website creation using a WYSIWYG editor
Content mapping	Input output, computer components, binary, networks, operating systems, H&S	Explain how a device (PC) stores reads and displays binary images. To explain how computers can represent bitmap image. Photoshop skills (layers, tools, workflow). Analysis of existing magazine covers, research assets for the magazine, design (visualisation) and creation (photoshop), image properties HL		Output text and calculations, functions escapes, casting, comments, sequence, selection, loops, data structures, external file handling	Existing website research, website design (sitemaps and wireframing), source website assets, masterpage set up and folder structure creation, website creation (linking, testing and content editing), evaluation	
Disciplinary knowledge	Apply the fundamental principles and concepts of computer science Use search technologies effectively, be discerning in evaluating digital content	Apply the fundamental principles and concepts of computer science select, use and combine software on a range of digital devices to create digital products, that accomplish given goals, including collecting, analysing, evaluating and presenting data		Apply the fundamental principles and concepts of computer science, including abstraction, sequence, selection and repetition, logic& algorithms Design, write and debug programs that accomplish specific goals Use logical reasoning to find and correct errors in algorithms and programs.	Develop skills in planning and creating a digital product use technology safely, respectfully and responsibly Select, use and combine software on a range of digital devices to create digital products, that accomplish given goals, including collecting, analyzing, evaluating and presenting data Use search technologies effectively, be discerning in evaluating digital content	

				Evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems		
Assessment mapping (Quizizz every lesson)	Operating system review End of unit test	Binary images spreadsheet Visualisation	Finished magazine cover End of unit test	Evidence document End of unit test	Design documents	Final website End of unit test
Personal development mapping	12. Next phase of education- GCSE Computing 21.Social development – working in teams	12. Next phase of education- imedia 16. Creativity 21. Social development- peer support and feedback		12. Next phase of education GCSE Computing 16. Creativity 21.Social development- paired programming	12. Next phase of education – imedia 16. Creativity 21.Social development- peer support and feedback	
Disciplinary literacy	Reading information when researching Writing a review	Effective annotation in design	SPAG	Writing effective Pseudocode Accuracy in text	Writing to persuade/advertise	Evaluation
Numeracy links	Binary to denary conversion relies on number columns, to the power of 10, 2, 16 – awareness of number systems other than denary	Inch to cm conversion. Data representation includes number conversion, binary to denary, colour depth - how many pixels in a 4-bit image.		Use of integers in programming and data types. Calculation needed to check answers on programs written are correct. Logic reasoning used to detect errors on programming	Measurement, image quality related to resolution = pixel sizes. Resizing a frame = ratio and calculating to scale a frame up or down. Use of Hex numbers to choose a colour	
Cross-curricular links to other subjects	Maths- binary, number conversions and calculating	Maths- binary, number conversions and calculating Encourage student choice to pick up on subject specific topics. E.g. National Geographic.		Maths – logical reasoning Drama – Shakespearean insult generator	Music and English – Website topic is musical pop up shop. Persuasive and informative writing skills covered	

		Art and DT use of Photoshop, creativity and designing skills		Music – what genre of music are these? How do you know? What images /text would help the reader know this?
Careers	Link to IT industry	Link to Graphic design industry	Link to programming careers	Link to web development industry
Support for all *All lessons are on Classnotes and can be viewed using immersive reader	Work on class notes, including objectives, relevant information/guides and keywords * Writing frames also provided	Step by step demos/videos, how to guides*, effective use of TAs and opportunities to practice the same skill set. Examples shown,	Step by step how to guides*, opportunities to practice the same skill set. Tasks broken down, examples, paired programming	Step by step demos/videos, how to guides*, effective use of TAs and opportunities to practice the same skill set. Writing frames/templates and examples
Challenge ideas	Either improving on work or challenging them to work out how to do something extra		Challenging them to work out how to do something extra or setting a difficult question	Either improving on work or challenging them to work out how to do something extra

Year 9

Overall curriculum intent for year 9: To build on students' prior knowledge and skills and provide a feel for both GCSE options to enable effective decision making at GCSE.

	Half term 1	Half term 2	Half term 3	Half term 4	Half term 5	Half term 6
Intent for the half term	Understand several key algorithms e.g. searching and sorting	Develop a more in depth understanding of how computers work	Develop and create a Game in game maker		Understand how Machine learning and big data shapes our digital world	
Content mapping	Searches, sorts, pseudocode and flowcharts, algorithm efficiency	CPU, fetch decode execute, transistors, logic gates & circuits, software, network hardware and protocols, encryption, cyber security	Game analysis, sprites and objects. Object orientated programming, programming constructs, testing and assessment		What is it? Benefits, programming an AI, moral compass	
Disciplinary knowledge	Solve problems by breaking them down into smaller parts. Apply the fundamental principles and concepts of computer science, including abstraction, sequence, selection and repetition, logic, algorithms and data representation Design, write and debug programs that accomplish specific goals Use logical reasoning to explain how some simple algorithms work To find and correct errors in algorithms and programs.	Solve problems by breaking them down into smaller parts. Apply the fundamental principles and concepts of computer science Use technology safely, respectfully and responsibly	Apply the fundamental principles and concepts of computer science, including abstraction, sequence, selection and repetition, logic & algorithms Design, write and debug programs that accomplish specific goals Use logical reasoning to find and correct errors in algorithms and programs.		Apply the fundamental principles and concepts of computer science, including abstraction, sequence, selection and repetition, logic & algorithms Design, write and debug programs that accomplish specific goals Use logical reasoning to find and correct errors in algorithms and programs.	
Assessment mapping (Quizizz every lesson)	Workbook End of unit test	Workbook – CPU Quizzes End of unit test	Game analysis quizzes Finished game End of unit test		Machine learning model End of unit test	
Personal development mapping	12. Next phase of education – GCSE 21.Social development- peer support and feedback	1. Responsible, respectful and active citizens 7. Recognise online and offline risks	12. Next phase of education – GCSE 16. Creativity 21.Social development- peer support and feedback			

		12. Next phase of education- GCSE Computing		
Disciplinary literacy	Writing effective Pseudocode Dry running through the code (very close to proof reading)	Key vocabulary Effective note taking	Analysis Accuracy in text Evaluation	Researching online Essay writing
Numeracy links	Logical reasoning	Binary calculation, Logical reasoning	Logical reasoning, measurement and calculating sizes.	Logical reasoning
Cross-curricular links to other subjects		Maths – binary		
Careers	Programming	IT career	Game developer	Programmer and big data analysis
Support for all *All lessons are on Classnotes and can be viewed using immersive reader	Work on class notes, including objectives, relevant information/guides and keywords * Writing frames also provided and teacher support		Step by step demos/videos, how to guides*, effective use of TA and opportunities to practice the same skill set. Examples shown, all lessons on class notes	Step by step, how to guides*, effective use of TA. All lessons on class notes and paired programming writing frame for the moral discussion
Challenge ideas	Either improving on work or challenging them to work out how to do something extra For Search and sort algorithms, the challenge tasks are in the workbook- look at going into more advanced theory e.g. Quicksort and big O notation are A level topics.			Deeper thinking – getting them to think about how their data is used and what are the moral issues /pros & cons

Year 10 & 11 Computing

Overall curriculum intent for year 10 & 11: Introduce students to the central processing unit (CPU), computer memory and storage, wired and wireless networks, network topologies, system security and system software. We also look at ethical, legal, cultural and environmental concerns associated with computer science. Develop skills and understanding in computational thinking: algorithms, programming techniques, producing robust programs, computational logic, translators and data representation. Apply these skills, using python to produce a complex application to solve a given problem.				
	Half term 1	**Half term 2**	**Half term 3**	**Half term 4**	**Half term 5**
Intent for the half term	Cover theory for Unit 1 paper		Cover theory for Unit 2 paper and prepare for NEA	Complete NEA and Cover theory for Unit 2 paper	Cover theory for Unit 2 paper and prepare for the exams

Content mapping	CPU, von Neumann, embedded systems, storage, RAM&ROM, memory, data capacity, networks, network theory	Threats, software systems, issues, abstraction, decomposition, algorithmic thinking, search and sort algorithms,	Programming constructs, file handling, data structures, SQL, verification, validation, testing	NEA project Binary, logic circuits, low level programming, assemblers, compilers and interpreters, IDEs	Binary conversion, shift, hexadecimal, check digits, character sets, bitmaps, sound, compression Exam preparation
Disciplinary knowledge	apply the fundamental principles and concepts of computer science use search technologies effectively, be discerning in evaluating digital content	Solve problems by breaking them down into smaller parts. Apply the fundamental principles and concepts of computer science, including abstraction, sequence, selection and repetition, logic, algorithms and data representation Design, write and debug programs that accomplish specific goals Use logical reasoning to explain how some simple algorithms work To find and correct errors in algorithms and programs.			apply the fundamental principles and concepts of computer science use search technologies effectively, be discerning in evaluating digital content
Assessment mapping	End of topic test for each unit – about once a fortnight. Workbooks also checked and feedback given. Smart revise HL tracks their understanding, checked fortnightly. Cornell notes completed for each topic not marked BUT checked for understanding and completeness. NEA checked and feedback given.				
Personal development mapping	11. Careers 12. Next phase of education 21.Social development- peer support and feedback	7. Recognise online and offline risks 11. Careers 12. Next phase of education	11. Careers 12. Next phase of education 21.Social development- peer support and feedback	11. Careers 12. Next phase of education 21. Social development- peer support and feedback	11. Careers 12. Next phase of education 21. Social development- peer support and feedback
Disciplinary literacy	For each uinit: Reading to gain new information, effective note taking using Cornell notes system, writing to present information, reading and decoding meaning in text.				
Numeracy links	Calculation, logic, sequencing		Calculation, logic, conversion, sequencing, algebraic thinking		
Cross-curricular links to other subjects	Maths – see numeracy links Science – radio waves	Maths – see numeracy links	Maths – see numeracy links	Maths – see numeracy links Science- electricity & circuits	Maths – see numeracy links Science - sound
Careers	IT industry	Cyber security and programming industry	Programming industry	IT industry	IT industry
Support for all	Workbooks for each unit to aid organisation, are clearly set out. Clear guide to support NEA task. Teacher support, examples shown/modelled.				
Challenge ideas	Challenge tasks, set throughout the course, are an extension of the tasks done in lesson. E.g. in programming, they have a worked example, then given a task/some tasks with some guidance. Once they finish the set tasks. They get another that uses the same knowledge learnt, but it is harder and with no guidance.				

Year 10 & 11 Creative imedia

Overall curriculum intent for year 10 & 11: Students are introduced to a range of essential pre-production techniques used in the creative and digital media, including client brief, time frames, deadlines and preparation techniques. Students explore where and why digital graphics are used and the techniques that are involved in their creation. They apply their skills and knowledge in creating digital graphics against a specific brief. Students explore the different properties, purposes and features of multipage websites. They demonstrate their creativity by combining components to create a functional, intuitive and visually pleasing website. They will do the same again for one other imedia discipline I.e. games development or Photography. This is to be decided as a group, each year.

	Half term 1	Half term 2	Half term 3	Half term 4	Half term 5
Intent for the half term	Completion of R082 Digital graphics	Completion of R082 Digital graphics and R085 Website	Completion of R085 Website and 3rd imedia project	Completion of 3rd imedia project	Completion of 3rd imedia project and preparation for R081 exam
Content mapping	Sectors, purpose, graphics theory, existing example analysis, design brief analysis, mood board, mind map	Visualisation, Workplan, legislation, asset gather, repurpose & create the graphic product, evaluate the graphic product Website theory, client and audience requirements, workplan, sitemap	Visualisation, house style, legislation, test plan, gather, create and modify assets, build website. 3rd project purpose, theory, existing example analysis, Design brief analysis, preproduction documents	3rd project legislation, test plan, gather, create and modify assets, build	Test and evaluate 3rd project. Exam revision and preparation: preproduction documents
Disciplinary knowledge	Evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems Use technology safely, respectfully and responsibly Select, use and combine software on a range of digital devices to create digital products, that accomplish given goals, including collecting, analysing, evaluating and presenting data Use search technologies effectively, be discerning in evaluating digital content				
Assessment mapping	Fortnight check-ins on coursework progress				Fortnight check-ins on coursework progress and mock exam
Personal development mapping	11. Careers 16. Creativity 21. Social development- peer support and feedback	11. Careers 15. Sense of enjoyment 16. Creativity 21. Social development- peer support and feedback	11. Careers 15. Sense of enjoyment 16. Creativity 21. Social development- peer support and feedback	11. Careers 15. Sense of enjoyment 16. Creativity 21. Social development- peer support and feedback	11. Careers 21. Social development- peer support and feedback
Disciplinary literacy	Reading and decoding text re-present research effectively.	As before. And	As before	Decoding exam questions	

	Analysing text and decoding what they are required to do Writing a review, writing a book blurb Writing evaluation		writing reviews for computer games.		Structuring higher value answers e.g. 12 mark review question
Numeracy links	Measurement, conversion, scale, proportion		Ratio/scale, units		
Cross-curricular links to other subjects	English – book cover, write a book blurb and reviews for the back	English – write reviews for website			English – structuring evaluation 12-mark exam question
Careers	Link to Graphic design industry	Link to Graphic design and web development industry	Link to Graphic design and other topic industry, e.g. game development animation, or photography	Link to chosen industry e.g. game development animation, or photography	Link to all digital production industries
Support for all	Step by step guides, teacher support, examples, guidebook for each unit and tasks broken up				
Challenge ideas	Self-assessment sheet for each unit – what do you need to do for the top mark bands? How can you do that?				

Year 12

Overall curriculum intent for year 12: Students will gain the right combination of knowledge, understanding and skills required for the 21st century, enabling them to demonstrate the skills of writing specifications, and the design, build, testing and implementation of applications. They will develop a solid foundation in the fundamentals of hardware, networks, software, the ethical use of computers and how businesses use IT. Students will have a greater understanding of how organisations use information sources both internally and externally and the types of information they will encounter. The skills gained by completing this unit will give them knowledge of the functionality of information and how data is stored and processed by organisations. They will also learn about how individuals use information of various types.

	Half term 1	Half term 2	Half term 3	Half term 4	Half term 5	Half term 6
Intent for the half term	Induction Prepare for Unit 1 exam	Prepare for Unit 1 exam	Learn Phases of development lifecycle Application development models	Learn Constraints, website components and cyber security	Prepare for resit if needed Website research	Website design
Content mapping	1.Understand computer hardware 2.Understand computer software 3.Understand business IT systems	4. Understand employability and communication skills used in an IT environment 5.Understand ethical and operational issues and threats to computer systems	Requirements analysis, design, coding/ implementation, testing, deployment, maintenance, comparison of development models	Constraints upon product development, website components, security risks, threats and prevention, market analysis	Case study and revise all of unit 2 Market analysis, user interview and analysis	Design brief analysis, functional requirements, target user profile, constraints and limitations, feasibility study, site maps, DFDs
Disciplinary knowledge	apply the fundamental principles and concepts of computer science use search technologies effectively, be discerning in evaluating digital content Evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems Use technology safely, respectfully and responsibly Select, use and combine software on a range of digital devices to create digital products, that accomplish given goals, including collecting, analysing, evaluating and presenting data Use search technologies effectively, be discerning in evaluating digital content					
Assessment mapping	Unit 1 section 1,2 &3 test	Unit 1, sections 4&5 test, Case study and Mock exams	Report on phases of development lifecycle and Comparison of development models	Constraints report Website Components writeup Cyber security writeup	Mock exam Research analysis	Research analysis Specification documents and design documents

Personal development mapping	11. Careers 12. Next phase of education 1. Responsible, respectful and active citizens 7. Recognise online and offline risks	11. Careers 12. Next phase of education	1. Responsible, respectful and active citizens 7. Recognise online and offline risks 11. Careers 12. Next phase of education	11. Careers 12. Next phase of education	2. equality of opportunity 11. Careers 12. Next phase of education
Disciplinary literacy	Reading and decoding text for research Re-presenting information learnt. Decoding exam questions and structuring effective answers	Analysis Decoding design brief and analysing it. Reading and decoding text for research Re-presenting information learnt. Identifying and listing user and client requirements Justifying design choices			
Numeracy links	Binary and Hexadecimal Storage capacity			Binary and Hexadecimal Storage capacity	
Cross-curricular links to other subjects	Business – events ticket booking website		DT –links to the product lifecycle		Business – what do they need to be successful as a business? DT – design lifecycle
Careers	Careers in IT – IT Technician, programmer, any career in IT	Careers in IT –web development, project development and app development Mr Wilcock to visit and be involved via email as the client		Careers in IT – data scientist/analyst	Careers in IT – data scientist/analyst, web development, project development and app development
Support for all	Workbook breaks the topics down, online resources on Teams site, teacher support	In class support, clear guide to support tasks set, teacher support		Workbook breaks the topics down, online resources on Teams site, teacher support	
Challenge ideas	Deeper reading into topics for the unit 1 exam	Deeper reading into topics for the unit 1 exam	Deeper reading and application on topics covered	Deeper reading and application on topics covered	Deeper reading into topics for the unit 1 exam	Deeper reading and application on topics covered

Overall curriculum intent for year 13: Students will gain the right combination of knowledge, understanding and skills required for the 21st century, enabling them to demonstrate the skills of writing specifications, and the design, build, testing and implementation of applications. They will develop a solid foundation in the fundamentals of hardware, networks, software, the ethical use of computers and how businesses use IT. Students will have a greater understanding of how organisations use information sources both internally and externally and the types of information they will encounter. The skills gained by completing this unit will give them knowledge of the functionality of information and how data is stored and processed by organisations. They will also learn about how individuals use information of various types.

	Half term 1	Half term 2	Half term 3	Half term 4	Half term 5
Intent for the half term	Complete the website prototype and accompanying evidence Prepare for Unit 2 exam	Prepare for Unit 2 exam	Agree website designs with client Adapt website designs and create prototype website	Create, test and present prototype website Final meeting with client	Prepare for resit of unit 2
Content mapping	Web development, testing, client presentation Unit 2 exam - Understand where information is held globally and how it is transmitted	Understand: styles, classification and the management of global information; the use of global information and the benefits to individuals and organisations; the legal and regulatory framework governing the storage and use of global information; the process flow of information Case study	Email dialogue to determine changes and agree on acceptance test plan, testing tables, website prototype creation	Complete prototype, unit, product, implementation, acceptance and immersion testing. security and maintenance	All of unit 2 topics and case study preparation
Disciplinary knowledge	apply the fundamental principles and concepts of computer science use search technologies effectively, be discerning in evaluating digital content Evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems Use technology safely, respectfully and responsibly Select, use and combine software on a range of digital devices to create digital products, that accomplish given goals, including collecting, analysing, evaluating and presenting data Use search technologies effectively, be discerning in evaluating digital content				
Assessment mapping	Final website and updated report Unit 2 section 1 test	Unit 2, sections 2-6 test Case study And Mock exam	Evidence of dialogue Acceptance testing plan	Final website Test plans, test report, final formal report, security and	Case study and mock exam

				maintenance report and final meeting evidence	
Personal development mapping	2. Equality of opportunity 11. Careers 12. Next phase of education	1. Responsible, respectful and active citizens 7. Recognise online and offline risks	11. Careers 12. Next phase of education	1. Responsible, respectful and active citizens 7. Recognise online and offline risks 11. Careers 12. Next phase of education	11. Careers 12. Next phase of education
Disciplinary literacy	Reading and decoding text for research Re-presenting information learnt. Decoding exam questions and structuring effective answers Researching case studies – decoding the study and selecting relevant information		Email structure and etiquette Writing test plans	Completing test plans Presentation to client Evaluating and reviewing	
Numeracy links	Measurement, ratio	Data collection	Measurement, ratio	Measurement, ratio	Data collection
Cross-curricular links to other subjects	Business – events ticket booking website		Business – events ticket booking website- target audience, what they want to see, legal obligations etc.		
Careers	Careers in IT – data scientist/analyst	Careers in IT – data scientist/analyst, web development, project development and app development			Careers in IT – data scientist/analyst
Support for all	Workbook breaks the topics down, online resources on Teams site, teacher support		In class support, clear guide to support tasks set, teacher support		Workbook breaks the topics down, online resources on Teams site, teacher support
Challenge ideas	Deeper reading into topics for the unit 2 exam	Deeper reading into topics for the unit 2 exam In depth research for the Case study	Consider front end and back end element – can you add a back-end data base to the site?	Ask for detail in analysis, drawing clear conclusions and steps forward	Deeper reading into topics for the unit 2 exam In depth research for the Case study

NB:
Year 12 and 13 both do the same exam unit (unit 1 or 2) then we switch to the alternate unit the following year

Unit 1 plans are below:

Intent for the half term	Prepare for the unit 1 exam

Content mapping	fundamentals of hardware, networks, software, the ethical use of computers and how businesses use IT.
Assessment mapping	Sections 1 to 5 in the work book marked once a fortnight and end of topic tests and mock exams
Personal development mapping	11. Careers 12. Next phase of education 1. Responsible, respectful and active citizens 7. Recognise online and offline risks
Literacy focus for the half term	Grammar & vocabulary Case study answers, structure and writing to justify/discuss/evaluate
Numeracy links	Calculation, binary, Hexadecimal, storage capacity
Cross-curricular links to other subjects	
Careers	Career in IT- all areas
Support for all	Workbook breaks the topics down, online resources on Teams site, teacher support
Challenge ideas	Deeper reading into topics for the unit 1 exam