

	Autumn 1	Autumn 2	Spring 3	Spring 4	Summer 5	Summer 6
YEAR 7	<p>Introduction & E-Safety Knowledge</p> <ul style="list-style-type: none"> Logins & Google Classroom Improving students' awareness of e-safety issues, <p>Skills</p> <ul style="list-style-type: none"> Developing presentation skills Raising awareness of relevant safety topics 	<p>Digital Promotion Skills Knowledge</p> <ul style="list-style-type: none"> Using a range of software to create documents to promote a celebration event <p>Skills</p> <ul style="list-style-type: none"> Spreadsheet & Publishing skills Numeracy skills 	<p>Computer Hardware Knowledge</p> <ul style="list-style-type: none"> Peripherals and components introduction Computer modelling <p>Skills</p> <ul style="list-style-type: none"> Investigation & research Applying computer modelling to other situations 	<p>Algorithms Knowledge</p> <ul style="list-style-type: none"> Sequencing of events Exploring how algorithms are used in computing to solve problems <p>Skills</p> <ul style="list-style-type: none"> Creating effective algorithms Solving coding challenges 	<p>Scratch programming Knowledge</p> <ul style="list-style-type: none"> Scratch software skills Motion, variables & levels <p>Skills</p> <ul style="list-style-type: none"> Creating and testing a successful product Debugging and correcting codes 	<p>Digital graphics – Poster Knowledge</p> <ul style="list-style-type: none"> Effective promotion using graphics Image editing and publishing <p>Skills</p> <ul style="list-style-type: none"> Producing a range of pre production documents Creating a final product using image editing techniques
YEAR 8	<p>E-Safety Website Knowledge</p> <ul style="list-style-type: none"> Further developing students' awareness of e-safety issues Interactive website features <p>Skills</p> <ul style="list-style-type: none"> Producing an effective website Raising awareness of relevant safety topics 	<p>Hardware Knowledge</p> <ul style="list-style-type: none"> Peripheral and component specifications Computer modelling <p>Skills</p> <ul style="list-style-type: none"> Applying computer modelling to other situations Investigating how to select components to build a PC 	<p>App Design Knowledge</p> <ul style="list-style-type: none"> Purpose of apps to make the world a better place Careers in the IT Industry <p>Skills</p> <ul style="list-style-type: none"> Designing and coding of an app Debugging and correcting codes 	<p>Digital graphics – DVD cover Knowledge</p> <ul style="list-style-type: none"> Effective promotion using graphics Further developing image editing Wrap around designs and measurements for the final product <p>Skills</p> <ul style="list-style-type: none"> Producing a range of preproduction documents Creating a final product using image editing techniques 	<p>Logic Gates Knowledge</p> <ul style="list-style-type: none"> Binary, Logic gates, truth tables Algorithms & Flowcharts Number conversion in binary <p>Skills</p> <ul style="list-style-type: none"> Numeracy skills Flowchart creation skills 	<p>Technology Trends Knowledge</p> <ul style="list-style-type: none"> How technology has changed over time and the effects of ethical, social & legal matters <p>Skills</p> <ul style="list-style-type: none"> Literacy skills Researching and presenting
Year 9	<p>Cyber security Knowledge</p> <ul style="list-style-type: none"> Computer misuse & scams Protecting personal data & copyright <p>Skills</p> <ul style="list-style-type: none"> Researching & investigating Raising awareness of online dangers 	<p>AI and impact Knowledge</p> <ul style="list-style-type: none"> Introduction to AI Ethics of AI and impact <p>Skills</p> <ul style="list-style-type: none"> Discussion & Investigation skills Debating skills 	<p>Networks Knowledge</p> <ul style="list-style-type: none"> Introduction to Networks Internet and Encryption <p>Skills</p> <ul style="list-style-type: none"> Compare, contrast & evaluate Problem solving 	<p>Python introduction Knowledge</p> <ul style="list-style-type: none"> Strings, integers & variables Selection & Iteration <p>Skills</p> <ul style="list-style-type: none"> Developing programming skills <p>Debugging and correcting codes</p>	<p>Digital and Enterprise Unit Knowledge</p> <ul style="list-style-type: none"> Online digital awareness (Blue) Employability Skills (Green) Digital Creativity (Orange) <p>Skills</p> <ul style="list-style-type: none"> Developing knowledge of cybersecurity, safety and ethics Investigation of workplace processes, tools and techniques Creating products for the digital world 	<p>Digital and Enterprise Unit Knowledge</p> <ul style="list-style-type: none"> What makes a successful Entrepreneur (Purple) Effective game design (Pink) Independent learning (Teal) <p>Skills</p> <ul style="list-style-type: none"> Organising ideas in business Problem solving and money management Developing clear design processes Increasing resilience and independence as a learner while challenging themselves
	KS4 Creative iMedia					

	Autumn 1	Autumn 2	Spring 3	Spring 4	Summer 5	Summer 6
YEAR 10 - iMedia	Introduction to iMedia Knowledge <ul style="list-style-type: none"> Introduction to R094 (Visual Identity) controlled assessment Branding visual identities Skills <ul style="list-style-type: none"> Ideas generation Analysis of techniques 	R094 Planning Knowledge <ul style="list-style-type: none"> Planning the making of a final product Skills <ul style="list-style-type: none"> Generating a range of pre-production documents 	R094 Making Knowledge <ul style="list-style-type: none"> Create an effective visual identity Branding and house style Skills <ul style="list-style-type: none"> Graphic design skills 	R094 Making Knowledge <ul style="list-style-type: none"> Editing assets to produce a final product as part of the course Asset editing Skills <ul style="list-style-type: none"> Creating a final graphic 	R094 Review Knowledge <ul style="list-style-type: none"> Completion of the controlled assessment ready for submission Skills <ul style="list-style-type: none"> Review and improvement 	Exam Practice & R097 Introduction Knowledge <ul style="list-style-type: none"> Refresher of skills related to the exam unit ready for mocks in the summer Student investigation and research ready for next controlled assessment Skills <ul style="list-style-type: none"> Revision & research skills
YEAR 11 - iMedia	R097 Planning Knowledge <ul style="list-style-type: none"> Analysing the task for R097 (Interactive Digital Media Website) Creation of brand and planning documents Skills <ul style="list-style-type: none"> Research, ideas generation & analysis 	R097 Planning Knowledge <ul style="list-style-type: none"> Gathering assets and further planning Skills <ul style="list-style-type: none"> Making pre-production document such as moodboard and mind map Evidence skills for asset table 	R097 Making Knowledge <ul style="list-style-type: none"> Editing assets to produce a final website as part of the course Skills <ul style="list-style-type: none"> Asset editing Creating the website 	R097 Making & Review Knowledge <ul style="list-style-type: none"> Review and improvement of the website Skills <ul style="list-style-type: none"> Completion of the controlled assessment ready for submission 	Summer Exam Knowledge <ul style="list-style-type: none"> Exam preparation Practice questions Skills <ul style="list-style-type: none"> Revision and mastering of topics 	
KS4 Computer Science						
	Autumn 1	Autumn 2	Spring 3	Spring 4	Summer 5	Summer 6
YEAR 10 – Comp Science	System Architecture Knowledge <ul style="list-style-type: none"> Performance and characteristics of the Central processor Von Neuman Architecture Embedded systems Primary & Secondary Storage Data storage and compression Skills <ul style="list-style-type: none"> Investigation and review 	Algorithms Knowledge <ul style="list-style-type: none"> Computational thinking Creating algorithms Search and sort methods Skills <ul style="list-style-type: none"> Correcting & completing algorithms Refining and adjusting code 	Programming fundamentals Knowledge <ul style="list-style-type: none"> Variables Sequencing, Selection & Iteration String Manipulation SQL database Arrays Skills <ul style="list-style-type: none"> Programming techniques 	Boolean Logic Knowledge <ul style="list-style-type: none"> Types of logic Logic gates & Truth tables Skills <ul style="list-style-type: none"> Interpreting & creating logic formulas 	System Software Knowledge <ul style="list-style-type: none"> Operating systems Utility software Encryption Skills <ul style="list-style-type: none"> Defining and explaining each area 	Computer network, connections and protocols Knowledge <ul style="list-style-type: none"> Networks & Topologies The internet & network protocols Differentiating between network types Skills <ul style="list-style-type: none"> Explaining different protocols and their purpose
YEAR 11 – Comp Science	Network security Knowledge <ul style="list-style-type: none"> Malware & social engineering Skills <ul style="list-style-type: none"> Identifying and preventing vulnerabilities Understanding network threats 	Producing robust programs Knowledge <ul style="list-style-type: none"> Defensive design Input validation Sub programs Skills <ul style="list-style-type: none"> Testing effectiveness of programs 	Programming Techniques & Integrated Development Environments Knowledge <ul style="list-style-type: none"> Compilers and interpreters Skills <ul style="list-style-type: none"> Improving coding skills 	Ethical, legal and cultural environmental impacts of digital technology Knowledge <ul style="list-style-type: none"> Evaluating the impact of these topics on technology Skills <ul style="list-style-type: none"> Review & Evaluation skills 	Summer Exam Knowledge <ul style="list-style-type: none"> Exam preparation Practice questions Skills <ul style="list-style-type: none"> Revision and mastering of topics 	