Curriculum Overview: IT/Computing

Year Group	Autumn Term		Spring Term		Summer Term		Useful information software/websites
Year 7	**Topic 1:** **Safety and responsibility** • Setting up • Online safety • Bias and reliability • The law and ethics • Search engines • Hardware vs software	**Topic 2:** **Networks** • Computer networks and protocols • Network hardware • Types of networks • The internet	**Topic 3:** **Computational thinking & Algorithms** • Decomposition • Abstraction • Pattern recognition • Algorithm • Searching and sorting algorithms	**Topic 4:** **Edublocks programming** • Variables • Sequencing • Selection iteration	**Topic 5:** **User interface design** • Introduction to UI • Designing a graphical user interface	**Topic 6:** **Modelling Data - Spreadsheets** • The purpose of a spreadsheet • Formula and functions • Goal seek • Macros	SCRATCH programming Edublocks Teach ICT Oak academy BBC Bitesize Outlook Kodu gaming
Year 8	**Topic 1:** **Computer Systems** • How a computer system works • Operating systems • Physical components	**Topic 2:** **Number systems and Memory** • Binary • Denary • Hexadecimal • Converting between systems	**Topic 3:** **User interface – Rocket Cake** • Navigation menu • Layout and structure • GUI & HCI • Hyperlinks	**Topic 4:** **Data Handling - SQL** • Handling data • Sorting and filtering • Relationships • Queries	**Topic 5:** **Programming – Python Basics** • Print() • Input() • Syntax • Datatypes	**Topic 6:** **Cybersecurity** • Social engineering • Malware • Protection against malware	SCRATCH programming Edublocks Teach ICT Oak academy BBC Bitesize Outlook Kodu gaming
Year 9 **Digital information Technology**	**Component 1:** Exploring User Interface Design Principles and Project Planning Techniques **(Practise sample assessment)** • **A** Understand interface design for individuals and organisations • **B** Be able to use project planning techniques to plan, design and develop a user interface • **C** Be able to review a user interface.		**Component 2:** Collecting, Presenting and Interpreting Data **(Practise sample assessment)** • **A** Understand how data is collected and used by organisations and its impact on individuals • **B** Be able to create a dashboard using data manipulation tools • **C** Be able draw conclusions and review data presentation methods		**Component 3:** Effective Digital Working Practices **(Practise sample Exam)** • **AO1/2/3** Apply and demonstrate knowledge and an understanding of facts, terms, processes and issues in relation to digital information technology • **AO4** Make connections with the concepts, issues, terms and processes in digital information technology		Teach ICT Oak academy BBC Bitesize Knowitallninja Outlook CraignDave MrBrownCS

Curriculum Overview: IT/Computing

Year Group	Autumn Term	Spring Term	Summer Term	Useful information software/websites
Year 10 **Creative** **IMEDIA**	**Unit R094: Visual identity and digital graphics** • TOPIC 1: Develop visual identity **Unit R093: Creative iMedia in the media industry** • TOPIC 1: The media industry • TOPIC 2: Factors influencing product design	**Unit R094: Visual identity and digital graphics** • TOPIC 2: Plan digital graphic for product **Unit R093: Creative iMedia in the media industry** • TOPIC 1: The media industry • TOPIC 2: Factors influencing product design	**Unit R094: Visual identity and digital graphics** • TOPIC 3: Create visual identity and digital graphics **INTERNAL ASSESSMENT** **Unit R096: Animation with audio** • TOPIC 1: Plan animation with audio	Teach ICT Oak academy BBC Bitesize Knowitallninja Outlook MrBrownCS StudyIMEDIA Adobe Photoshop Adobe animate OCR Past papers
Year 11 **Creative** **IMEDIA**	**Unit R096: Animation with audio** • TOPIC 1: Plan animation with audio • TOPIC 2: Create animation with audio • TOPIC 3: Review animation with audio **INTERNAL ASSESSMENT**	**Unit R093: Creative iMedia in the media industry** • TOPIC 1: The media industry • TOPIC 2: Factors influencing product design	**Unit R093: Creative iMedia in the media industry** • TOPIC 3: Pre-production planning • TOPIC 4: Distribution considerations **EXTERNAL EXAM**	Teach ICT Oak academy BBC Bitesize Knowitallninja Outlook MrBrownCS StudyIMEDIA Adobe Photoshop Adobe animate OCR Past papers