

Key Stage 4: Creative iMedia Plan 2022/23

| | | Autumn | Spring | Summer |
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| Information Technology | | | | |
| | Year 10 | <p>R094 – Visual identity and digital graphics</p> <p>Knowledge:</p> <ul style="list-style-type: none"> • Design a concept for the visual identity referenced to the client in the set task • Justify why the visual identity you developed is suitable for the identified client • Produce planning documentation for the digital graphic product referenced in the set task • Create an effective visual identity which has the correct properties and is appropriate • Prepare assets for use in the digital graphic • Create the digital graphic planned in Topic Area 2 • Apply design concepts and layout conventions to the digital graphic • Ensure the format of the digital graphic is appropriate <p>Skills: Research, planning, creation and reviewing digital graphics using different software</p> | <p>R093 - Creative iMedia in the Media Industry</p> <p>Knowledge:</p> <ul style="list-style-type: none"> • Media industry sectors and products • Job roles in the media industry • How style, content and layout are linked to the purpose • Client requirements and how they are defined • Audience demographics and segmentation • Research methods, sources and types of data • Media codes used to convey meaning, create impact and engage audiences • Pre-production planning • Document used to support ideas generation • Documents used to design and plan media products • The legal issues that affect media • Legal considerations to protect individuals • Intellectual property rights • Regulation, certification and classification • Health and safety • Distributed platforms and media to reach audiences • Properties and format of media files (image, audio, moving images) • File compression • <p>Skills: Research into the media industry</p> | <p>R097 – Interactive Digital Media</p> <p>Knowledge:</p> <ul style="list-style-type: none"> • Produce an interpretation of a client brief for a given set task • Explain how the intended product meets the client brief and how it appeals to the target audience • Produce pre-production and planning documentation • Create component parts of the interactive digital media product • Create the interactive digital media product • Export the interactive digital media product to a suitable format with suitable properties • Review the interactive digital media product for its effectiveness • Produce recommendations for areas of improvement and future development <p>Skills: Research product types and platforms, useplanning tools to plan the concept, design and review the product proposal</p> |



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| | Year 11 | <p>R087 – Interactive Multimedia Products</p> <p>Knowledge:</p> <ul style="list-style-type: none"> • Purpose of interactive multimedia products • properties of interactive multimedia products • Client requirements and target audience • Work plan • Producing ideas • Legal restrictions • Obtain and edit assets • Create interactive multimedia products • Review and evaluate interactive multimedia products <p>Skills: Research, planning, creation and reviewing using different software</p> | <p>R081 Revision if resitting in January 2023</p> <p>Knowledge:</p> <ul style="list-style-type: none"> • Purpose and content of pre-production • Plan pre-production • Produce pre-production documents • Review pre-production documents <p>Skills: Research, planning, creation and reviewing pre-production documents using different software</p> | |
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Key Stage 4: Computer Science Curriculum Plan 2022/23

| | | Autumn 1 | Autumn 2 | Spring 1 | Spring 2 | Summer 1 | Summer 2 |
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| Computer Science | | | | | | | |
| | Year 10 | TOPIC 1: Data Representation Knowledge: <ul style="list-style-type: none"> • Conversions from binary to denary to Hex • Binary additions and shifts • ASCII and Unicode • Check digits • Characters • Images • Sound • Compression | TOPIC 2: System Architecture Knowledge: <ul style="list-style-type: none"> • The central processing unit • Components of the CPU • Fetch-Decode-Execute Cycle 1 and 2 • Performance of the CPU • Embedded systems | TOPIC 3: Secondary Storage Knowledge: <ul style="list-style-type: none"> • Optical and magnetic devices • Solid-state memory • Capacity, speed and cost • Portability, durability and reliability • TOPIC 4: Memory • Knowledge: • RAM and ROM • Virtual memory | TOPIC 4: Programming Techniques Knowledge: <ul style="list-style-type: none"> • Variable and constants • Arithmetic operators • Comparison operators • Boolean operators • Selection • Iteration • Data Types • String manipulation • Arrays • File handling operations • Records • SQL • Sub-programs 1 & 2 | TOPIC 5: Wired and Wireless Networks Knowledge: <ul style="list-style-type: none"> • LANs and WANs • Client-Server & Peer-to-Peer • Transmission media • Connecting computers to a LAN • The Internet | TOPIC 6: Network Topologies, Protocols and Layers Knowledge: <ul style="list-style-type: none"> • Network topologies • Protocols 1- browsers and email clients • Protocols 2 – Network layers • Protocols 3 – Benefits of layers • Packets and packet switching |



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| Computer Science | Year 11 | <p>TOPIC 7: Computational Logic Knowledge:</p> <ul style="list-style-type: none"> • Computational logic 1 • Computational logic 2 | <p>TOPIC 9: Translators and facilities of languages Knowledge:</p> <ul style="list-style-type: none"> • Programming languages • Translators • Integrated development environment | <p>TOPIC 11: Producing robust Programs Knowledge:</p> <ul style="list-style-type: none"> • Defensive design • Testing and maintenance | <p>TOPIC 5: Algorithms Knowledge:</p> <ul style="list-style-type: none"> • Computational thinking • Algorithms • Pseudocode • Flow diagrams • Search algorithm - linear • Search algorithm - binary • Comparing linear and binary • Sort algorithm – bubble • Sort algorithm – insertion • Sort algorithm – merge • Interpreting, correcting and completing algorithms • Using trace tables | REVISION | REVISION |
| | | <p>TOPIC 8: Ethical, legal, cultural and environmental concerns Knowledge:</p> <ul style="list-style-type: none"> • Environmental and legal issues • Cultural issues 1 & 2 • Environmental issues • Privacy issues • Legislation 1 & 2 • Proprietary and open-source software | <p>TOPIC 10: Producing robust Programs Knowledge:</p> <ul style="list-style-type: none"> • Defensive design • Testing and maintenance | <p>TOPIC 12: Boolean Logic</p> <ul style="list-style-type: none"> • Simple logic diagrams using AND, OR and NOT • Truth tables • Combining Boolean operators using AND, OR and NOT • Applying logical operators in truth tables to solve problems | REVISION | REVISION | |