

Intent

At James Brindley Academy, our computing curriculum **nurtures neurodiverse pupils** by developing essential digital skills and knowledge to help them **keep safe**, build confidence, and use technology effectively. We **think differently**, offering an accessible yet ambitious curriculum that promotes digital literacy, problem-solving, and creativity. With **high aspirations**, pupils learn everything from everyday software use to designing complex programs. Our adaptive approach lays the foundation for all learners to **thrive**—fostering independence, resilience, and real-world readiness. **Inclusion** is at the heart of our curriculum, meeting diverse needs through a balance of technical and creative learning. From KS2 to KS4 our curriculum path is based on the following skill progression: p AL – Algorithms – be able to read, understand, design, create and evaluate algorithms. p CM – Creating Media – select and create a range of media including text, images, sound and video. p CS – Computer Science – Understand what a computer is, how all its parts work together. p DD - Design and Development Understand the activities involved in planning, creating, and evaluating computing artifacts. p DI - data and information. Understand how data is stored, organised, and used to represent the real world. p DL - Digital literacy - Ability and skill to find, evaluate, you share and create content using information technologies and the Internet. p ET - Effective use of tools. Competent, confident and creative use of all information technology and communication devices. p IT - Information technology, communication and the impacts of it. p NW – Networks - understanding how networks can be used to retrieve/share information, and the associated risks of networks. PG - Programming (coding) - create software to allow computers to solve problems. p SS - Safety and Security - Understand risks when using technology and how to protect individuals and systems.

Implementation

Our computing curriculum leads to recognised qualifications—GCSE Computer Science, Creative iMedia, or Digital Information Technology—preparing learners for future careers. We use a structured, flexible, and pupil-centred approach that meets diverse needs, including attention and sensory differences: **Personalised Pathways** – Pupils progress through stage-appropriate programmes based on readiness, not age, revisiting key skills like coding and digital safety through a spiral curriculum. **Multi-Sensory Teaching** – Visual tools (e.g., Scratch) support early learning before moving to text coding (e.g., Python). Hands-on tech like physical hardware boosts engagement. **Safe & Structured Environment** – E-safety is embedded. Predictable routines and sensory breaks reduce anxiety and build focus. **Accessible for All** – Tools like screen readers, dyslexia-friendly fonts, and tables. **Real-World & Cross-Curricular Links** – Pupils apply skills through meaningful projects across subjects, making learning relevant and transferable.

Impact

Our computing curriculum is measured on both academic and developmental outcomes. **Pupil Progress and Achievement** - evidenced through formative assessments, project outcomes, and skill portfolios. **Engagement and Independence** - increasing confidence and self-direction in using digital tools, evidenced through participation, self-reflection, and reduced adult prompting. **Digital Citizenship and Safety** - using technology safely, responsibly, and ethically, including recognising online risks and knowing how to seek help. **Skills for Life and Work** essential digital competencies aligned to national standards and employability skills. Pupils at James Brindley have an opportunity to leave at KS4 with level 2 qualifications such as GCSE Computing Science, Vocational Creative iMedia and are prepared for the demands and opportunities of a digital world.