

Technology Faculty Curriculum Intent

Technology Vision:

Technology faculty is where curious, inquisitive minds are developed into independent, confident, resilient problem solvers who are not afraid to take risks. Through an inclusive curriculum in Design & Technology, Cooking & Nutrition, ICT and Computing, Hospitality & Catering and Creative iMedia, we strive to prepare and develop the designers, architects, engineers and chefs of the future.

Technology Intent

The Design and Technology curriculum at The Albion Academy has been designed to develop the student's practical, problem solving and designing skills. Our long-term aim is to produce thinking, adaptable young adults capable of contributing and shaping society.

Key stage 3 students will study Design and Technology, Hospitality and Catering and ICT and Computing in a rotation carousel. In Key stage 4 students will choose from a set of guided options including Hospitality & Catering and Art, Craft and Design and Creative iMedia.

The Technology curriculum is underpinned by the following curriculum principles and further discussion about each discipline is elaborated below.

Entitlement: All students have the right to learn.

Coherence: Using the National Curriculum as a foundation, our curriculum is carefully sequenced so that powerful knowledge builds through KS3. We make meaningful connections within subjects and between subjects.

Mastery: We ensure that foundational knowledge, skills and concepts are secure before moving on. Students revisit prior learning and apply their understanding in new contexts.

Adaptability: The core content follows the Design, Make, Evaluate and Technical knowledge process. This allows teachers to adapt the design briefs to bring to life our local context and meet the individual needs of their own classes.

Representation: All students see themselves in our curriculum, and our curriculum takes all students beyond their immediate experience.

Character: Our curriculum is intended to spark curiosity. It includes the taught subject timetable as well as spiritual, moral, social and cultural development

Design and Technology

In Key Stage 3 the learning is embedded through practical application in focused practical tasks to learn or develop skill using a range of materials and techniques to design and make a product to meet the requirements of a design brief, exploring the history of design and its impact on society. Year 7 Project based on carbon footprint and use of electricity to design and make a mobile phone passive amplifier. Year 8 Project based on environment impact, re-purposed materials to design and make a birdhouse for a local national trust heritage

site. Year 9 pupils engage in an application of skills project to design and make a series of mini make projects using a range of different materials and artistic styles.

Cooking and Nutrition

Food is a vital part of our daily lives and is essential for life. It is easy to choose food which has been pre prepared. However, it is more nutritious and often cheaper to cook simple, delicious food. Students at The Albion Academy will build on prior knowledge and understanding of nutrition, healthy eating, food preparation, hygiene, cooking techniques, and sensory characteristics. We are a culturally diverse, so lessons are prepared to reflect upon student's local context and food from around the world and support them in the wider world. This gives our students vital life skills that enable them to feed themselves and others affordably and nutritiously, now, and later in life.

ICT and Computing

Computing is an essential subject which equips students to use computational thinking and creativity to understand and change the world. Computing at The Albion Academy ensures that students become digitally literate – able to use and express themselves and develop their ideas through information and communication technology. The skills students develop in their computing lessons will prepare them for the future workplace. “Preparing students to be digital learners, ready for the next generation”. Our Computing curriculum will provide students with the skills to embrace and utilise new technology in a socially responsible and safe way. We equip our students with the skills to successfully operate in the ever-changing digital workplace and help them to understand the career opportunities that could be open to them. Our students will be digitally literate and competent end-users of technology, developing creativity, resilience, problem-solving and critical thinking skills

The curriculum threads the three pillars of computing (Digital Literacy, ICT, Computer Science) throughout Key Stage 3. When students join the academy in Year 7, they are taught a strong message of e-safety through exposing them to scenarios of potential dangers and teaching them a range of strategies to successfully combat them. This year covers the principles of how to access computers, software packages, exploring the history of computing and how technology will continue to evolve. The skills and knowledge acquired in the schemes of work are sequential and increase with complexity as students' progress through Key Stage 3 and Key Stage 4.

Students will utilise the following software: - Microsoft Office Products: Word, PowerPoint, Excel, Publisher - Office 365 Apps: Outlook, Forms, Teams, OneDrive - Python - Bitmap and Vector editing software. Lessons are sequenced to support students' progression in these areas over the course of study.