

Design and Technology

Curriculum information



Intent

The Design and Technology curriculum is sequenced from KS3 to KS5 to develop confident, creative and technically capable learners. Students progressively build knowledge of materials, manufacturing processes, design theory, graphics, engineering principles and nutrition. Projects are carefully selected to be relevant, engaging and reflective of real-world contexts, enabling students to become innovative problem-solvers and informed consumers and creators.

Implementation

At Key Stage 3 students experience all Design and Technology at St Augustine's including Resistant material, Graphic Communication and Cooking & Nutrition. Schemes of work are sequenced to build on prior learning and progressively develop technical knowledge, practical expertise, design theory and nutritional understanding. Students regularly analyse existing products, investigate the work of designers and companies, and apply their findings to their own design tasks.

Practical work is supported through modelling, demonstrations, peer assessment, self-evaluation and verbal feedback. Retrieval activities at the start of lessons reinforce prior learning and address misconceptions. The department makes extensive use of ICT, including CAD/CAM technologies, specialist software, interactive displays and visualisers. Students are encouraged to take design risks, refine designs, solve problems creatively and develop resilience through the iterative design process.

Impact

Students leave Design and Technology with the confidence to analyse, design, create and evaluate products effectively. Assessment evidence, practical outcomes, discussions with students and portfolio work demonstrate increasing levels of knowledge retention and technical competence. Students develop the ability to communicate design ideas, justify decisions and apply theoretical knowledge in practical situations. At KS4 and KS5 students are well prepared for further study, with learners progressing to A-Level courses, university programmes and apprenticeships in Graphic Design, Multimedia Design, Interior Design, Engineering, builders, architects and related fields.

Research Links/Professional Links

<https://www.designtechnology.org.uk/>, <https://www.aqa.org.uk/subjects/art-and-design/gcse/art-and-design-8201/specification/subject-content/graphic-communication>

Sequencing

At KS3 students follow the design process through analysing a problem, generating ideas, developing and modelling concepts, producing final outcomes and evaluating success. Design theory and nutrition are introduced in Year 7 before being revisited and extended in Years 8 and 9. Practical projects are sequenced to develop understanding of materials, processes and technical skills.

At KS4 Graphics students follow the OCR Art and Design: Graphic Communication specification, beginning with a skills-based project before progressing into portfolio development. A-Level students follow the AQA Graphic Communication specification, focusing on typography, design briefs, independent investigation and preparation for higher education.

GCSE Design and Technology students follow the AQA specification, beginning with structured design-and-make projects before completing the Non-Exam Assessment (NEA) and preparing for the written examination. This sequence ensures that knowledge and skills are revisited, strengthened and applied in increasingly challenging contexts.

Key Stage	Level	Qualifications	Exam Board
4	GCSE	Design & Technology	AQA
4	GCSE	Art & Design: Graphic Communication	OCR
5	A-Level	Art & Design: Graphic Communication	AQA

