

DESIGN & TECHNOLOGY CURRICULUM MAP

Students at SJB study Design & Technology to become individuals who are equipped with the skills, understanding & responsibility for shaping the world for future generations. Curiosity, creativity, adaptability, independence & problem solving underpin everything we do.

A LEVEL

DESIGN:

- Comprehensive investigations identify a breadth and/or depth of challenging problems & opportunities for further consideration. Objective consideration of market potential through the approaches taken.
- I can develop & communicate a selection of innovative, creative & original design ideas using annotated sketches that fully respond to the problem. Iterative developments are comprehensive & progressive. CAD & traditional prototyping techniques are accurate & incorporate all technical requirements.

MAKE:

- I can select & use a wide range of materials & appropriate tools and equipment, including CAD/CAM effectively & consistently, operated safely with accuracy.
- I can make my final product with a good level of accuracy, which is challenging, utilising quality control, consideration to tolerances & finishing skills are consistent. The final design addresses the problem & provides impact to a stakeholder.

ANALYSE:

- Comprehensive & systematic analysis & evaluation of 4 investigated sources of information from stakeholders, existing products & wider issues, offering clear & focused support to inform the design process.
- Iterative design shows that I can continuously critically analyse & evaluate my work, suggesting modifications & consideration of possible design optimisation. A range of tests including market testing has been used to formulate my final evaluation & next steps for future iterations.

GCSE

DESIGN:

- I can use focused research to identify design possibilities, investigate client needs & wants & factors including economic & social challenges to solve contextual challenge problems.
- I can develop & communicate a selection of innovative, creative & original design ideas using annotated sketches that addresses the contextual challenge. Different ideas are experimented & avoid design fixation. CAD & traditional prototyping techniques are accurate & consider functionality, aesthetics & innovation.

MAKE:

- I can select & use a wide range of materials & appropriate tools & equipment, including CAD/CAM, operated safely with accuracy.
- I can make my final product with a good level of accuracy, utilising quality control, consideration to tolerances & finishing skills are largely consistent. The final design addresses the contextual challenge.

ANALYSE:

- I can analyse the work of past & present professionals & others to develop & broaden my understanding. This includes developments in design & technology such as the impact on individuals, society & the environment & the responsibilities of designers, engineers & technologists.

KS3

DESIGN:

- I can use research to identify & understand users' needs to solve contextual challenge problems, ensuring they are incorporated.
- I can develop & communicate a selection of innovative & creative design ideas using annotated sketches. Ideas start to avoid design fixation, developing accuracy in CAD & traditional prototyping techniques considering functionality, aesthetics & innovation.

MAKE:

- I can select and use specialist tools & equipment independently, including CAD/CAM, operated safely with a good level of skill.
- I can make my final product with a good level of accuracy utilising quality control, consideration to tolerances & finishing skills are largely consistent.

ANALYSE:

- I can analyse the work of past and present professionals & others to develop & broaden my understanding.
- I can evaluate my work with good evidence that feedback has been used to improve work & reference to some suggestions made. Evaluation & analysis runs throughout the project.

