Design and Technology Curriculum Summary

KS5 Curriculum Summary

Introduction
The A level course builds on the content from AQA with very close links in structure and content. This course is reformed with key emphasis on design & engineering at its core. STEM links are central to the detailed understanding of materials working properties and processing of materials at this level.

At any one point during the first 4 terms of year 12 students will be working on a practical project, a research assignment and covering theory topics in dedicated theory lessons. Students develop independent management skills by balancing these assignments flexibly as is often required with design tasks. There is much room for students to be creative and embrace risk taking in the practical skills project. Research projects are mostly completed outside of lessons that helps students to develop independent enquiry skills in this subject area.

Theory is taught using the PG Online lesson resources. These offer high quality resources and materials for lessons and a well-defined structure, including end of unit tests that ensure that students have covered the full exam specification in depth.

Exam board: *AQA*
A-level Specification: *7552 Design & Technology: Product Design*

Non-Examination Assessment
The NEA project follows a 'student-led context' that each student must investigate and define themselves. Emphasis is placed on working with a real client and using the iterative design model to continuously test and refine their design ideas. Projects vary significantly. The NEA at A level is highly challenging but very rewarding to many students.

Year 12

Topic	Principal resources
Skills: Inclusive Design Modelling	
Skills: Concrete Casting	
Skills: Laser Cutting Christmas Products	
Skills: User Centred Cleaning Products (Fixperts Brief)	
Skills: Learning to Look (Fixperts Brief)	
Research: New & Emerging Technology	
Research: Sustainable Management & Design	
Research: Outstanding Design	
Research: Book Review	
Research: Explore the mundane	
Theory: Units 2&7 Polymers	PG Online Resources.
Theory: Unit 10: Production Systems	PG Online Resources.
Theory: Units 4&9 Metals	PG Online Resources.
Theory: Unit 11 Product Design Considerations	PG Online Resources.
Theory: Units 3&8 Timbers	PG Online Resources.
Theory: Unit 12: Product Design & Development	PG Online Resources.
Theory: Units 1&6 Papers and Boards	PG Online Resources.
NEA Project (Easter onwards)	

Year 13

Topic	Principal resources
Theory: Unit 13 Design Methods	PG Online Resources.
Theory: Unit 5 Composite Materials	PG Online Resources.
Theory: Unit 14 Design Processes	PG Online Resources.
Theory: Unit 15 Responsible Design	PG Online Resources.
NEA Project (Sept- Late March)	