St George's School
Design & Technology
KS4 Curriculum

PRIOR KNOWLEDGE *Knowledge and skills developed in KS3*	Design & Technology (D&T) prior knowledge is detailed in our KS3 curriculum maps. All students should have experience of designing across a range of contexts and material areas. Students will have developed their D&T capability through a mixture of mainly making, mainly designing and design and make tasks across KS3.
COURSE DELIVERY & STRUCTURE *How the curriculum is delivered*	**Lessons:** Students will receive five lessons per fortnight in both Year 10 and Year 11. **Grouping:** Students are taught in mixed ability classes. **Structure:** Our curriculum builds upon KS3 and seeks to develop students' design thinking across a range of unseen contexts. It is taught as a series of topics which are sequenced to cover the full specification. **Prep:** Prep is set once or twice per week. Prep will predominantly consist of knowledge consolidation, pre-reading tasks or continuation of NEA tasks.

QUALIFICATION
Exam Board, aims and objectives
	GCSE Design & Technology AQA (8552)
	AO1: Identify, investigate and outline design possibilities to address needs and wants.
	AO2: Design and make prototypes that are fit for purpose.
	AO3: Analyse and evaluate:
	  ➔ design decisions and outcomes, including for prototypes made by themselves and others
	  ➔ wider issues in design and technology.
	AO4: Demonstrate and apply knowledge and understanding of:
	  ➔ technical principles
	  ➔ designing and making principles

ASSESSMENT *Internal monitoring and final assessment*	**Internal Assessment:** Summative assessment at the end of each topic area and on-going assessment of NEA style tasks. Year 10 & 11 Mock exams **Final assessment:** NEA commencing June of Year 10, ending March Year 11; 1 Exam paper - Core content; Specialist Technical Principles and Designing and Making principles; 2 hours
BREADTH *Opportunities, trips, wider reading, cultural capital*	Students are encouraged to subscribe to websites such as core77.com in order to see up to date design practice as well as other blogs, books and magazines we have access to in the department.

	SUBJECT KNOWLEDGE *Overview of topics*	SKILLS & STRATEGIES *Procedural knowledge*
Autumn Y10	Topic 1 - Presenting & Developing Design Ideas. Topic 2 – Machine Skills Topic 3 - Amazon Project	Presentation techniques, Advanced CAD, Prototype development techniques; Castings & Lathe operations; Heat treatments; Polymer recycling, Mould making;
Spring Y10	Topic 4 - Mock Exam preparation Topic 5 - CAD.	Pattern cutting; sewing machine processes; Design Ideas; Developing design ideas and prototypes; presenting design solutions; Core Content.
Summer Y10	NEA Section A & B	Research methods; Design Brief & Specification;
Autumn Y11	NEA Section C & D	Design Ideas; Development of prototypes; Manufacturing specification. Core Content & Specialist technical principles
Spring Y11	NEA Section E & F	Realising Prototypes; Testing & Evaluation; Specialist technical principles; Designing & Making Principles.
Summer Y11	Revision	Revision