Verulam School: Key Stage 4 CURRICULUM INFORMATION

Department: Design & Technology - Systems
Subject Leader: Nicholas Phillips

Subject Vision: Across all Key stages (except food KS5) in Design & Technology and Food, we actively engage students to plan, think, solve creatively, and evaluate iteratively. Our students are self-motivated and confident learners; able and ready to take on current and future technological challenges. Vital in critically understanding today's ever-changing global world; we aim to create a growth mindset in students who will be ready and willing to engage in being able to have the knowledge, thinking skills and ability to innovate with new technologies to make a difference.

	YEAR 10 Systems					
Term	**Autumn 1**	**Autumn 2**	**Spring 1**	**Spring 2**	**Summer 1**	**Summer 2**
Topic/Unit Title	Flash in the dark Project. Introduction to CAD / CAM. PCB Wizard / CorelDRAW / SketchUp. Presentation skills on A3, Word and G Docs. Soldering, PCB Manufacturing and assembly. Theory runs alongside practical lessons in bitesize chunks		PROBOX project Developing skills with CAD / CAM. Introduction to laser cutting and further manufacturing techniques. Independent practical work skills 3D modelling with card iterations Theory runs alongside practical lessons in bitesize chunks		NEA project skills Theory relating to end of year exam, revision notes and folder	Commence NEA (1st June) – Research and Design opportunities Theory relating to end of year exam, revision notes and folder
	YEAR 11 Systems					
Term	**Autumn 1**	**Autumn 2**	**Spring 1**	**Spring 2**	**Summer 1**	**Summer 2**
Topic/Unit Title	NEA – Brief, specification, design ideas Theory relating to GCSE exam, revision notes and folder	NEA – design ideas and development Trial exam 1: Exam preparation	Complete NEA – development, planning and making and evaluating Trial exam 2: Exam preparation		Theory/revision – relating to GCSE Exam.	