Curriculum Map

Year 10 Scheme of Learning Design Technology

	Design and Technology GCSE (eduqas)
Unit Title & Assessment Task	**There are six units that pupils will complete in design and technology during year 10.** • Unit 1 - Biomimetic Design • Unit 2 – Core technical principals • Unit 3 – CAD an CAM Skills • Unit 4 – Specialist Technical principals • Unit 5 – The work of others • Unit 6 – Introduction to the NEA Task **Assessment is completed throughout the course and will focus on the four assessment objectives of the exam board.** • 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 made by themselves and others. Also evaluate wider issues in design and technology. • AO4 – Demonstrate and apply knowledge and understanding of technical principals and also design and making principals **Pupils designing and making projects will be assessed at regular intervals throughout year 10 and will account for 50% of the overall year 10 grade. Pupils will also complete a mock examination at the end of the year that will account for 50% of the final grade for year 10.**
Key Knowledge/ Skills	In year 10 learners will develop their skills by researching, designing and making products whilst they complete several design and make projects. They will also learn about the wider influences of design and technology, including social, cultural and environmental factors during theory-based lessons. **Key Skills and Knowledge to be covered:** (pupil will have the opportunity to) • use imagination, experimentation and creativity when designing • develop the skills to critique their own work and the work of others, whilst analysing and evaluating • communicate their design ideas and design decisions using a range of media and techniques • develop decision making skills, including the planning and organisation of time and resources when managing their own project work • improve practical skills to develop high quality, imaginative and functional prototypes • consider the costs, commercial viability and marketing of products • demonstrate safe working practices in design and technology • use key design and technology terminology including those related to: designing, innovation and communication; materials and technologies; manufacture and production; critiquing, values and ethics • develop a knowledge of; the influences of design and technology on our world, mechanical systems, materials and their properties and components
Rationale: Short summary explaining the rationale for what is being learned in this unit and why – no more than 2 sentences.	This programme of study builds on subject content which is taught at key stage 3 in design and technology lessons. The curriculum is planned and sequenced so that key concepts are revisited, with increasing complexity, to build deep knowledge and understanding of the subject. This means that pupils of all abilities will be prepared for the challenge of completing NEA assessment projects and GCSE examinations in year 11.