



Marshall's Park Academy - Curriculum Overview

Subject: Design and Technology

Year Group: 11

TERM 1	TERM 2	TERM 3
<p style="text-align: center;">KNOWLEDGE/SKILLS</p> <ul style="list-style-type: none"> • By analysing the contextual challenge students will identify design possibilities, investigate client needs and wants and factors including economic and social challenges. • Encouraged to investigate throughout their project to help inform decisions. • outline design possibilities by producing a design brief and design specification. Students should review both throughout the project. • Students should explore a range of possible ideas linking to the contextual challenge selected. • Start to draw out design ideas • Students will develop and refine design ideas. This may include, formal and informal 2D/3D drawing including CAD, systems and schematic diagrams, models and schedules. • Students will develop at least one model. • Students will also select suitable materials and components communicating their decisions throughout the development process. • appropriate methods, such as measured drawings, control programs, circuit diagrams, patterns. 	<p style="text-align: center;">KNOWLEDGE/SKILLS</p> <ul style="list-style-type: none"> • Students will work with a range of appropriate materials/components to produce prototypes that are accurate and within close tolerances. • This will involve using specialist tools and equipment, which may include hand tools, machines or CAM/CNC. The prototypes will be constructed through a range of techniques, which may involve shaping, fabrication, construction and assembly. • Within this iterative design process students are expected to continuously analyse and evaluate their work, using their decisions to improve outcomes. This should include defining requirements, analysing the design brief and specifications along with the testing and evaluating of ideas produced during the generation and development stages. • Final internal deadline for coursework • Exam preparation 	<p style="text-align: center;">KNOWLEDGE/SKILLS</p> <p style="text-align: center;">□ Exam preparation.</p> <p>Section A – Core technical principles (20 marks) A mixture of multiple choice and short answer questions assessing a breadth of technical knowledge and understanding.</p> <p>Section B – Specialist technical principles (30 marks) Several short answer questions (2–5 marks) and one extended response to assess a more in depth knowledge of technical principles.</p> <p>Section C – Designing and making principles (50 marks) A mixture of short answer and extended response questions.</p> <ul style="list-style-type: none"> • This will include revision on specialist areas. • Students will go through how to effectively answer questions in the paper. • Core technical principles • Specialist technical principles • Designing and making principles

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Students will be completing the Non Exam Assessment. This will last 35- 40 hours. There will be internal moderation.

The NEA accounts for 50% of the final grade.

Once this is complete the focus will then be on exam preparation.





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KEY ASSESSMENTS HALF TERM 1 HALF TERM 2	HALF TERM 1 KEY ASSESSMENTS HALF TERM 2	HALF TERM 1 KEY ASSESSMENTS HALF TERM 2
Extended reading suggestions and links to external resources:		