



Design and Technology



Archdiocese of Liverpool

Curriculum intent:

In Year 10 pupils develop their depth of knowledge and understanding by working through a range of mini NEA projects. Pupils use creativity and imagination to design and manufacture products and prototypes that solve real and relevant problems that consider social, moral and cultural values, forming cross-curricular links, pupils draw on disciplines such as Mathematics, Science, and Computing. Pupils use a range of media in order develop their own design style.

Year 10

	Content	Concepts and Skills
TERM 1	Tools Box Project 3.1 Core technical principles <ul style="list-style-type: none">Materials and their working propertiesMaterial categoriesMaterial properties 3.2 Specialist technical principles <ul style="list-style-type: none">Sources and originsUsing and working with materialsStock forms, types and sizes	Tools & Equipment Manufacturing processes & Techniques Health & Safety Materials: Timbers & Metals Maths: measuring, marking out and tolerances Technical drawing techniques & CAD Sustainability and Environmental issues
TERM 2	Bottle Opener 3.1 Core technical principles <ul style="list-style-type: none">Material categoriesMaterial properties 3.2 Specialist technical principles <ul style="list-style-type: none">Forces and stressesSpecialist techniques and processes 3.3 Designing and making principles <ul style="list-style-type: none">Tolerances	Tools & Equipment Manufacturing processes & Techniques Health & Safety Materials: Metals & Polymers Design process Scales of production Target market & commercial viability
TERM 3	CAD GCSE-NEA (Exam Prep) 3.1 Core technical principles <ul style="list-style-type: none">New and emerging technologiesEnergy generation and storageDevelopments in new materials 3.2 Specialist technical principles <ul style="list-style-type: none">Ecological and social footprint3.2.4 Sources and origins 3.3 Designing and making principles <ul style="list-style-type: none">Environmental, social and economic challenge	Literacy: Design Context Research & Analysis Health & Safety Lathe & Milling machine techniques Site Management Literacy: product evaluation Literacy: exam style questioning

