

Curriculum Map



Revision

Students prepare for the exam using revision and exam practice.

Students use their design brief, specification and customer feedback to evaluate their solution.

NEA Evaluation

The final prototype is manufactured independently and documented in making diary.

NEA Making

Students conduct a range of testing, modeling, sketching and evaluation to develop solution to the design brief.

NEA Developing



Generation of initial ideas.

New and emerging technologies- industry and enterprise, sustainability and production techniques and systems.



Unit 6 covers design strategy, communication techniques and the work of others.



On June 1st in Year 10 AQA release the Contextual Challenges.

Students investigate the context of their choice to identify a problem, customer, design brief and specification.

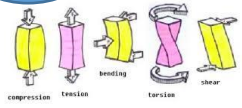
A	S
C	S
E	M

NEA Designing

Design principles Making principles

NEA Context

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Common technical principles covers- forces and stress, improving functionality, The 6Rs and scales of production.



Students study a range of materials learning about- Sources and origins of, working with materials and commercial manufacturing.



Students develop their practical skills using a range of different materials, tools and equipment.

Common specialist technical principles

Polymers Papers and boards

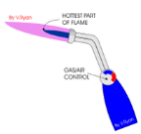
Metals Textile based materials

Timber based products

Students learn about metals, their properties and uses.



Students learn how to cut, machine, join and finish metals including heat treatments.



Student develop their knowledge and skills of papers and boards and use this to design and make a product.

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Metal based products

QA/QC

Independently apply quality assurance and quality control.

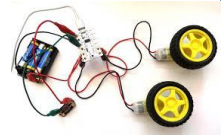
Papers and boards



Students learn how to produce a high quality timber based product.

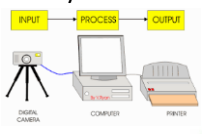


students create a bespoke product by developing their understanding of textiles including pattern drafting.



Students use Crumble electronics kits to make a range of circuits with different inputs and outputs.

Students develop their knowledge and skills of systems and control.



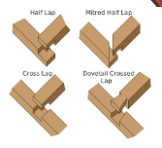
Jigs, moulds and templates are designed and used to assist product manufacture.



An introduction to fabrics and surface decoration through hand stitching, tie dying, embroidery and digital design.



By the end of this unit students will understand how to make a range of wood joints including marking out and finishing skills. They will understand material properties and stock forms



Textiles

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Timber

Timber properties and stock forms

Students design and make a basic electronic circuit to suit their products requirements.



Students are introduced to timbers. They learn about their categories and how to cut, shape and finish them.



Learning is based around the iterative design process. Students design a product for a set client.



Students are introduced to Design and Technology safe working practices.



Electronics

Timbers

Iterative design

Safety

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