

Curriculum Map



Generation of initial ideas

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

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

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

Students prepare for the exam using revision and exam practice.

KO

NEA Evaluation

NEA Making

KO

NEA Developing

KO

NEA Designing

KO

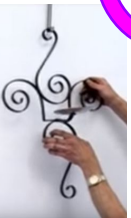
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NEA Context

KO

AQA

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



Metal craft. Students complete a mock NEA based on a metal craft project. Covers several areas of GCSE theory, the focus being joining metals and processing.

KO

Metal Craft

Nightlight project- The focus is on the systems element of the specification- students combine electronics and product design to meet a specific design brief

KO

Night Light

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Pizza Cutter - Students develop further knowledge and skills of workshop and industrial manufacturing processes in a multidisciplinary and multi material project.

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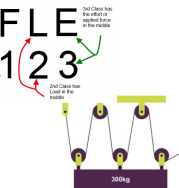
Pizza Cutter

Design in the style of ... Students use a range of modelling techniques including CAD/CAM to develop a final design of an egg holder in the style of Alessi. Theory coverage focuses on polymers, smart materials and the environment.

KO

Design in the style of Alessi

- A** is for **Aesthetics**
- C** is for **Cost**
- C** is for **Customer**
- E** is for **Environment**
- S** is for **Size**
- S** is for **Safety**
- F** is for **Function**
- M** is for **Material**



Advanced Systems & Control

KO

Eco Amplifier - Students learn more advanced subject content relating to wood & timber processing and manufacture in this focused practical project. Covers elements of design theory and sustainability.

KO

Eco Amplifier

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Creative Lighting - students create a small USB powered light. This project further covers aspects of polymer production & manufacture and environmental concerns. Additionally the project introduces more advanced CAD skills.

Pewter Casting - Students design and mould keyrings using hot cast metal



Pop Up Book - This is an introduction to paper and card engineering. Students apply their learning of motions, levers and linkages with creativity and illustration /graphics



Product design (Lighting & Casting projects)

Crumble - Coding: students have a basic introduction through the CRUMBLE project on the carousel. They use code to receive inputs and control outputs via interactive tasks

Systems and control (Coding via crumble)

Technology Enrichment project

Worry monster - An introduction to fabrics. Students are taught how to use sewing machines, to hand sew and the principles of tie dying.



7/8

Textiles (Worry Monsters)

Y8 KO's

Y7 KO's

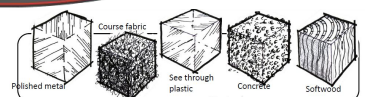
Metals (Hanging Around)

Hanging Around - students are introduced to timbers and metals. They learn about their categories, properties and stock form. Then how to cut, shape and finish them. Other carousel rotations introduce students to Polymers. This also includes a basic introduction to Computer Aided Design.



Learning is based around the basic techniques used for communicating ideas - rendering, isometric, perspective, crating. This is over the course of Years 7 & 8

Students have their first Health and Safety induction and in addition specific training on the pillar drill/ scroll saw and bandfacer.



Graphics - small exercises in each project

7



Timbers (Hanging around)

Plastics (Crumble Intro)

