2 Tolerances

3 Material management

4 Tools,

1 Selection of materials equipment, & components

techniques and finishes

Year 11 **Unit 7:**

Worth 50% of the GCSE

Hand in

Exam preparation

REVISE

Post 16 **Destinations**

0000000

YEAR

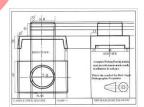
Making

principles

5 Surface treatments and finishes **February**

May/June

Worth 50% of the GCSE



movements,



3 contextual challenges released by AQA

Collaboration

Sketching & prototyping

1 Investigation, primary Stakeholder & secondary research requirements

1 Sources, origins & properties

2 Working with polymers

Formal drawing

QC/QA testing and properties

Material

Unit 4: Common specialist

technical principles

Practice for

Infant asthma project, 3D printed door pull, mini NEA etc.

Unit 6: **Designing** principles

2 Design strategies

Evaluate

2 The work of others

Unit 5D: **Polymers**

Timbers and polymers practical task

Iteration

Systematic evaluation

Creative strategies

Presentation

4 Communication of ideas

3 Manufacture & finishing

Finishing & joining methods

1 Forces & stresses

2 Improving functionality

3 Ecological and social footprint

5 Scales of production

4 The six Rs



2 Sustainability & the environment

3 People culture & society

Finishing & joining methods

Formal

drawing

1 Energy generation

2 Energy storage

3 Modern Materials

1 Papers & boards

2 Timbers

4 Smart Materials 3 Metals & Alloys

YEAR

Unit 1: New and emerging technologies

Focused practical task

Alloys

Unit 3: Materials and their working properties

design

Material

properties

and testing

7 Electronic systems processing 4 Polymers

5 Textiles

4 Production techniques & systems

5 Informing decisions

Ferrous and non-ferrous

5 Composite materials & **Technical textiles**

6 Systems approach

to designing

8 Mechanical devices



KS4 Careers signposting:

Manufacturing industries. Material Science. Quality control procedures. User-centred design approaches.

Iteration. Research - primary and secondary. Understanding data and population statistics.

Prototyping and testing ideas. Concept presentation skills.

Empathic Design tools.

Scales of production. Manufacturing methods and processes.

The work of others. Architecture, engineering, product design, graphic

Design approaches Inc. collaboration, systems approach.

Energy and sustainability.

Mechanics, forces and movement.

Material selection, working, physical and mechanical

Social footprint and associated organisations. Primary and secondary research collection. Interviewing processes.

Quality control and Quality Assurance.

Displaying data. Applied maths.

Visual communication. CAD/CAM. Intellectual property.

KS4 Overview

• At KS4 students will develop: their use of creative strategies to help avoid fixation; their practical skills; their theory knowledge; presentation and drawing skills and exam technique.

Students will engage in several practical projects including focused practical tasks to develop their practical skills.

Should this QR code not work, please click here to view the relevant specification.

Key themes of new GCSE specification (8552 - 2017):

- Iteration i.e. explore needs, create solutions, evaluate how well solutions meet needs
- **Prototyping**
- Primary research
- Third party feedback & client
- Problem spotting and problem
- Addressing the needs of a client



