

# Curriculum Intent Statement for Design and Technology

## Intent

The Design and technology curriculum at GM School is designed to develop students to become confident designers, who can make exciting and unique designs and products that can meet users' needs.

## Implementation

Through our broad and balanced curriculum, the overarching themes underpin core knowledge which develop creative learners in the key areas of research, technical knowledge, testing, evaluating, designing and making. In addition, students gain an understanding of different cultures, society and industry which will prepare them for the world of work.

## EYFS

In EYFS, children are encouraged to develop their designing and making skills through free flow activities. Activities are incorporated into different areas of the curriculum. Children are encouraged to be imaginative, using a range of materials, media and tools to experiment with design, form and function. They continue to work on their fine and gross motor skills.

## KS1 and KS2

Design and Technology is taught in 6-hour blocks across a half term. In Design and Technology, children are given opportunities to utilise their creativity and imagination to design and make products that address real and relevant problems, taking into consideration their own and others' needs. Through a hands-on approach, students explore various materials and techniques, as well as the design process, which includes the stages of idea generation and design development, prototyping, and evaluation. Students engage in practical activities that promote creativity, critical thinking, and collaboration. Students develop skills in ideation, sketching, modelling, and evaluation, as well as gain an understanding of the importance of considering user needs in product design. This lesson will foster a deep appreciation for the role of Design and Technology in solving real-world problems, empowering students to become thoughtful and innovative designers.

## KS3

Key Stage 3 follows the National Curriculum and is taught in mixed ability groups over 4 hours per fortnight.

Design and Technology is a highly creative subject that combines knowledge with practical skills to solve design problems. During years 7, 8 and 9 students will work within specialist teaching facilities to produce a range of products. Lessons are structured to offer two lessons a week across the different Technology specialisms, which are:

- D&T Product Design
- D&T Textiles Technology
- D&T Food Technology

## KS4

KS4 offers three different exam board specifications and is taught in mixed ability groups over 6 hours per fortnight.

At Key Stage 4, teaching and learning builds upon Key Stage 3; introducing greater depth, creativity and real-life scenarios to build upon knowledge and practical skills and prepare students to create innovative and inspiring products that have real world application.

At Key stage 4 we currently offer the following courses:

- WJEC Eduqas GCSE Design and Technology Grade 1-9 (Textiles)

- WJEC Level 1/2 Vocational Award in Hospitality and Catering
- AQA GCSE Art and Design (Three-Dimensional Design)

### **The WJEC Eduqas GCSE Design and Technology Grade 1-9 (Textiles)**

The course follows three principles:

- Technical principles: Core knowledge and understanding
- In depth knowledge and understanding
- Core designing and making principles

External Assessment

- Written exam: 2 hours
- 100 marks
- 50% of final GCSE grade

Non-exam assessment

This is a practical assessment of the three course principles

- Non-exam assessment (NEA) approximately 30–35 hours
- 100 marks
- 50% of final GCSE grade

For further information please visit the exam board website. [https://www.eduqas.co.uk/qualifications/design-andtechnology-gcse/#tab\\_overview](https://www.eduqas.co.uk/qualifications/design-andtechnology-gcse/#tab_overview)

### **WJEC Level 1/2 Vocational Award in Hospitality and Catering**

Students will gain the ability to plan, prepare and present food is an essential skill within the hospitality and catering industry. The WJEC Vocational Award in Hospitality and Catering equips learners with theoretical knowledge about the industry as well as enabling them to develop practical skills in planning, preparing and cooking a variety of dishes

This qualification is graded Level 1 Pass – Level 2 Distinction and involves a 12 hour Non Examined Assessment (controlled assessment/coursework)

External Assessment

This unit is externally assessed through a written exam which contributes 40% to the overall qualification grade.

Duration: 1 hour 20 minutes

Number of marks: 80

Format: short and extended answer questions based around applied situations.

Unit 1: The topics you will be covering are:

- About hospitality and catering provision
- How hospitality and catering providers operate
- Health and safety in hospitality and catering
- Food safety in hospitality and catering

Internal Controlled Assessment

This unit is internally assessed through controlled assessment. The assessment contributes 60% to the overall qualification grade.

Duration: 12 hours

Number of marks: 120

Format: An assignment brief will be provided by the exam board, which will include a scenario and several tasks.

Unit 2: This unit draws upon the knowledge gained in Unit 1. You will need to apply knowledge gained in the following topic areas in order to be able to complete this assessment:

- the operation of the front and back of house
- hospitality and catering provision to meet specific requirements
- health and safety in hospitality and catering provision
- food safety
- preventative control measures of food-induced ill health.

The topics you will be covering are:

2.1 The importance of nutrition

2.2 Menu planning

2.3 The skills and techniques of preparation, cooking and presentation of dishes 2.4 Evaluating cooking skills

For further information please visit the [exam board website www.wjec.co.uk/qualifications/hospitality-and-cateringlevel-1-2](http://www.wjec.co.uk/qualifications/hospitality-and-cateringlevel-1-2)

### **The AQA GCSE Art and Design (Three-Dimensional Design)**

Students will learn by:

- Undertaking three-dimensional design (ceramics, sculpture, jewellery architectural design)
- Improving your creative thinking and problem-solving skills further
- Developing the ability to produce creative design ideas by recording ideas through drawing and modelling and design create and manufacturing 3D products using workshop skills and traditional creative techniques, such as drawing materials, clay, wood, metal, plaster, plastic, found materials
- Working independently and creatively whilst developing time management/organisational skills.

The course follows:

Internal Assessment

**Component 1** - Portfolio (**coursework**) worth 60% of GCSE

Non-Examined Assessment

**Component 2** - Externally Set Assignment worth 40% of GCSE

**Course Content:** The course is divided into two main parts: Portfolio and Externally Set Assignment.

Both aspects must satisfy the following assessment objectives:

**1.** Develop ideas, **2.** Refine work, **3.** Record ideas, **4.** Present a personal and meaningful response

Students learn about:

- Artist, Designers and designing, using creativity and imagination.
- Approaches to solve real and relevant problems, creatively within a variety of contexts
- Prototyping, modelling and maquette making
- Exploring Materials, Manufacturing process and practical skills creatively

For further information please visit the [exam board website https://www.aqa.org.uk/subjects/art-and-design/gcse/art-and-design-8201-8206/subject-content/three-dimensional-design](https://www.aqa.org.uk/subjects/art-and-design/gcse/art-and-design-8201-8206/subject-content/three-dimensional-design)

## **Enrichment Opportunities**

The department have internal workshops with agencies such as Speakers for Schools, the Victoria and Albert Museum and Careers Hub East. We have an internal KS3 Designers competition where the top two students from each class win a place on a trip to the Victoria and Albert museum. There is a KS3 knitting club in Textiles Technology.

# Supporting your Child

There are many websites that can be used to aid learning in the different specialisms

Product Design <http://www.cfsd.org.uk>  
<http://www.openhouse.org.uk> )  
<http://www.technologystudent.com>  
<http://www.designmuseum.org>  
<http://www.horniman.ac.uk>  
<http://www.conran.com>

Food Technology  
<https://www.nutrition.org.uk/>  
<http://www.foodinschools.org>  
<http://www.hse.gov.uk/catering/>  
<https://www.foodsafety.gov/>

Textiles Technology  
<http://www.vam.ac.uk>  
<http://stitchschool.blogspot.co.uk>  
<http://www.burdastyle.com>  
<http://www.sewing.org>

## Where could Design and Technology take you next?

Possible careers in Design and Technology can be –

Product Design: Mechanic, Carpenter, Electrician, Art and design, Media, Engineering, Photography, Construction and Building services. Apprenticeships such as junior product designer, theatre set carpenter, civil engineering technician, design and draughting technician and engineering model maker and much more!

Food Technology: Chef, Nutritionist, Travel and Tourism, Hotel staff, Restaurateur, Hospitality Business, Consultant to Healthcare Providers, Environmental Health Officer, Care worker and much more!

Textiles Technology: Clothing/textile technologist, Colour technologist, Interior and spatial designer, Fashion designer, Textile designer, Conservator, Further education teacher, Graphic designer, Higher education lecturer, Printmaker, Product designer, Retail buyer, Secondary school teacher, Stylist, Visual merchandiser & fashion styling and much more!