KEY STAGE 4: FACULTY OF SCIENCE, INNOVATION & CREATIVITY

DESIGN AND TECHNOLOGY

Teacher in Charge

MRS R SHARRATT

What course do I follow?

GCSE DESIGN AND TECHNOLOGY

What will I study?

This GCSE will prepare students to participate confidently and successfully in an increasingly technological world. Students will gain awareness and learn from wider influences on Design and Technology including historical, social, cultural, environmental and economic factors. Students will get the opportunity to work creatively when designing and making and apply technical and practical expertise.

The GCSE allows students to study core technical and designing and making principles, including a broad range of design processes, materials techniques and equipment. They will also have the opportunity to study specialist technical principles in greater depth.

This qualification is linear. Linear means that students will sit all their exams and submit all their non-exam assessment at the end of the course.

Upon completion of this course, students will be qualified to go on to further study or embark on an apprenticeship or full-time career in the creative industries.

Details of Assessment

Exam 50%, Project (Coursework) 50%

What's assessed

<u>Core technical principles</u> <u>Specialist technical principles</u>

Exam: How it's assessed

Written exam: 1 hour and 45 minutes 100 marks 50% of GCSE

Section A – Core

This section is 40 marks and contains a mixture of different question styles, including open-response, graphical, calculation and extended-open-response questions. There will be 10 marks of calculation questions in Section A.

Section B – Material Categories

This section is 60 marks and contains a mixture of different question styles, including open-response, graphical, calculation and extended-open-response questions. There will be 5 marks of calculation questions in Section B

Where does this lead to?

(just a few of many examples)

Engineering
sectors: energy,
aerospace,
agriculture,
vehicle, robotics,
biomedical,
electronics...

<u>Design:</u>

Architecture, product design, art and design, fashion, CAD...

Building:
carpentry,
construction, set
design, civil
engineering,
plumbing...

...and many more!

Post 16 design and technology allows you to pursue: BTECs, NVQs, A-Levels, Higher Nationals, and Degree, and apprenticeships.

Project: What's assessed

Practical application of:

- Core technical principles
- Specialist technical principles
- Designing and making principles

How it's assessed

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

Task(s)

- Students will undertake a project based on a contextual challenge released by Edexcel on the 1st of June.
- The project will test students' skills in investigating, designing, making and evaluating a prototype of a product.
- Task will be internally assessed and externally moderated.
 - 1 Investigate (16 marks)
 - 2 Design (42 marks)
 - 3 Make (36 marks)
 - 4 Evaluate (6 marks
- Students will produce a working prototype and a portfolio of evidence
- Work will be marked by teachers and moderated externally by the awarding body.



"We aim to teach a balance of modern and traditional making techniques from 3d printing and laser cutting to machining and MIG welding. Having strong links with industry enable us to provide a bespoke curriculum that children enjoy and learn skills that compliment those with post 16 providers."

"Pupils are proud of the work they complete in Design and Technology". Ofsted 2019

By using a combination of design and making activities we ensure that pupils bring the best of their knowledge of all subjects into their projects. This unique experience means that students apply knowledge in creative ways.

