DESIGN TECHNOLOGY
Mr J. Perks

at SCGSG

AQA - Specification 8552

The course:

GCSE Design and Technology is an engaging and practical subject where creativity meets real-world problem-solving. In this course, you'll explore how problems are solved and how ideas are transformed into essential products and services that shape our everyday lives—from cutting-edge medical devices to sustainable solutions for global challenges.

This course is perfect for those who want to create rather than just study. You'll develop valuable workshop skills and gain hands-on experience with modern design technologies such as 3D printing, laser cutting, and computer-aided design (CAD)—skills that are in high demand in fields like medicine, engineering, dentistry, and biomedical sciences.

You'll also explore the historical, social, cultural, economic, and environmental influences that shape design. This will give you a well-rounded perspective, enabling you to approach real-world problems in creative and sustainable ways.

Whether you're interested in designing gadgets for the future, working in technology, medicine, dentistry or pursuing a variety of other careers, Design and Technology equips you with the technical expertise and creative problem-solving skills to make a lasting impact in today's world.

Post-16 Options:

After completing GCSE Design and Technology, students can pursue a variety of Post-16 options, including:

- **A-Level Design and Technology:** This course will further deepen your understanding of design principles, materials, and technologies, with a focus on both practical skills and theoretical knowledge.
- **BTEC Level 3 Engineering or Product Design:** A vocational qualification that offers more practical, hands-on learning. It's perfect for students who want to dive deeper into design, technology, and engineering principles, preparing them for a career in the creative or technical industries.
- **Apprenticeships:** For students interested in gaining practical experience while earning, apprenticeships in fields like product design, engineering, or construction offer valuable on-the-job training and potential career progression.
- **University Degrees:** GCSE Design and Technology is a great stepping stone to degrees in Engineering, Industrial Design, Architecture, or other related fields.

How will I be assessed?

The course is assessed in two units:

1) Written exam - 2 hours (50% of GCSE)
- Core technical principles
- Specialist technical principles
- Designing and making principles

2) Non-examination assessment (NEA) Approximately 35 hours (50% of GCSE)
- Identifying and investigating design possibilities
- Producing a design brief and specification
- Generating design ideas
- Developing design ideas
- Realising design ideas
- Analysing & evaluating

Students produce a prototype and a portfolio of evidence. The NEA work is marked by teachers and moderated by AQA.

Into the future:

Here are a few career options that blend Design and Technology with medical and healthcare applications:

- Medical Device Designer
- Biomedical Engineer
- Product Designer for Healthcare
- Ergonomics Specialist
- Surgical Instrument Designer
- Health and Safety Consultant
- Pharmaceutical Equipment Designer
- Sports Medicine Technology Specialist
- Assistive Technology Designer

These career options allow you to apply your Design and Technology skills in ways that make a real impact on people's lives and contribute to advancements in healthcare.