



Course Requirements

Sixth Form Entry Requirement
plus
GCSE Design and Technology -
Grade 5

Syllabus

AQA

Who to Contact

Mr S Martindale
Course Leader for 2022

Overview

Product Design is the study of how we interact with everyday things and how we can improve the quality of people's lives through better, more thoughtful and intelligent design. Students will combine practical and technological skills with creative thinking to design and make products and systems that meet human needs. Students will learn to use current technologies and consider the impact of future technological developments. You will learn to think creatively and intervene to improve the quality of life, solving problems as individuals and as members of a team. Students will evaluate present and past design and technology, and its uses and effects. You will learn to apply your creative thinking and to innovate.

Students will work in a stunning, inspiring environment with access to a range of cutting edge design and manufacture equipment. The department has a national reputation for the quality of students work and, in particular, it leads the way in Design, the use of Computer Aided Design (CAD), Computer Aided Manufacture (CAM) and Rapid Prototyping technology. Outside agencies, and industry have described the Design & Technology faculty as being the 'pinnacle of design education in the country', 'probably the best D&T faculty in the country', and 'probably the best department and students' work in the world'. Work is regularly used in books, publications and presentations across the world and past students continue to win local & national design and engineering competitions.

You will study, through taught lessons and independent research, materials (including properties), components and their application, product analysis, model making, mathematical engineering design questions, and a theory of design. Students will also learn advanced industrial design skills and techniques, along with Computer Aided Design (CAD) proficiency, to achieve as highly as possible in the NEA (coursework) unit, similar in its structure to a GCSE project but in greater depth and student can create their own brief.

Two written examination papers will test students' knowledge on Materials, Components and Application, technical and core principles of design, and mathematical understanding (worth 15% of all marks).

Assessment

The course is assessed by a Non-Examined Assessment (NEA) project (50% of the final mark) and two terminal examination papers at the end of Year 13.

Paper 1 carries a 30% weighting and Paper 2 carries a 20% weighting of A-level:

Exam Content: Question Style

Paper 1 Technical Principles written paper.

Paper 2 Designing and making principles written paper.

Duration

150 minutes

90 minutes

Marks

Paper 1 = 120 marks

Paper 2 = 80 marks

You

The kind of person who does well in this design course is one who is questioning the environment around them; one who is creative and considers all aspects and influences when developing a new product. The department has an enviable reputation with universities for the preparation of skills that students are taught and all are accepted onto HE courses.