



A LEVEL DESIGN & TECHNOLOGY: PRODUCT DESIGN

2025-26



THE
PORTSMOUTH
GRAMMAR
SCHOOL

Course Outline

This course will introduce you to some of the challenges involved in becoming a product designer. You will be encouraged to take a broad view of design and technology, to develop your capacity to design and make products and to appreciate the complex relationships between design, materials and manufacture. You will learn a range of technical designing and manufacturing skills and gain an understanding of market influences on product design. You will have access to a range of workshops that offer a wide selection of tools and processes. This includes 3D printing, CNC milling machines, laser cutters, metal and wood turning lathes, vacuum formers, scroll saws, bandsaws and power sanders as well as a large assortment of hand-based tools.

A Level Assessment

The course follows the AQA specification (code 7552).

The NEA (coursework element) is 50% of the overall A Level grade. The NEA assesses the practical application of technical principles and designing and making principles. It involves creating a substantial design and make project marked out of 100.

Paper 1 – Written exam: 2 hours and 30 minutes, 120 marks, 30% of the A Level – assesses **technical principles** through a mixture of short answers and extended responses.

Paper 2 – Written exam: 1 hour and 30 minutes, 80 marks, 20% of the A Level – Section A of the paper assesses **product analysis skills** (30 marks) with up to 6 short answer questions based on visual existing products. Section B of the paper assesses commercial manufacture (50 marks) with a mixture of short and extended response questions.

Entry Requirements

A grade 6 or above at GCSE in Design and Technology (or design-based subject) is required for further study at A Level. Your Maths skills will be tested in the final examination and so it is also desirable for pupils to have a grade 6 or above in Maths.

Skills Required and Developed

To follow this course, you should not only have exceptional design, engineering and maths-based skills but also be able to think creatively to problem solve. Strong research analytical skills are needed to be successful throughout the NEA. Development of CAD/CAM skills and advanced practical skills will take place throughout the course. Lots of dedication and hard work outside of lessons is essential to maximise your potential within the subject.

Beyond the Classroom

The department holds trips to a variety of design studios, museums, and local industry. The department regularly gets pupils involved in local and national design and engineering competitions, giving the opportunity to compete against other schools and colleges.

University Courses and Professions that require the Subject

All universities will accept Product Design as an A Level for entry onto degree courses. We see increasing numbers of our pupils going on to study a wide range of engineering and design related courses, including Architecture, Engineering, Industrial Design, Interior design, and Product Design to name but a few. The skills developed in the course also give pupils a great advantage in both civilian and military apprenticeship schemes.



More Information

Contact our Head of Design and Technology, Mrs E Haigh:

- Telephone: 023 9236 4227
- Email: e.haigh@pgs.org.uk

You can also find more information on the exam board's website: www.aqa.org.uk