Design and Technology: Product Design

Exam Board and Specification Code
AQA 7551 AS Level / AQA 7552 A Level (first teaching from September 2017)

Specific Entry Requirements
If banked GCSE in Resistant Materials or GCSE Graphic Products in Year 11 then grade B is the minimum requirement to study this AS or A Level course.

Introduction to the course
The course begins with a series of visits to help surround students within the design industry. We will visit the design museum to look at modern product design; the V&A to look at traditional design; a London City walk to photograph architecture as their inspiration. Students are then given the challenge of designing their own product in the style of a designer or design movement. They must also design around a ‘context’ set by AQA. Students create a 35 page portfolio evidencing their journey through the design process. This folder starts with investigating possible design problems through practical application of skills, developing knowledge and understanding of designers, interviewing a suitable client and then experimenting with materials and building prototypes. This is then followed by a self-penned design brief and specification based on their chosen designer or design movement and records all of the student’s initial ideas and development of a product through to the manufacturing process. Students are expected to be creative, analytical and have a flair for design. All product design students are also expected to work independently when out of lessons and attend regular after school sessions in the workshop.

Learning and teaching styles
The subject is mostly practical with written annotation and evaluation to support their outcome. Students need to demonstrate analytical and critical thinking skills in this subject. Students will be taught how to use a range of industrial processes and manufacturing methods. They will also learn how to use Google SketchUp to edit, test and develop their design ideas in virtual reality. Final outcomes can be small scaled prototypes and should be fully working models.

Course Details

AS Level
Paper 1 – Technical principles
• Designing and making principles
• Written exam: 1 hour 30 minutes
• 80 marks
• 50% of AS

NEA (Non-exam assessment)
• Single design and make project (context set by AQA)
• 80 marks
• 50% of AS

A Level
Paper 1 – Technical principles
• Written exam: 2 hours 30 minutes
• 120 marks
• 30% of A Level
• Mixture of short answer and extended response questions

Paper 2 – designing and making principles
• Written exam: 1 hour 30 minutes
• 80 marks
• 20% of A Level
Section A – product analysis (30 marks)
• Up to 6 short answer questions based on visual stimulus of product(s)
  Section B – commercial manufacture (50 marks)
• Mixture of short and extended response questions

NEA (Non-exam assessment)
• Substantial design and make project
• 100 marks
• 50% of A Level
• Written or digital design portfolio and photographic evidence of final prototype

**Common subject combinations**
Art and Design, Media Studies, Photography, Applied ICT.

**Future Opportunities**
A large number of students who successfully complete their AS and/or A Level course in Product Design will have the opportunity to go on to study a range of design based degree courses ranging from Product Design, Engineering, Architecture, Animation, 3D Visualisation and Media. The course offers excellent opportunities to develop cultural and artistic understanding alongside creative skills that would benefit a series of careers including photojournalist and graphic designer.