

A LEVEL PRODUCT DESIGN

SUBJECT: Product Design

Title of GCE: A Level Product Design

Exam Board: Edexcel

Syllabus Number: 9DT0

Single or Double Award: Single

Course Overview:

For students looking for a future in a world driven by creativity, design and innovation. Product Design A Level is the course. The course is the stepping stone between GCSE Design and Technology and a wide range of opportunities for students after they leave education. The practical skills and theory learnt prepare students to become independent innovators.

The course is run over two years, with students working through a range of skill building modules up until the June of Year 12. These modules have been designed to expose students to a range of designing and making techniques that can be used later in the course for their non-exam assessment (NEA).

Students will get to be involved in a range of classroom, extra-curricular and trip based experiences that will build students knowledge and skills, whilst also building their independence and sense of innovation. Students will have 8 hours of lessons a fortnight with staff who have a wide range of skills, links and experiences in the design industry. Alongside this, students are expected to complete an equal amount of independent study. Students will therefore have access to use the DT departments classrooms and workshops throughout their time in A Level.

Further information about our course can be found on our department website:

<https://sites.google.com/johncolet.co.uk/dtresources/?pli=1>

A Level Assessment:

Written Paper: Principles of Design and Technology (9DT0/01)

2 hours 30 mins • 120 marks • 50% of A-level

At the end of Year 13, students will sit a single exam that is worth half of their overall grade. The knowledge required for this part of the course is built from the foundations of learning that students acquire at GCSE DT. This foundation is then expanded, applying the existing knowledge and new knowledge to industry based scenarios that prepare students for real life. Students will study a range of topics over the course, through practical / design based activities with embedded theory, so students understand that learning isn't just about an exam paper but practical application.

- Materials / Properties of Materials
- Process, Techniques, Machines and Specialist Tools
- Digital Technology
- Factors Influencing Design
- Effect of Technological Development
- Safe Working Practice / Hazard and Risk Assessment
- Manufacturing Industry
- Designing For Maintenance and Cleaner Environment
- Current Legislation
- Information Modelling and Handling
- Advanced Making Processes

NEA Task: Individual Design and Make Project (9DT0/02)**Portfolio and Product • June Y12 - April Y13 • 120 marks • 50% of A-level**

Independent research, design and make projects based on each student's individual choice of project. Students will begin the coursework on June 1st and independently work through the NEA process until the deadline in April.

Students at GCSE will have already conducted an NEA project. The A Level NEA task is designed to use the students existing skills and build upon this with new techniques learnt in Year 12 to create a more intricate and detailed piece of coursework. Unlike at GCSE, students get a free choice of focus for their NEA, with students designing their own problem to solve, with many choosing to guide their project towards their next step, whether this is a degree or a career.

The course is designed to prepare students for their coursework, by offering a range of practical and design based modules that teach students about a range of skills, techniques, machines and programmes. This wide curriculum offers students of all backgrounds in design to be able to experience a range of areas and make the independent choice as to their chosen pathway / journey in the NEA task.

Career Opportunities:

Architect, Engineering, Design Industry, Construction, Footwear Design, AI Design, Mechanical Engineer, Electrical Engineer, Product Designer, Mechanic, Toy Maker, Technicians, Design Teacher / Lecturer, Graphic Designer, Furniture Maker, Industrial Designer, Automotive Engineer, Automotive Designer, Aerospace Engineering, Carpenter, Structural Engineer, Robotics Engineer, CAD CAM Engineer, Footwear Design

Entry Requirements:

- GCSE Design and Technology - Grade 5
- GCSE English - Grade 5
- GCSE Maths - Grade 5
- The course is accessible for student students who haven't taken GCSE Design and Technology. It is advised that students have a background in a creative subject or interest. An equivalent creative subject (e.g. Art, Textiles, 3D Design, Graphics) at grade 5 is required along with a portfolio of completed work.

Students who study this subject often complement it with:

- A Level Maths
- A Level Physics
- A Level Art / Photography
- A Level IT/ Computing
- A Level Business Studies
- A Level Media Studies
- EPQ

For more information or advice contact:

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