Design and Technology A Level: September 2020 **Product design**

Course Title

Design and Technology (Product Design)

Why take D&T A level?

In Design and Technology students learn about the design and manufacture of all sorts of products; and understand why only a small number of these become design classics. We encourage students to design and make their own working products; and provide them the opportunity to work in a specialist design discipline such as, textiles, 3D product design, graphics, jewellery, architecture, electronics and engineering. Students also discover how today's designers are responding to global issues such as poverty and the environment; they develop the skills necessary to be a successful designer, architect or engineer and even make the first steps toward a rewarding career. Visiting designers, architects and ex-students support our classes and allow students to experience what it is like to work on real life design projects and to develop and test products for a real client. Students are encouraged to work independently, writing their own briefs and to develop their own personalised learning objectives.

The D&T A level curriculum

At A level Design and Technology students are able to follow either a Product Design or Graphics pathway. In year 12 students produce a 'creative portfolio' consisting of several skills based projects involving design investigation, modelling and manufacturing. We encourage students to select projects that will support their specialist applications to further education – architecture, engineering,

design etc. The subject is also successful in providing de projects that support students making applications in oth curriculum areas; in the past year we have had students designing musical instruments and baby sleep monitors; supporting applications in Music Technology and Midwifery! In year 13, all students research and identify specific and measurable design problems and produce and test their prototypes to industry standards.

Assessment: Edexcel D&T Product Design Link to exam board

Component 1: Principles of Design and Technology (9DT0/01)

Written exam: 2 hours – 50% of A Level. 120 marks Component 2: Independent Design and Make Project (9DT0/02)

C/w project – 50% of A level. 120 marks

Career Pathways

Students embark on a variety of career pathways and we have recently seen them moving on to study: Product Design Design Engineering Art Foundation Mechanical engineering Civil Engineering Architecture Advertising and marketing Graphics and illustration Furniture design Eco-design Jewellery design



Destinations for Further Education have recently included:

Nottingham Trent University, Manchester University, Central St Martins, Camberwell School of Art Chelsea School of Art, Ravensbourne College of Art and Design, Cardiff University School of Architecture; Exeter University, Brunel University, Reading University, Trinity College London, London College of Communication; Goldsmith College University of London, Falmouth University School of Art and Design and Kingston University School of Art and Design

Students have also used the self-initiated design and make project to support specialist applications to a variety of further education pathways, including: Music at Trinity and Goldsmiths (Students have designed musical instruments; recording studios) Midwifery (Student designed a nursing lamp of new mothers)

Psychology (Student designed a textiles for autistic children)

Biotechnology (Student designed a bio-sphere)

Enrichment and Extra-Curricular activities

All of our projects allow the students opportunities for extension and enrichment activities. Working in smaller groups at lunchtime, after-school and for extended sessions on Saturday's, students have worked in: Silver-smithing; Wood turning; Flame enamelling; Digital design skills; CAD/CAM laser cutting and Centre lathe work;

In recent years students have attended the following educational visits and workshops:

- A1 Architectural model makers;
- Imakr 3D printers;
- Warren Evans;
- Park Communication;
- Design Museum Product Analysis workshop;
- Science Museum Plastic Fantastic exhibition and workshop;
- Arkwright woman in engineering competition awards ceremony;
- Unto this Last Digital furniture design and manufacturing;
- Royal College of Art graduate show;
- Inspired by Design graduate showcase;
- Chelsea School of Art graduate show; and
- 100% Design Professional show case trade exhibition at Earls Court.

Entry requirements

Five grade 9-5 passes at GCSE including English, and at least a 5 grade in a D&T subject at GCSE level. Candidates who have not completed GCSE D&T but have achieved grade 9-5 in Art will also be considered for this course. They should contact the head of D&T for further information.

For more information

For a full breakdown of the unit topics and assessment requirements please contact Nick Hull, Head of Design and Technology: nhull@gch.org.uk



Design and Technology A Level: September 2020 Fashion and Textiles

Why take Fashion and Textiles A Level?

The Textiles course offers students an opportunity to gain a positive experience from working with a variety of textile materials. The practical problem solving processes encourage independent learning, creativity and innovation, and students produce individual products of high quality. Textiles provides wide opportunities ranging from fashion and aesthetics to industrial uses of textiles, and from creative and individual work to aspects of manufacturing and industrial and commercial practice. The students will cover several topics including the study of materials and components, the history of textile design, current design trends, fashion and textiles layout and presentation, textiles innovation, use of ICT and the processes and manufacture of textiles products, to name a few. They will be required to keep up to date with current design issues, and visits to galleries, textile retail outlets, exhibitions and manufacturers will be an integral part of the course.

Assessment: AQA Fashion and Textiles (7562) Link to exam board

Paper 1: Core technical Principles, Two hours 25% of A level Paper 2: Additional specialist knowledge, Two hours 25% of A level C/W project (NEA), Design and make project: 45 hours 50% of A level

Career Pathways

Students embark on a variety of career pathways and we have recently seen them moving on to study: Art Foundation; Stage and costume design; Fashion and textiles design; Fashion and promotion journalism; Advertising and marketing and Fashion illustration

Destinations for Further Education have recently included:

- Nottingham Trent University;
- Manchester University
- Central St Martins;
- Camberwell School of Art
- Chelsea School of Art;
- Ravensbourne College of Art and Design;
- London College of Fashion;
- Edinburgh University, School of Fashion Design;
- Apprenticeship at Anderson and Sheppard Savile Row Tailors

Enrichment and Extra-Curricular activities

All of our projects allow the students opportunities for extension and enrichment activities.

Working in smaller groups at lunchtime, after-school and for extended sessions on Saturdays, students have worked in: Digital design; Pattern cutting and tailoring workshops; CAD/CAM laser cutting and Decorative finishing techniques



In recent years students have attended the following educational visits and workshops:

- V&A Hollywood Glamour, David Bowie retrospective and Revolution;
- Anderson and Sheppard Savile Row Tailors;
- John Lobb shoe and boot-makers;
- Vauxhall City Farm fibres and spinning and dyeing natural yarns workshop;
- McCulloch and Wallace haberdashers,
- Barnett Lawson haberdashers;
- Royal College of Art graduate show and guided tour;
- Inspired by Design graduate showcase;
- Chelsea School of Art graduate show; and
- 100% Design Professional show case trade exhibition at Earls Court.

Entry requirements

Five grade 9-5 passes at GCSE including English, and at least a 5 grade in a D&T subject at GCSE level. Candidates who have not completed GCSE D&T but have achieved grade 9-5 in Art will also be considered for this course. They should contact the head of D&T for further information.

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