

Design and Technology A Level



Product Design

COURSE DESCRIPTION

Design and Technology Product Design:

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, 3D product design, graphics, jewellery, architecture, electronics and engineering. Students also discover how today's designers are responding to global issues such as the environment and socio-economic influences; 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

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 design projects that support students making applications in other 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.

CAREER PATHWAYS

- Product Design
- Design Engineering
- Art Foundation
- Mechanical Engineering
- Civil Engineering
- Architecture
- Digital Design
- Advertising and Marketing
- Graphics and Illustration
- Furniture Design
- Jewellery Design
- Eco-Design
- Games Design
- Interior Architecture



JOINT HEADS OF DEPARTMENT

Nick Hull
and
Liske Russell de Boer

EXAM BOARD AQA

PROGRAMME OF STUDY

Component 1:

Technical Principles

30% of total A Level

Written exam paper

2.5 hours

Component 2:

Designing and Making Principles

20% of total A Level

Written exam paper

1.5 hours

Component 3:

Non-Exam Assessment (NEA) Design and Make Project

50% of total A Level

45 hours

Entry Requirements

Five level 9-5 passes at GCSE including

English, and at least

a level 5 in a D&T subject at GCSE level.

Candidates who have not completed GCSE D&T but have achieved level 9-5 in Art will also be considered for this course. They should contact the Head of D&T for further information.

For a full breakdown of the unit topics and assessment requirements please contact Joint Heads of D&T Nick Hull and Liske Russell de Boer.

EXAMINATION RESULTS

Five year average: A*-B 58%; A*-C 89%.

STUDENT DESTINATIONS

Destinations for Further Education have recently included:

Oxford University, 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 for new mothers)

Psychology (Student designed a textiles for autistic children)

Biotechnology (Student designed a bio-sphere)

ENRICHMENT 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: Silver-smithing; Wood turning; Flame enamelling; Digital design skills; CAD/CAM laser cutting and Centre lathe work.

RECENT EDUCATIONAL VISITS AND WORKSHOPS

- A1 - Architectural model makers
- Arkwright woman in engineering competition awards ceremony
- Imakr - 3D printers
- Unto this Last – Digital furniture design and manufacturing
- AHMM Architects – Open School workshop
- Royal College of Art graduate show
- Maccreeanor Lavington Architects – Talk as part of International Women's Day
- Inspired by Design graduate showcase
- 100% Design Professional show case trade exhibition at Earls Court
- Chelsea School of Art graduate show
- Design Museum - Product Analysis workshop
- AHMM – Summer school for Year 12 students who are interested in architecture
- Science Museum – Plastic Fantastic exhibition and workshop