Cornwallis Academy
Ambitions for All

SMILE
SUCCESSFUL | MOTIVATED | INSPIRED | LEARNING | EXCITED & ENGAGED

Design and Technology A Level

Curriculum Intent

A Level Design and Technology: Product Design is an innovative and challenging qualification that develops creative, practical and analytical thinking skills, preparing students for higher education and employment within the design, engineering and creative industries. Through the study of contemporary design and manufacturing, students gain a deep understanding of how products are developed in response to user needs, challenges in society and technological advances. They investigate historical, social, cultural, environmental and economic influences on design whilst developing their own creative practice through designing, modelling and producing innovative solutions to real-world problems.

The curriculum encourages students to become independent, reflective and resilient learners who can apply knowledge from a range of disciplines including engineering, mathematics, science, business and art. Through iterative design processes, students develop advanced skills in research, communication, problem-solving, Computer Aided Design (CAD), prototyping and manufacturing, alongside an understanding of sustainability and responsible design.

Product Design provides an excellent foundation for progression to higher education, apprenticeships and employment. Many students have moved from our department on to further areas of creativity. Students have studied degrees in Product Design disciplines, and many have gone on to apprenticeships across a wide variety of industries. The combination of creative innovation, technical expertise, project work and problem-solving skills developed through the course is highly valued by universities and employers alike.

Assessment, Marking and Feedback

There are regularly opportunities to complete exam questions and papers throughout year 12 and 13. They receive regular knowledge tests, and these are assessed with feedback.

Homework

Students receive weekly homework from both areas of the course. They have a mixture of exam questions, theory homework and NEA related homework. They get assessed and receive feedback on the completed tasks.

Links to National Curriculum / Syllabus Specifications

Paper 1 – technical principles
2 hours 30 minutes
120 marks
30% of A Level
Mixture of short answer and extended response questions
Paper 2 – Designing and making principles
1 hour and 30 minutes
80 marks
20 % of A Level
Mixture of short answer and extended response questions
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

Exam Support & Revision Resources

- **DTBase** offers high-quality revision notes, past paper questions, solutions, and coursework examples for AQA A-Level Design and Technology, covering all major topics and practical applications
- **Study Rocket** provides free lessons, assessment questions, and videos for A-Level Design and Technology, allowing you to revise topics interactively and test your understanding
- **Save My Exams** features past papers, revision notes, flashcards, and exam-style questions aligned with the latest AQA specification, helping you focus on what is essential for high grades
- **SimpleStudy UK** offers free revision notes, quizzes, and past exam papers to reinforce learning and track progress
- **Brainscape** provides smart flashcards and quizzes covering mechanical and physical properties of materials, classification of materials, testing methods, and other key topics, ideal for active recall and self-testing

Extracurricular and Enrichment Opportunities

We participate in a national competition with students during year 12 ('If you were an engineer').
Students also attend regular after school sessions and support sessions during their free time.

Interested to know more?

To read:

- **Design Museum Magazine** articles
- **Dezeen** (online architectue and product design magazine
- **Material world** by Jonathan Bell

To watch:

- **The Genius of Design** (BBC documentary series)
- **How It's Made** (manufacturing processes)
- **Grand Designs** (for problem-solving and innovative design)
- **Abstract: The Art of Design** (Netflix)
- **Objectified** (documentary by Gary Hustwit)

To listen:

- **99% Invisible** podcast
- **Design Matters** with Debbie Millman
- **The Design Museum Podcast**
- **The Futur** podcast (design and creativity)

To visit:

- **The Design Museum, London**
- **The V&A Museum, London**
- **The Science Museum, London**
- **The Natural History Museum** (biomimicry inspiration)