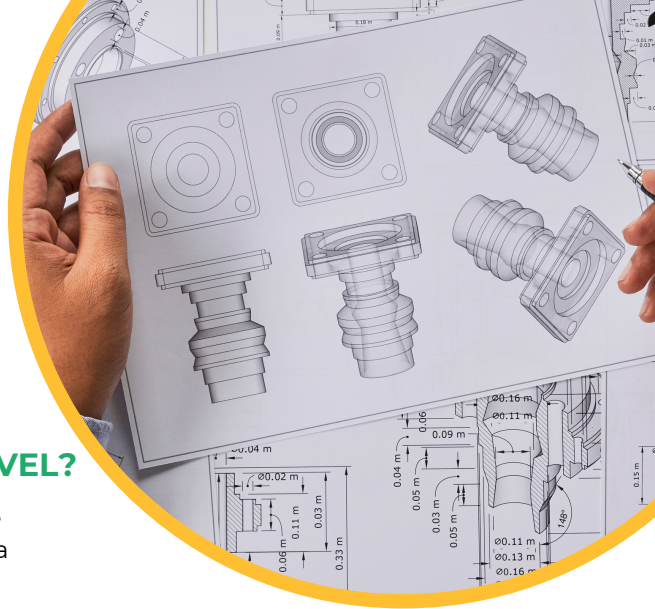


A-LEVEL DESIGN AND TECHNOLOGY: PRODUCT DESIGN



WHY STUDY DESIGN AND TECHNOLOGY AT A-LEVEL?

This creative and thought-provoking qualification gives students the practical skills, theoretical knowledge and confidence to succeed in a number of careers. Especially those in the creative industries.

Students will investigate historical, social, cultural, environmental and economic influences on design and technology, whilst enjoying opportunities to put their learning in to practice by producing prototypes of their choice. Students will gain a real understanding of what it means to be a designer, alongside the knowledge and skills sought by higher education and employers.

TOPICS STUDIES

- Materials and their applications,
- Classification of materials
- Methods for investigating and testing materials
- Performance characteristics of materials
- Efficient use of materials
- Manufacturing processes
- The use of finishes
- The use of computer systems
- Digital design and manufacture
- Virtual modelling
- Rapid prototyping processes
- Electronic data interchange
- Production, planning and control (PPC) networking
- The requirements for product design and development
- Health and safety
- Inclusive design
- Protecting designs
- Intellectual property
- Design for manufacturing, maintenance, repair and disposal
- Feasibility studies
- Enterprise and marketing in the development of products
- Designing and making principle

ASSESSMENT STRUCTURE

The course is assessed by a combination of:

- Examination (50%)
- The designing and making of a product (50%)

PAPER 1

What's assessed

- Technical principles

How it's assessed

- Written exam: 2 hours and 30 minutes
- 120 marks
- 30% of A-level

Questions

- Mixture of short answer and extended response questions

PAPER 2

What's assessed

- Designing and making principles

How it's assessed

- Written exam: 1 hour and 30 minutes
- 80 marks
- 20% of A-level

Questions

- 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

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ENTRY REQUIREMENTS

Grade 6 in GCSE Design & Technology or other subject related course (where studied)

Career Pathways

This A-Level course is academically demanding and develops a range of skills, meaning it is excellent preparation for university and beyond. It offers many rewarding and interesting university and career paths.

Students go on to university to study Engineering, Product Design, Industrial Design, Architecture, Set Design or Fashion.

Engineering is in high demand and there are many opportunities for sponsorship or apprenticeships.

Engineering is the fourth most common subject taken at university amongst the top 250 FTSE CEO's after Economics, Business and Law.

IS THIS COURSE FOR ME?

If you are looking for a career on any of the above career pathways and are interested in new technology, design development, designing for the future and enjoy working independently on improving your skills using C.A.D./C.A.M. then you should consider this as an option.

NEED MORE INFORMATION?

Please contact Mr Gara (Subject Lead for Design Technology)
ggara@lighthall.co.uk

filestore.aqa.org.uk/resources/design-and-technology/specifications/AQA-7552-SP-2017.PDF

READING LIST

- The Design of Everyday Things – Don Norman
- Hooked – Nir Eyal
- Design for How People Think: Using Brain Science to Build
- Better Products - John Whalen

