

Product Design Design & Technology A Level

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Exam Board: OCR



What is the course about?

Learning about design and technology at A Level strengthens learners' critical thinking and problem solving skills within a creative environment, enabling them to develop and make prototypes/products that solve real world problems, considering their own and others' needs, wants, aspirations and values. This A Level qualification requires students to identify market needs and opportunities for new products, initiate and develop design solutions, and make and test prototypes/products. Learners should acquire subject knowledge in design and technology, including how a product can be developed through the stages of prototyping, realisation and commercial manufacture.

Pupils will develop an experienced understanding of iterative design processes that is relevant to industry practice. They will be able to create and analyse a design concept and use a range of skills and knowledge from other subject areas, including mathematics and science.

What will I study in the first year?

In the first year you will be developing subject knowledge and skills to enable you to tackle the exams and the project. You will then begin to undertake the project which will be At A Level it is for the learner to explore and contextualise the Iterative Design Project they undertake. The project should be of sufficient complexity.

What will I study in the second year?

In the second year you will focus predominately on the project and continue to develop your subject knowledge and exam technique in preparation for the examinations.

How is the course assessed?

Assessment is 50% exam and 50% non examined assessment (coursework).

What skills will I develop in this course?

The knowledge, understanding and skills that all learners must develop are underpinned by technical principles predominantly assessed in the written exam, and designing and making principles predominantly assessed in the non-exam assessment (NEA) although there is an expectation that learning builds a holistic understanding of the subject. There is distinct content for the exam and non-exam assessment, but this is held together through 9 topic areas that shape all components and give clarity, these are: 1. Identifying requirements 2. Learning from existing products and practice 3. Implications of wider issues 4. Design thinking and communication 5. Material considerations 6. Technical understanding 7. Manufacturing processes and techniques 8. Viability of design solutions 9. Health and safety.

What does this subject offer for higher education and future careers?

Learners will build their skills in thinking and designing to support the requirements that they will need to demonstrate when progressing to higher education or industry. An 'A' Level in Design and Technology could lead to a degree in Product Design, Industrial Design, Architecture, Electrical / Electronic Engineering, Engineering (General), Aeronautical & Automotive Engineering, Materials Science (including Biomedical Materials Science), Mechanical Engineering, Teaching.

Jobs directly related to your degree include:

Industrial/product designer, Interior and spatial designer, Exhibition designer, Furniture designer,
Jobs where your degree would be useful include: Advertising art director, Automotive engineer, Graphic designer, Materials engineer, Product manager, Production designer, theatre/television/film, Purchasing manager