

Product Design



Examination Board: AQA

Subject Leader(s): Mr D Tilstone-Hallam



Course Structure

Unit	Topics/Unit Title	Assessment	A Level (%)
1	Core Technical Principles Additional Specialist Knowledge	Written Exam 2.5hrs 120 Marks	30%
2	Designing and Making Principles	Written Exam 1.5hrs 80 Marks	20%
NEA	Practical application of technical principles, designing and making principles and specialist knowledge.	Coursework Approx 45hrs Substantial design and make project 100 marks	50%

What does the course involve?

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.

Course outline:

The course is designed to encourage students to 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.

In year 1 a number of small design and make products will be made throughout the year developing and improving knowledge and understanding of a wide range of materials, processes and equipment. The teaching delivery model will expect a lot of independent research and encourage independence in students to take responsibility for their own areas of research.

Students will be expected to carry out work experience as it allows them to apply theoretical knowledge in a real-world setting, gain hands-on industry experience, and develop essential transferable skills.

In year 2, the Non Examined Assessment (NEA) is the selection, by the student, of a context that will provide them with the opportunity to challenge themselves as a designer. Care should be taken to ensure that the context chosen offers the scope and complexity for a piece of work that is worthy of consideration for the award of an A-level.

Having chosen their context and potential user(s) students will then need to plan and carry out an extensive investigation into all aspects of the context in order that they might operate from a position of knowledge when making subsequent decisions. Students will be expected to employ a variety of both primary and secondary methods of investigation.

This course will enable you too:

- Understand properties and uses of a variety of natural and manufactured materials.
- Recognise the use of components in the assembly of manufactured items.
- Appreciate how line, shape, form, colour, tone, texture, proportion and materials affect the functional and aesthetical qualities of a product.
- Understand how design movements have influenced past and present products, recognising design classics.
- Use Computer Aided Design and Computer Aided Manufacture to design and model 3D outcomes.
- Use a variety of drawing techniques to communicate ideas and solutions, referring to ergonomic and anthropometric data when developing solutions.
- Use the most appropriate system for product manufacture.
- Use relevant tools and equipment to process and manufacture products and prototypes of your own design to a high level of accuracy.

This course will appeal to students who:

- Are interested in developing their problem-solving skills linked to a design project outcome
- Are keen to develop and improve their CAD/CAM skills
- Enjoy making products in response to a given problem or one that they have identified
- Can use their imagination to develop solutions to problems
- Are interested in learning how products are influenced by design styles, cultures and society
- Wish to learn more about how products are manufactured in industry
- Are happy working independently

Entry Requirements

- Grade 4 in Maths and English
- Innovative, creative and keen to produce high quality designs and products.
- Keen to learn from the past and develop the future.
- Competent computer skills, willingness to learn and not be afraid to make mistakes.

Extra-Curricular Activities

- Visits to the Design Museums
- Visits to retail furniture and lighting outlets
- Study days at supporting Universities
- Guest Speakers
- Work experience

Further Study/Employment Prospects

- Graphic design/3D design/ product design/ interior or fashion design
- Teaching
- Architecture
- Engineering
- Manufacturing
- Construction and the built environment