Study Programme

Design & Technology (A Level)

Bishop Laney Sixth Form

QUALIFICATION

GCE A-Level Design & Technology (Product Design)

WHY SHOULD I CHOOSE THIS STUDY PROGRAMME?

Design and technology is part of everyday life and is constantly evolving. 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. They 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. This single A-Level qualification is modern and relevant, so students can learn about contemporary technologies, materials and processes, as well as established practices. The new qualification will place greater emphasis on understanding and applying iterative design processes. Students will use their creativity and imagination to design and make prototypes that solve real and relevant problems, considering their own and others' needs, wants and values.

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WHAT COULD THIS QUALIFICATION LEAD TO?

This qualification builds on the skills, knowledge and understanding developed through study at GCSE. At the end of the A level course you will have the knowledge and understanding needed for higher education.

This qualification does carry UCAS points but if a student wishes to pursue a degree in an area of art and design, it is generally expected that students will progress to a one-year Foundation diploma in art and design course at further education level. Here they will build their portfolio for further study of their chosen art specialism at degree level.

Some providers may accept students onto degree courses immediately after their A level course but you should always check the entry requirements for degree programmes with specific higher education providers.

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WHAT WILL I STUDY?

Core technical principles

- Materials and applications
- Classification of materials
- Methods for investigating and testing materials
- Performance characteristics of materials: Papers and boards, polymer based sheet and film, woods, metals, polymers (plastics) inc biodegradable, composites, smart & modern materials
- Enhancement of materials
- Forming, redistribution and addition processes
- The use of adhesives and fixings
- The use of finishes
- Modern industrial and commercial practice
- Digital design and manufacture
- The requirements for product design and development
- Health and safety
- Protecting designs and intellectual property
- Design for manufacturing, maintenance, repair and disposal
- Feasibility studies
- Enterprise and marketing in the development of products
- Design communication
- Modern manufacturing systems

Designing and making principles:

- Design methods and processes
- Design theory
- How technology and cultural changes can impact on the work of designers
- Design processes
- Critical analysis and evaluation
- Selecting appropriate tools, equipment and processes
- Accuracy in design and manufacture
- Responsible design
- Design for manufacture and project management
- National and international standards in product design

Non-exam assessment (NEA):
The practical application of the technical principles and designing and making principles in a single design and make project. The context for which is set by AQA.

WHAT WILL BE EXPECTED OF ME?

- Follow all health & safety procedures
- Read, research and record in a journal
- Keep a sketchbook
- Plan your work and manage time efficiently
- Talk to your teachers about your ideas and how to achieve the best results
- Produce good quality work with high standards of grammar and spelling
- Present your work using a range of techniques
- Evaluate and review your work and make suggestions for improvement
- Meet all deadlines that are set

WHO WILL BE INVOLVED?

The subject teachers are responsible for planning lessons, preparing resources, assessing work and making sure that the units are completed on time.

The subject teachers will internally mark the NEA and will cross moderate the work with each other before submitting the final marks to the exam board.

A sample will be requested by AQA upon receiving these marks.

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ENTRY REQUIREMENTS

At least 5 GCSE Grades 9 – 4 or equivalent to include English. Also required is a Technology subject at Grade 5 or above, if currently studied.

FURTHER INFORMATION

How will you be assessed?
This qualification is linear. Linear means that students will sit all their exams and submit all their non-exam assessment at the end of the course.

Assessment objectives
Assessment objectives (AOs) are set by Ofqual and are the same across all AS Design and Technology: Product Design specifications and all exam boards. The exams and non-exam assessment will measure how students have achieved the following assessment objectives:

AO1: Identify, investigate and outline design possibilities to address needs and wants.
AO2: Design and make prototypes that are fit for purpose.
AO3: Analyse and evaluate: design decisions and outcomes, including for prototypes made by themselves and others wider issues in design and technology.
AO4: Demonstrate and apply knowledge and understanding of: technical principles, designing and making principles.

Written exams:
Paper 1: Technical principles. 2.5 hours. 120 marks. 30% of A-level.
Questions: Mixture of short answer and extended response.
Paper 2: Designing and making principles. 1.5 hours. 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 question.

Non-examined Assessment (NEA):
Practical application of technical principles and designing and making principles.
Substantial design and make project. 100 marks. 50% of A-level. Written or digital design portfolio and photographic evidence of final prototype is expected.