



DESIGN & TECHNOLOGY A LEVEL



We are thrilled to be able to offer two level 3 Design and Technology courses at The Bourne Academy Sixth Form. The two courses available to opt for are Product Design and Design Engineering. Both of these courses seek to develop your knowledge, understanding, skills and application for designing products. Both subjects encompass a wide range of design disciplines but are firmly rooted in the skills required to design and make high quality products.

You can unfortunately only opt to study one of these qualifications.

Design Engineering

What will you learn?

The content of this course is focused towards engineered and electronic products and systems. You will explore the functions, components and materials of these products and systems in order to understand the applications, commercial viability and uses of them in an engineering industry.

Topics include;

- Systems and Control
- Electronic Principles
- Properties of materials and manufacturing processes
- Mechanisms



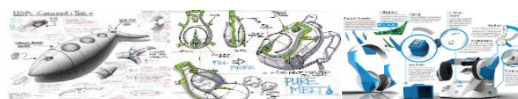
Product Design

What will you learn?

The content of this course is focused towards consumer products and applications. You will use your creative and innovative problem solving skills to analyse and design everyday marketable products. You will explore materials, components and function as part of the design process.

Topics include;

- Design Principles
- Properties of materials and manufacturing processes
- Sustainable Designing
- Industry Design standards and practice



How will you learn?

Throughout the course you will be engaged in a variety of tasks and activities, which have been devised to improve your skills and meet the necessary requirements for your qualification. You will find that rather than just testing your knowledge of a subject area, you are also being assessed on your competence in vocational areas. Your learning will see you explore topics through:

- Small group/team work
- Videos/ media
- Case studies/simulations
- Presentations
- Visits/conferences/guest speakers
- Main project/practical work

How will you be assessed?

Your assessment for either qualification will be broken down into following areas:

50% Design and Manufacture independent project.

25% Design challenge.

25% Theory exam.

Where will it take you?

This course will provide you with the opportunity to develop innovation, creativity and design & technology capability. It will develop your ability to recognise constraints of product design and enable you to produce high quality products. You will develop a critical understanding of the processes and products of design, use ICT to enhance design and technological capability, build an understanding of Health and Safety and evaluate technical, aesthetic, economic, environmental, social and cultural issues of product design.

Students who have previously studied similar qualifications have moved on to study design or engineering at university, gained employment in the engineering industry and have been accepted onto apprenticeship schemes.

Who should you talk to? Mr Dunn, Mrs Gist or Miss McCarthy or email mike.dunn@thebourneacademy.com

What will you need to study the course?

You will need to have 5 or more A*-C grades at GCSE and ideally have gained at least a B grade at GCSE in a Design and Technology subject. You will have strong creativity, be an innovative problem solver, have design flair and have a good understanding for the design process along with a positive and enthusiastic attitude to learning. You will need a genuine interest and excitement for the subject and a willingness to commit significant independent time and effort into producing your portfolio or work.