



# DESIGN TECHNOLOGY

HEAD OF DEPARTMENT: MR BAKER  
EXAMINATION BOARD: OCR

SPECIFICATION: ART AND DESIGN – 3D DESIGN  
QUALIFICATION: A-LEVEL

This is a design course, not an art course. During this course you will develop a deeper understanding of design and manufacture in order to generate creative and commercial concepts. You will undergo a period of ‘up-skilling’ through a series of design challenges, where the focus will be in developing new skills and understanding how to look into the work of past and present designers as well as other sources of inspiration..

Your main project will be a ‘Personal Investigation’ of your choosing, followed by an externally set design task provided by the exam board. While there is no written ‘theory’ exam, candidates are required to write a short ‘related study’.

This course develops invaluable skills for your journey into higher education and beyond. At the end of the two years you will be a highly creative and analytical thinker, armed with a combination of hand, digital and practical skills.

## WHAT YOU WILL STUDY IN LOWER SIXTH

The course starts with a period of ‘up-skilling’ delivered through a series of short DMT’s (design and make tasks). These tasks are aimed at improving your designing and making skills as well as your ability to undertake effective research and analysis and will run until February. The focus and duration of each will change but in essence will include the following:

- 1) Developing CAD / CAM skills including SolidWorks
- 2) Analysing the work of other designers and improving and developing new products
- 3) Architecture and the built environment
- 4) Biomimicry and its impact on design

In February you will start your Personal Investigation Project. You will need to prepare a portfolio of work, which responds to a design ‘context’ of your choosing. The nature of this portfolio will be defined by your interests and creativity

but could include:

- 3D Product Design
- Engineering (both product and mechanical)
- Architectural / Interior design
- 3D Digital design
- Furniture design
- Ceramics
- Sculpture
- Jewellery
- Stage / Exhibition / Production design
- Environmental design

You will explore a variety of design approaches in order develop a ‘Final solution’ which could be in response to a real-world problem or simply presented as a conclusion to your context investigation. The focus of the Personal Investigation is creativity and productivity. You will be expected to fully explore your design ideas through extensive sketching, modelling and making.

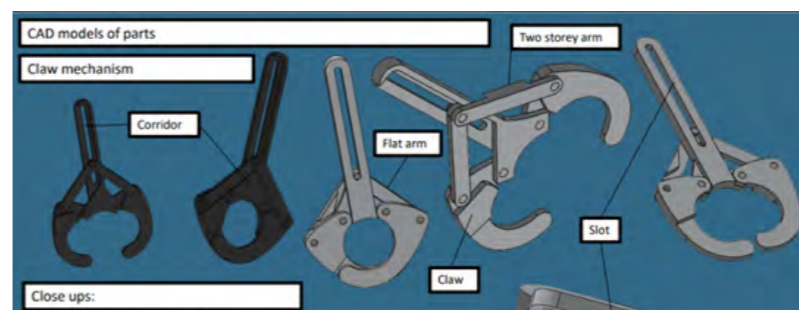
## THREE REASONS TO STUDY DESIGN TECHNOLOGY AT TRURO SCHOOL

Having all been ‘heads of department’ our collective teaching team experience puts us in a position to help pupils develop and manufacture designs to a very high level.

Our growing and considerable list of contacts and alumni facilitate an extensive support network, providing opportunities for both projects and careers experience.

The departments resources are some of the best in the Southwest, and we place trust in our pupils to enjoy it independently, while having access to all the support they require.

Context ‘Mutifunctional’ - ‘working and seating area’ inspired by architect Frank Gehry. Henry, current student



Ollie Newman - Loughborough University – Industrial Product Design

## WHAT YOU WILL STUDY IN UPPER SIXTH

Your ‘Personal Investigation will continue until February and will culminate with the writing of a ‘Related study. This is a short written piece (minimum 1000 words) supported by illustrations and images, which relates to your chosen context, and will help to provide further insight into elements of your portfolio. After this, you will start preparing for the ‘Externally set task’. Candidates will be required to prepare a second portfolio

of work which responds to one of a number of ‘start points’ provided by the exam board. The candidate response will include elements of research, designing, modelling and preparation for a 15 hour practical assessment, during which they will manufacture their developed idea.

Unlike GSCE Design and Technology, which is very linear its delivery, this course follows a more organic and natural pathway,

*The workshop is very well equipped with a large range of machines from woodworking to metal-working lathes, 3D printers to laser cutters, so it’s possible to undertake any project. The staff have a great sense of humour and they are expert in all areas of design. They give us lots of freedom, but plenty of great guidance too. There are always staff available to help students at lunchtime and after school and I feel that it is difficult to miss deadlines when the staff open up the workshops all day long and encourage you so much. It’s a very friendly and well-equipped place to learn!*

JOE

## WHO SHOULD CONSIDER THIS COURSE?

This course will benefit candidates with a keen interest in and curiosity for design and manufacture. You will benefit from possessing critical and analytical thinking skills and a comfortable attitude to communicating and sharing ideas.

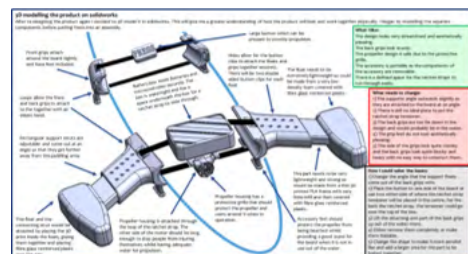
Pupils who are successful in this course will need to demonstrate creativity, independence and initiative. This course will accommodate pupils who prefer digital based technology including CAD, as well as those who prefer working in a more ‘hands on’ way.

and as such pupils enjoy a significant amount of design freedom.

## HOW IS IT ASSESSED?

Component 1 ‘Personal Investigation’ 12 months duration worth 60% of qualification (including the related study)

Component 2 – Externally set task’ 3 months 40 % (including 15hr practical



Sean Heaney – Brunel University – Industrial Product Design