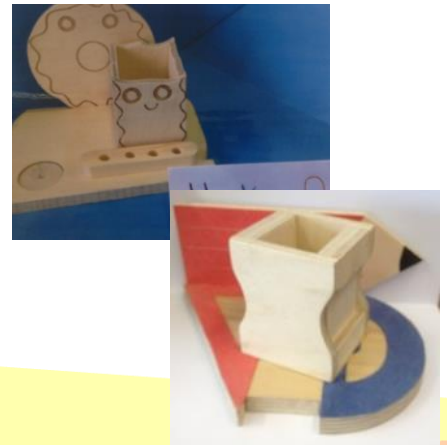
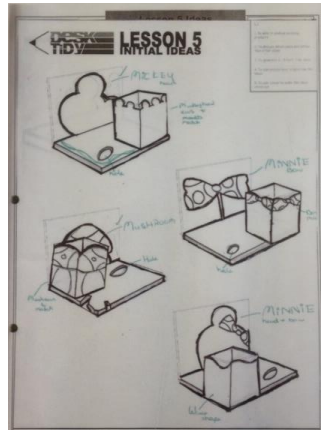


PRODUCT DESIGN

DESIGN & TECHNOLOGY

KEY STAGE 3

Each of the Key Stage 3 projects emulate the structure of GCSE coursework or a BTEC assignment. This helps students develop the skills and knowledge for GCSE and BTEC



KEY STAGE 4

During Year 11 Product Design students will pick from a range of possible contexts and design, develop and manufacture a complex working product.

FINAL DESIGN

Having completed my development I now must move on to the construction of my final idea. To do this I have done a specific page of design to aid me during manufacturing.

1.1 Colour The desk has a wooden colour scheme as it is made of pine and waxed

4.3 The Screen The screen shall be made of a clear acrylic with a frosted tint as to project light more evenly.

4.4 The Frame This desk shall be made from play wood as it can be easily cut into shape as it is and it does not fracture when cut.

7.1 Finish It shall have a layer of painted blue paint and my product will have a matt waxed finish as it will be made of wood

8.1 Self manufacture The frame and body should be made from hand tools and machines as it has a simple box construction that can be easily reproduced however the screen design shall be carried in using cutlasm

1.2 The screen shall be made from Perspex/plexi acrylic and frosted pattern

2.3 The frame shall be constructed from the wood of a variety should be made of at least

4.2 The screen shall be made of a clear acrylic with a frosted tint as to project light more evenly.

4.4 The Frame This desk shall be made from play wood as it can be easily cut into shape as it is and it does not fracture when cut.

7.1 Finish It shall have a layer of painted blue paint and my product will have a matt waxed finish as it will be made of wood

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Year 11



FINAL DESIGN

The perches on my bird house will be made using the CAD/CAM machine by heating the image from 2D design.

Both walls of the bird house will be made using plywood and the finger joints will be cut out using both the jig saw and the band saw.

These mortise and tenon joints will be made using the jig saw and by chiselling into the roof.

The back and the front of the bird house will be using plywood.

The base of the bird house will be made out of plywood.

The decoration around the three holes will also be cut out using the CAD/CAM machine.

I will be using a large sand paper.

The base of the bird house will be made out of plywood.

I will cut out the back and front wall of the bird house using the band saw using the band saw to make the mortise and tenon joints.

The decoration around the three holes will be made using the CAD/CAM machine.

I will attach the base of the bird house to the base of the tree using a pine frame on the inside and securing it into the end-grain.

The lid will be hinged using a knuckle joint. The knuckle joint will be produced by cutting a knuckle fitting finger joint, mounting the screw and heating the wood.

I will attach the base of the bird house to the base of the tree using a pine frame on the inside and securing it into the end-grain.

Name: Alex Battelle Year 11 Candidate Number: 9018 Centre Number: 12912



KEY STAGE 5

Students who continue into the sixth-form will build on the skills, knowledge and experience they have gained to create a more ambitious, professional and fully realised final prototype.

Final design

The main focus of the design was to produce a suitable, sustainable structure that would be highly efficient, sustainable and compact to replace the existing form of housing available to students at Bristol university. A large focus was put on the concept of sustainability with natural materials as this is common throughout the campus already and it would allow the design to blend in with the existing while still being different and a vast improvement on the existing.

Large focus was placed on having workable, suitable space within the structure of the building that would be able to be used for multiple purposes in addition to be a study area. The design was to be a multi-purpose building that would be able to be used for multiple purposes in addition to be a study area. The design was to be a multi-purpose building that would be able to be used for multiple purposes in addition to be a study area.

The form of the building work to such a way that the main structure of the building will become a large, long, slender shape that will be able to be used for multiple purposes in addition to be a study area. The design was to be a multi-purpose building that would be able to be used for multiple purposes in addition to be a study area.

All aspects of the concept have been clearly explained through the images in order where the target audience was considered primarily as the first hand example of information when it comes to functionality, needs, purpose and materials. Additionally, the process of development also allowed me to make alterations which have shaped the design as a whole and prepared it to the point where it should now be ready for the purpose and function as a whole of the building structure.

Candidate Number: 7021 Centre Number: 12912

Product	Height	Weight	Length	Cost
1	40	40	195	2
2	40	40	195	2
3	40	40	195	2

Sufian Ishaq Candidate No: 7080 Centre No: 12912





At Key Stage 4 you can pick between 2 different Design & Technology subjects:

Product Design encourages you to design and make quality products with through a variety of practical activities using a range of materials and techniques. You will create an A3 evidence folder which will show the development of your product from initial designs to completed prototype.

Construction and the Built Environment is a workshop based course which is highly regarded as a college entry qualification for those who wish to follow a more practical based course. It aims to give learners the opportunity to gain a broad knowledge and understanding of, and develop skills in, the construction industry.



PRODUCT DESIGN

What courses or careers can this courses lead to?

- Product Design at AS/A2 level
- Product/Furniture design
- Graphic design
- Architecture
- Engineer – mechanical, civil, aero.
- Surveyor
- CAD Technician/Modeller
- Packaging design
- Product Research and development
- Interior design



BTEC FIRST CONSTRUCTION

What courses or careers can this lead to?

- BTEC Construction level 3
- Joinery
- Carpentry
- Plumbing
- Roofing
- Brick laying
- Project management
- Welding
- Construction engineering
- Electrical engineering
- Sign making
- Mechanic
- Maintenance engineer