

# A level Design & Technology Taught at ACS, by Mrs. N. Pugh

You can study either <u>Product Design</u> or <u>Fashion and Textiles</u> within this A level. Both subjects will be taught under the DT specification.

For more information on Product Design click on the pencil.

For more information on Fashion and Textiles click on the reel of cotton.

Product Design



Fashion & Textiles





# A level DT: Product Design

Taught by: Mrs. N. Pugh / Mrs. E. Bryant

What does this A level involve?

What GCSE grades would I need?

What careers could this lead to?

Can I see examples of work?

What type of equipment would I have access to?

Click on the pencil next to each question, to reveal the answer. Then click on the pencil to return to this page.



# Why choose Product Design?

The DT: Product Design specification has been specifically designed to provide engaging, innovative and creative learning experiences, where craft, construction and engineering are integrated with practical knowledge and understanding.

It is our aim, at ACS, to ensure all our students achieve their goals, by teaching them a variety of different manufacturing techniques and presentation techniques, enabling them to envision and create innovation and inspirational products.

### What will you learn?

Throughout this qualification you will learn different design and manufacturing techniques, including both machine and hand techniques, such as:
CAD/CAM, welding, laser cutting, 3D printing, graphic communication and more.

### <u>AS – Year 12</u>

AS consists of **two units** 

In the first year of this course, you will focus on developing practical skills, within the first half term. Then we will begin your assessed unit of work.

# Unit 1 – Written examination (2 Hours) 20% of qualification:

The examination includes a mix of structured and extended writing questions assessing learners' knowledge and understanding of:

- Technical principles
- Designing and making principles along with their ability to:
- Analyse and evaluate design decisions and wider issues in design and technology.

# Unit 2 – Design and Make Task (40 Hours) 20% of qualification:

A design and make task, based on a brief developed by you, assessing your ability to:

- Identify, investigate and outline design possibilities
- Design and make prototypes
- Analyse and evaluate design decisions and wider issues in design and technology.

#### A2 - Year 13

A2 consists of two units

# Unit 3 – Written examination (2 and half hours) 30% of qualification:

The examination includes a mix of structured and extended writing questions assessing learners' knowledge and understanding of:

- Technical principles
- Designing and making principles along with their ability to:
- Analyse and evaluate design decisions and wider issues in design and technology.

# Unit 4 – Design and Make task (60 hours) 30% of qualification:

A design and make task, based on a brief developed by you, assessing your ability to:

- Identify, investigate and outline design possibilities
- Design and make prototypes
- Analyse and evaluate design decisions and wider issues in design and technology.

Unit 2 and Unit 4 will be presented in Sketchbooks, A3 folders and A2 design boards.



### What GCSE grades do I need to get?

You are required to have at least a C in English, and you should have studied DT (Product Design, Graphics, Construction, Engineering) at GCSE, achieving at least a D.

If you did not study DT, you can still opt for the A level, if you took Art (Graphics, Photography) subject at GCSE and achieved a C or above.

Email: Npugh@aberdareschool.co.uk or EBryant@aberdareschool.co.uk if you would like to check that you are able to opt for this subject at A level.



### **Design Engineer**



Graphic designer



**Architect** 





**Electrical Engineer** 



# Careers in Product Design

Click on the picture and it will explain the role further... If there is a career you are thinking of and it is not here, email Mrs Pugh or Mrs Bryant for more information.

**Tool maker** 



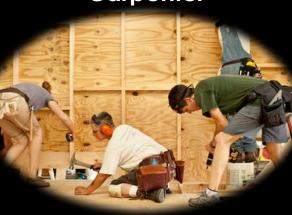
Musical instrument maker



**Materials** technician

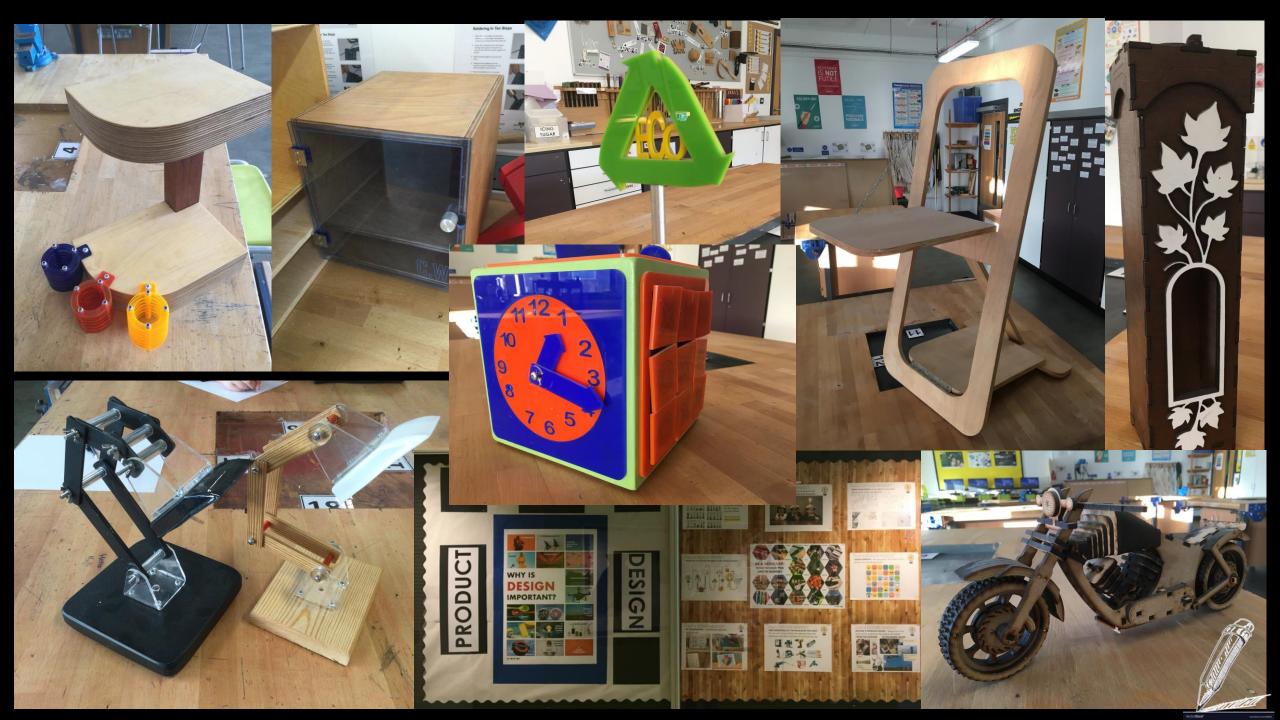


Carpenter



Interior designer







You will have access to 3 specialist work shops, with an array of specialist equipment, to support you in designing, developing and manufacturing innovation products.



You will have access to 2 laser cutters, which allow you to do a range of laser cut materials and techniques, using 2D design.

You will also have access to:

- A welding station.
  - Brazing hearth.
  - 2 technicians.
  - Soldering irons.
    - 3D printer.
- Wood and metal turning lathe.



# A level DT: Fashion & Textiles

Taught by: Mrs. N. Pugh



What GCSE grades would I need?

What careers could this lead to?

Can I see examples of work?

What do previous students think of the course?

What type of equipment would I have access to?

Are there opportunities for educational visits?

Click on the cotton reel next to each question, to reveal the answer. Then click on the cotton reel to return to this page.



### Why choose Textiles?

The DT: Fashion & Textiles specification has been specifically designed to provide engaging, innovative and creative learning experiences, where art, craft and textile design are integrated with practical knowledge and understanding.

It is my aim, as the Textiles teacher, to ensure all my students achieve their goals, by teaching them a variety of different textile techniques and presentation techniques, enabling them to envision and create innovation and inspirational fashion products.

### What will you learn?

Throughout this qualification you will learn different textile techniques, including both machine and hand techniques, such as:

Beading, Hand embroidery, machine embroidery, Quilting, Applique, Felting, Patchwork, CAM embroidery.

### <u>AS - Year 12</u>

AS consists of **two units** 

In the first year of this course, you will focus on developing practical skills, within the first half term. Then we will begin your assessed unit of work.

# Unit 1 – Written examination (2 Hours) 20% of qualification:

The examination includes a mix of structured and extended writing questions assessing learners' knowledge and understanding of:

- Technical principles
- Designing and making principles along with their ability to:
- Analyse and evaluate design decisions and wider issues in design and technology.

# Unit 2 – Design and Make Task (40 Hours) 20% of qualification:

A design and make task, based on a brief developed by you, assessing your ability to:

- Identify, investigate and outline design possibilities
- Design and make prototypes
- Analyse and evaluate design decisions and wider issues in design and technology.

#### **A2 – Year 13**

A2 consists of **two units** 

# Unit 3 – Written examination (2 and half hours) 30% of qualification:

The examination includes a mix of structured and extended writing questions assessing learners' knowledge and understanding of:

- Technical principles
- Designing and making principles along with their ability to:
- Analyse and evaluate design decisions and wider issues in design and technology.

# Unit 4 – Design and Make task (60 hours) 30% of qualification:

A design and make task, based on a brief developed by you, assessing your ability to:

- Identify, investigate and outline design possibilities
- Design and make prototypes
- Analyse and evaluate design decisions and wider issues in design and technology.

Unit 2 and Unit 4 will be presented in Sketchbooks, A3 folders and A2 design boards.



# What GCSE grades do I need to get?

You are required to have at least a C in English, and you should have studied Textiles at GCSE, achieving at least a D. If you did not study Textiles, you can still opt for the A level, if you took a DT (Textiles, Product design) or Art (Graphics, Photography) subject at GCSE and achieved a D or above.

Email: <a href="mailto:Npugh@aberdareschool.co.uk">Npugh@aberdareschool.co.uk</a> if you would like to check that you are able to opt for this subject at A level.















### Careers in Fashion & Textiles

Click on the picture and it will explain the role further... If there is a career you are thinking of and it is not here, email Mrs Pugh for more information.











"Hi, my name is Amy. I'm an ex-student of Aberdare Community school. I'm currently a second-year student at Cardiff Metropolitan University studying Fashion Design. I must start by thanking Mrs Pugh, because without her I would not have this love and passion for the subject. Of course, you will be advised not to choose a subject just because you like the teacher. However, to me it is not the case as I know I will need a good teacher in terms of the understanding between me and the teacher, our connection and the type of support I would receive. Mrs Pugh identified your mistakes and brings the talent out in you. Mrs Pugh will be one of your biggest supporters and will teach you all the skills and techniques you need in Textiles. One common mistake is that people think that Textile is not as important as Maths, English, or Science. Please do not ever let this impact your choice, each subject has its own importance that will lead you to a pathway you want for your future career. Always seek advice from the teacher who teaches the subject to see if you are suitable. I will say Textiles is not an easy subject and it takes a lot of patience and your own time to develop and explore techniques, but Mrs Pugh is always there for support! As a second year uni student I can tell you that there are a lot of career pathways within textile. I urge you to consider it as an A level. Amy Nguyen (Previous student)

These students all completed the Art and Design A level, focusing on the Textiles specification, but it provides you with a students insight into how A level Textiles is delivered.

"A-Level textiles is a fun, creative and enjoyable subject. You have the chance to express yourself through your work highlighting both your likes and dislikes. Textiles gives you a great sense of accomplishment when you look back at the work you put so much effort into. Even though A-Level textiles is a very 'hands on' subject that requires a lot of hard work, it is definitely worth it. My favourite part about the subject is how much freedom you have when choosing themes, colours, techniques etc. The choice is 100% yours and you do what you enjoy the most and what you believe shows your best work. Along with this, you are taught by one of the best teachers who will give you great support and feedback during the duration of your work. Overall, I believe that textiles is a subject that you should definitely consider taking further in your studies."

Katie-Louise Tucker (Year 13)

"A level textiles is my favourite lesson, I really enjoy it as it gives me opportunities to use my creative side and to experiment with different techniques and designs. Textiles gives you a lot of freedom with your work as you're allowed to choose your own theme, therefore you can create whatever designs and products that you wish!"

Emma Price (Year 13)





You will have access to 10
Bernina sewing machines, which allow you to do a range of stitching, including free machine embroidery.



You will have access to 2
CAM
machines, which allow you to do a range of preprogrammed stitches, as well as your own designs using 2D.



You will have access to 2 laser cutters, which allow you to do a range of laser cut materials and techniques, using 2D design.

You will also have access to:

- 2 Batik pots.
- A sublimation printer.
  - A heat press.
  - 2 Over lockers.

A full range of fabric, thread and haberdashery.



