

# WHGS Sixth Form

## Design Technology Product Design



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If you are a student hoping to join our A-level Product Design course in September, we would like you to be as ready as you can be and take advantage of this long Summer break.

There are many ways you can get prepared but please try the following:

- Improve your subject knowledge by reading up on Design and materials (See wider reading section) as well watching 'How it's Made' on YouTube.
- Improve your CAD skills by creating things on Fusion 360 (use YouTube tutorials to help you).
- Improve your practical skills by making things creating work at home to share when you return will help us see your journey of ideas. This will also show us your interests and skills. The activities should be interesting, fun and capture your imagination. We would like you to take notes about your ideas and creativity.

Finally, familiarise yourself with the sample Non-Exam Assessment (Coursework part of the A-Level also known as the NEA) and the mark scheme. Try completing a mini project.

### Wider Reading (Books, Articles, Podcasts and Videos)

Below is a list of links to relevant websites, articles, videos, shows, etc.

These are here purely to extend your knowledge of current trends in design and how it is currently being used in the world today.

Evidence any wider reading you do by summarising what you have learned. (Potentially through bullet points, a review, a small paragraph, a reflective piece of writing or any other media you find appropriate such as trying out some of the drawing techniques).

- [99percentinvisible.org/?fbclid=IwAR3-foomjkomcOnvRDw79upF5BnrVkY9W5cuU2ix82ntkjuYOL6qEsJ4L84](https://99percentinvisible.org/?fbclid=IwAR3-foomjkomcOnvRDw79upF5BnrVkY9W5cuU2ix82ntkjuYOL6qEsJ4L84) – A long series of podcasts about products and other ways in which design has impacted the world



- [www.bbc.co.uk/programmes/b08k9pv0?fbclid=IwAR1O-REp7H72oZnoEemZZ6Bby7mXouo019xlfZR1wuENSAAoFKl--NPhqXo](http://www.bbc.co.uk/programmes/b08k9pv0?fbclid=IwAR1O-REp7H72oZnoEemZZ6Bby7mXouo019xlfZR1wuENSAAoFKl--NPhqXo) – Podcast about ideas and inventions that created the modern world.
- [www.dezeen.com/design/](http://www.dezeen.com/design/) - podcasts, articles, design newsletters and magazine.
- [www.bbc.co.uk/programmes/m000gwzg](http://www.bbc.co.uk/programmes/m000gwzg) How to Make series starts beginning of April on BBC Four
- [www.bbc.co.uk/iplayer/episode/m0007trf/bauhaus-100](http://www.bbc.co.uk/iplayer/episode/m0007trf/bauhaus-100) Bauhaus 100
- [www.bbc.co.uk/programmes/b05ttnd7](http://www.bbc.co.uk/programmes/b05ttnd7) Handmade craft
- [www.bbc.co.uk/programmes/b09rfb1v](http://www.bbc.co.uk/programmes/b09rfb1v) Inside story of IKEA
- [www.youtube.com/channel/UCElt4nocnWDEnYJmov4zqyA](http://www.youtube.com/channel/UCElt4nocnWDEnYJmov4zqyA) – How Its Made YouTube. Loads of content on production processes and materials uses.
- [www.youtube.com/watch?v=9uOMectkCCs](http://www.youtube.com/watch?v=9uOMectkCCs) – The Secret of Great Design – TED Talk
- [www.youtube.com/channel/UC62Ngds\\_ZBWkX-6yFV-10UQ](http://www.youtube.com/channel/UC62Ngds_ZBWkX-6yFV-10UQ) – Product designer maker youtube channel
- [www.youtube.com/channel/UCxyQKi7ipjA3Cz-VQUYanNQ](http://www.youtube.com/channel/UCxyQKi7ipjA3Cz-VQUYanNQ) – Producttank youtube channel
- [www.youtube.com/watch?v=FwvLkmdV9QA](http://www.youtube.com/watch?v=FwvLkmdV9QA) – Interview with Braun
- [www.youtube.com/watch?v=wChkvofR7Q0](http://www.youtube.com/watch?v=wChkvofR7Q0) – Dieter Rams' 10 Principles of Good Design
- [www.thisiscolossal.com/category/design/?fbclid=IwAR0X73ArtGT6jqMp2f5xYddmmSEDTf1z47FO1-XyZylhyCt14rOxVYjGc18](http://www.thisiscolossal.com/category/design/?fbclid=IwAR0X73ArtGT6jqMp2f5xYddmmSEDTf1z47FO1-XyZylhyCt14rOxVYjGc18) – Design magazine/articles
- [www.netflix.com/gb/title/80057883](http://www.netflix.com/gb/title/80057883) – 2 Netflix series about the art of design
- [www.youtube.com/channel/UCJyreQlgA\\_X62cfouSlrgMw](http://www.youtube.com/channel/UCJyreQlgA_X62cfouSlrgMw) – Lockdown lectures are excellent but there are other sections too
- [designmuseum.org/digital-design-calendar](http://designmuseum.org/digital-design-calendar) – Digital exhibitions and articles
- [www.youtube.com/watch?v=iVy0qGqmKFU](http://www.youtube.com/watch?v=iVy0qGqmKFU) – How to sketch like a product designer
- [www.youtube.com/watch?v=O-SM3Fpcji0](http://www.youtube.com/watch?v=O-SM3Fpcji0) – Industrial and product design sketching
- [www.youtube.com/watch?v=DRq60nRWYDI](http://www.youtube.com/watch?v=DRq60nRWYDI) – Marker pen shading and rendering basics

## Online Learning and Courses

There are a large variety of courses that you can do and complete online to enhance your learning. Some of the content may be aimed at y13+ but give it a go, you might surprise yourself!

### Future Learn Courses

- [www.futurelearn.com/courses/designing-futures](http://www.futurelearn.com/courses/designing-futures)
- [www.futurelearn.com/courses/medtech-trends-and-product-design](http://www.futurelearn.com/courses/medtech-trends-and-product-design)
- [www.futurelearn.com/courses/modern-building-design](http://www.futurelearn.com/courses/modern-building-design)

### Open University have free Design related courses:

- [www.open.edu/openlearn/science-maths-technology/design-innovation/design/content-section-0?active-tab=description-tab](http://www.open.edu/openlearn/science-maths-technology/design-innovation/design/content-section-0?active-tab=description-tab)
- [www.open.edu/openlearn/science-maths-technology/design-innovation/design-thinking/content-section-0?active-tab=description-tab](http://www.open.edu/openlearn/science-maths-technology/design-innovation/design-thinking/content-section-0?active-tab=description-tab)
- [www.open.edu/openlearn/science-maths-technology/computing-ict/designing-the-user-interface-text-colour-images-moving-images-and-sound/content-section-0?active-tab=description-tab](http://www.open.edu/openlearn/science-maths-technology/computing-ict/designing-the-user-interface-text-colour-images-moving-images-and-sound/content-section-0?active-tab=description-tab)
- [www.open.edu/openlearn/science-maths-technology/engineering-technology/introduction-design-engineering/content-section-0?active-tab=description-tab](http://www.open.edu/openlearn/science-maths-technology/engineering-technology/introduction-design-engineering/content-section-0?active-tab=description-tab)
- [www.open.edu/openlearn/science-maths-technology/introduction-interaction-design/content-section-0?active-tab=description-tab](http://www.open.edu/openlearn/science-maths-technology/introduction-interaction-design/content-section-0?active-tab=description-tab)
- [www.open.edu/openlearn/science-maths-technology/engineering-and-technology/design-and-innovation/design/people-centred-designing/content-section-0?active-tab=description-tab](http://www.open.edu/openlearn/science-maths-technology/engineering-and-technology/design-and-innovation/design/people-centred-designing/content-section-0?active-tab=description-tab)



- [www.open.edu/openlearn/nature-environment/natural-history/studying-mammals-winning-design/content-section-0?active-tab=description-tab](http://www.open.edu/openlearn/nature-environment/natural-history/studying-mammals-winning-design/content-section-0?active-tab=description-tab)

## Practical Projects

1. Make you own designer sun dial:  
[www.bbc.co.uk/norfolk/kids/summer\\_activities/make\\_sundial.shtml](http://www.bbc.co.uk/norfolk/kids/summer_activities/make_sundial.shtml)
2. Make you own pinhole camera:  
[www.jpl.nasa.gov/edu/learn/project/how-to-make-a-pinhole-camera/](http://www.jpl.nasa.gov/edu/learn/project/how-to-make-a-pinhole-camera/)
3. Make you own mechanical toy:  
[www.instructables.com/id/Extending-Grabber/](http://www.instructables.com/id/Extending-Grabber/)
4. Make you own recycled project:  
[www.youtube.com/watch?v=ZQxJ1yyTI5Q](http://www.youtube.com/watch?v=ZQxJ1yyTI5Q)
5. Make you own Toothpick shooter:  
[www.instructables.com/id/Toothpick-Shooter/](http://www.instructables.com/id/Toothpick-Shooter/)
6. Make you own Mobile passive speaker:  
[hative.com/diy-iphone-speakers/](http://hative.com/diy-iphone-speakers/)
7. 3D Modelling using Fusion 360.  
Subscribe to Lars Christensen – he has great tutorials for you

## Project Work

In addition to the wider reading and online courses I will be setting you a design context for which you can demonstrate your ability at producing design work in the setting of an individual project.

The coursework at A Level is slightly different in layout to that of GCSE but still has the same content.

Section A – Research and Designs  
Section B – Design Brief and Specification  
Section C – Developing ideas  
Section D - Making  
Section E – Evaluation

This link takes you to the AQA website to access the full A Level Specification

[www.aqa.org.uk/subjects/design-and-technology/as-and-a-level/design-and-technology-product-design-7552](http://www.aqa.org.uk/subjects/design-and-technology/as-and-a-level/design-and-technology-product-design-7552)

Below this page is a series of slides which explain how each page should be done and has examples of how the work could look. At the start of each section is the mark scheme and where you can generally achieve the marks.

Understandably you may struggle with sections like making given access to equipment, but it is perfectly acceptable to make 3D models using online programs or paper/card models if you have the materials available.

Using the context below demonstrate your capability at research and designing a product for others. You may not need to complete all of the research sections detailed below depending on the direction you take the project. Treat this as a chance to demonstrate skill at presenting work whether it is research, design or development work.



**Context:** Storage in the modern home is at a premium, especially in those households with children, and this poses a rising issue of where products can be placed.

**Hint:** Look at how this issue has been overcome in other countries where smaller housing is more prevalent, such as Japan.



[Work your way through the AQA Product Design – Inspirational Transition Work.](#)