

# HIGHER DESIGN & MANUFACTURE ESSENTIAL INFORMATION

## Which topics are covered at Higher?

- ◆ researching and evaluating existing product types
- ◆ selecting and using a range of research techniques and evaluating their usefulness
- ◆ selecting and applying a range of idea-generation techniques
- ◆ applying a range of creative design skills when refining and resolving product design tasks that cover key design challenges
- ◆ selecting and using graphic techniques to visually represent design solutions, justifying the choice of techniques
- ◆ selecting, using, and evaluating a range of simple modelling and manufacturing techniques to represent design ideas in three dimensions
- ◆ selecting and using a range of tools, equipment, software and materials for designing, making and testing models and prototypes
- ◆ developing broad knowledge and understanding of the impact of a range of design and manufacturing technologies on our environment and society
- ◆ critically evaluating a range of factors that influence the design and manufacture of products
- ◆ developing knowledge and understanding of a broad range of industrial and commercial manufacturing processes and the properties and uses of materials

## What apps and websites can I use to support my learning?

- <https://achieve.hashtag-learning.co.uk/>
- <https://www.brightredpublishing.co.uk/shop/design-and-manufacture>
- <https://www.bbc.co.uk/bitesize/levels/z6gw2hv>
- <https://www.sqa.org.uk/pastpapers/findpastpaper.htm>
- <https://www.technologystudent.com/>
- <https://www.designclass.co.uk/>

## Are there important dates of which I should be aware?

- Oct– Moderation period 1
- Dec – Moderation period 2
- Jan – March - Design folio **(53% of final grade)**
- May – Final exam **(47% of final grade)**

## How is the course assessed?

COMPONENT	DETAILS	LENGTH	MARKS	%
<b>FINAL EXAM</b> Question paper	<ul style="list-style-type: none"> <li>◆ design</li> <li>◆ materials and manufacture</li> <li>◆ impact of design and manufacturing technologies on society, the environment, and the world of work</li> </ul>	2 hours and 15 minutes	80 marks	47%
<b>Design assignment</b>	<ul style="list-style-type: none"> <li>◆ carrying out research into a given brief 5 marks</li> <li>◆ producing a specification 3 marks ◆ generating initial ideas 8 marks</li> <li>◆ exploring ideas 12 marks ◆ refining ideas 6 marks</li> <li>◆ applying knowledge and understanding of materials and assembly processes 10 marks ◆ applying knowledge and understanding of design 12 marks ◆ applying graphic techniques 12 marks</li> <li>◆ demonstrating practical modelling skills 8 marks ◆ producing a plan for commercial manufacture 6 marks ◆ applying modelling technique</li> </ul>	Completed under exam conditions in class over 4 months	90 marks	53%

## What resources do I need?

**Resources from lessons** (One Note and Teams)  
**Login details** to essential websites (above)

## Where can I find more information about the writing exam and assignment?

The SQA Understanding Standards provides exemplars and grades awarded.

<https://www.understandingstandards.org.uk/>

## Where do I find the past papers?

These are on One Note but you will also find past papers back to 2018 on the SQA site.

<https://www.sqa.org.uk/pastpapers/findpastpaper.htm>

## Where do I find more information about the course?

[HigherCourseSpecDesignAndManufacture.pdf \(sqa.org.uk\)](HigherCourseSpecDesignAndManufacture.pdf (sqa.org.uk))

## What else can I do to improve?

Use the apps and websites above regularly  
Go over work covered in class  
Watch any videos of teachers explanations again and ask for help if you do not understand  
Utilise all of your time available in classroom to build modelling skills  
Attend department during lunch time to work on Mock and SQA design folios  
Use the past papers to help establish areas needing further revision.

## How do I ensure top marks?

Set yourself an aspirational target grade and detail exactly what you're going to do to achieve this and keep referring to this  
Keep up-to-date with your Design folios and homework  
Work consistently throughout the year  
Utilise the extra sessions put on in department during lunch and after school

