

<b>Course information</b>			
<b>Subject: Design and Technology - Product Design - KS5 (Years 12-13)</b>			
<b>Subject</b>	Design and Technology - Product Design	<b>Subject leader contact information</b>	Mr J Poote jpoote@cottesloe.bucks.sch.uk
<b>Examination Board</b>	Pearson (Edexcel) GCE	<b>Specification Code</b>	9DT0
<p><b>Subject Content:</b> Product Design is about equipping students with design skills for the future - Students will be able to recognise design needs and develop an understanding of how current global issues, including integrating technology, impacts today's world.</p> <p>A-level students will have the confidence to innovate and produce creative design solutions as they develop their own design brief with a client/end-user. The course encourages the development of creativity and innovation.</p>			
<p><b>Additional Equipment Needed</b></p> <ul style="list-style-type: none"> <li>● A device that can access the internet and be able to research, create and edit documents and presentations. Ideally a Chromebook or laptop/desktop PC or Mac.</li> <li>● Mechanical Pencil</li> <li>● Copic Spirit Markers (specific information will be given to students)</li> </ul>			
<b>Assessment Details:</b>			
<p><b>Written examination:</b> 2 hours 30 minutes- 50% of the qualification 120 marks  <b>Component 1</b> Principles of Design and Technology (exam)  <b>Theoretical Assessment includes</b>                      Topic 1: Materials                      Topic 2: Performance characteristics of materials                      Topic 3: Processes and techniques                      Topic 4: Digital technologies                      Topic 5: Factors influencing the development of products                      Topic 6: Effects of technological developments                      Topic 7: Potential hazards and risk assessment                      Topic 8: Features of manufacturing industries                      Topic 9: Designing for maintenance and the cleaner environment                      Topic 10: Current legislation                      Topic 11: Information handling, Modelling and forward planning                      Topic 12: Further processes and techniques.</p> <p><b>Component 2 - Non-Examined Assessment</b>                      Independent Design and Make Project - Teacher assessed unit 50% of the qualification 120 marks</p> <p><b>Assessment overview</b>                      Part 1- Identifying opportunities for design                      Part 2- Designing a Prototype                      Part 3 - Making a Prototype                      Part 4 - Evaluating own design and prototype</p>			
<b>What can I do to support my child at home?</b>			

## Home Study and Independent Learning Parental Support Information

- Encourage reading of design and technology news (<https://www.wired.com>) and new innovations in design, technology and materials.
- Be curious about how things work, take broken products apart to learn more about how they work and what they may be made from (you could even cannibalise them to make something new).
- Watch appropriate 'design and make' or 'how stuff is made' videos on Youtube
- Provide access to the internet and a device to help with homework on Google Classroom

### Recommended resources for the course:

#### Websites:

<https://www.technologystudent.com>

<http://www.madehow.com>

<https://designmuseum.org>

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

<http://www.design-technology.info/home.htm>

#### Books:

My Revision Notes: Pearson Edexcel, A-Level Design and Technology (Product Design)

ISBN-13 : 978-1510474154

Essential Maths Skills for AS/A Level Design and Technology

ISBN - 13: 978-1510417069

#### Teaching Staff Contact Details

Name	Role	Email	Tel
Steve Bonser	Teacher	sbonser@cottesloe.bucks.sch.uk	(01296) 688264
James Poote	Subject Leader	jpoote@cottesloe.bucks.sch.uk	(01296) 688264

#### Additional Information:

Students will need to provide or fund materials throughout the course for the product they wish to design and make - Approximately £15 -20 per year. Drawing pens and a pack of coloured pencils are essential items for this course.