

**Curriculum Area: Product Design Year: 10 & 11  
2015/2016**

Topics	Year Curriculum	How you can support learning at home, eg. Books, websites, family learning through visits.
<p><b>Candidates should demonstrate these skills through designing:</b></p> <ul style="list-style-type: none"> <li>• be creative and innovative when designing;</li> <li>• design products to meet the needs of clients and consumers;</li> <li>• understand the design principles of form, function and fitness for purpose;</li> <li>• understand the role that designers and product developers have, and the impact and responsibility they have on and to society;</li> <li>• develop and use design briefs and specifications for product development;</li> <li>• consider the conflicting demands that moral, cultural, economic, and social values and needs can make in the planning and in the designing of products;</li> <li>• consider health and safety in all its aspects;</li> <li>• use, where appropriate, a range of graphic techniques and ICT (including digital media), including CAD, to generate, develop, model and communicate design proposals;</li> <li>• Investigate and select appropriate materials;</li> </ul>	<p><b>Year 10</b> This first year of the two-year course deals mainly with the students acquiring the underpinning knowledge and skills that are essential to their success in both the written paper and the controlled assessment. The course is planned to ensure that candidates are taught the underpinning knowledge and skills that are the foundation of Product Design. These skills will be delivered through focussed practical and theory tasks. The underpinning skills are:</p> <p>Theoretical Knowledge</p> <ul style="list-style-type: none"> <li>ï Paper/card plus at least one other material</li> <li>ï Design issues such as sustainability, packaging, human factors, etc.</li> <li>ï Manufacturing for both school based and commercial methods</li> </ul> <p>Designing and making skills</p> <ul style="list-style-type: none"> <li>ï Drawing and modelling skills</li> <li>ï Analytical skills</li> <li>ï ICT skills</li> <li>ï Hand, machine and CAM production methods</li> </ul> <p><b>Year 11</b> Much of the second year of the course is dedicated to the controlled assessment task. Lessons are used mainly to prepare the candidates for the controlled task sessions where candidates will be working under informal supervision. Candidates are required to work independently with the manufacture of the prototype.</p>	<p>Parents and carers can encourage their child/children to be as actively involved in the design and manufacture of everyday products. Taking an interest in the many design and making related television programmes; watching and discussing them with your child/children can also be useful. Support will be vital in ensuring that all work is submitted for deadlines.</p> <p>These links are the websites where we have found some of the useful information and resources that you will find on this page. To find more information or visit the sites that they came from, click on the links below.</p> <p>A list of websites that might be helpful in research and revision:  <a href="http://filestore.aqa.org.uk/subjects/AQA-4555-W-SP-14.PDF">http://filestore.aqa.org.uk/subjects/AQA-4555-W-SP-14.PDF</a>  <a href="http://filestore.aqa.org.uk/subjects/AQA-4555-W-TRB-RL.PDF">http://filestore.aqa.org.uk/subjects/AQA-4555-W-TRB-RL.PDF</a>  <a href="http://www.technologystudent.com/prddes1/prddex1.html">http://www.technologystudent.com/prddes1/prddex1.html</a></p>

<ul style="list-style-type: none"> <li>• communicate the design proposal in an appropriate manner;</li> <li>• test and evaluate the final design proposal against the design specification;</li> </ul> <p><b>Candidates should demonstrate these skills through making:</b></p> <ul style="list-style-type: none"> <li>• select and use tools/equipment and processes to produce quality products;</li> <li>• consider the solution to technical problems in the design and manufacture process;</li> <li>• use tools and equipment safely with regard to themselves and others;</li> <li>• work accurately and efficiently in terms of time, materials and components;</li> <li>• manufacture products applying quality control procedures;</li> <li>• have knowledge of Computer-Aided Manufacture (CAM) and to use as appropriate;</li> <li>• ensure, through testing, modification and evaluation, that the quality of their products is suitable for intended users and devise modifications where necessary that would improve the outcome(s);</li> <li>• understand the advantages of working as part of a team when designing and making products.</li> </ul>	<p>(60% of the assessment.)</p> <p>The spring and summer term have been allocated to the final preparation for the written paper which does now contain a pre-release topic to allow candidates to prepare for the section A (first question) which will be worth around 25% of the paper mark.</p>	
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