

# Design and Technology: Product Design

## Subject Information Sheet

Course Title:	A-level Design and Technology: Product Design
Subject:	A-level Product Design
Qualification:	A Level
Exam Board:	AQA
General Course Description	<p>This creative and thought-provoking qualification gives students the practical skills, theoretical knowledge and confidence to succeed in a number of careers. Especially those in the creative industries.</p> <p>They will investigate historical, social, cultural, environmental and economic influences on design and technology, whilst enjoying opportunities to put their learning in to practice by producing prototypes of their choice.</p> <p>Students will gain a real understanding of what it means to be a designer, alongside the knowledge and skills sought by higher education and employers.</p>
Course Content and Teaching Units	<p>Product Design requires students to engage in both practical and theoretical study. This specification requires students to cover design and technology skills and knowledge. These have been separated into:</p> <ul style="list-style-type: none"> <li>• Technical Principles <ul style="list-style-type: none"> <li>○ Materials and their applications</li> <li>○ Performance characteristics of materials</li> <li>○ Enhancement of materials</li> <li>○ The use of finishes</li> <li>○ Modern industrial and commercial practice</li> <li>○ The requirements for product design and development</li> <li>○ Health and safety</li> <li>○ Protecting designs and intellectual property</li> </ul> </li> </ul>

	<ul style="list-style-type: none"> <li>○ Design for manufacturing, maintenance, repair and disposal</li> <li>○ Feasibility studies</li> <li>○ Enterprise and marketing in the development of products</li> <li>○ Design communication</li> </ul> <ul style="list-style-type: none"> <li>● Designing and Making Principles <ul style="list-style-type: none"> <li>○ Design methods and processes</li> <li>○ Design theory</li> <li>○ How technology and cultural changes can impact on the work of designers</li> <li>○ Product life cycle</li> <li>○ Design processes</li> <li>○ Critical analysis and evaluation</li> <li>○ Selecting appropriate tools, equipment and processes</li> <li>○ Responsible design</li> <li>○ Design for manufacture and project management</li> <li>○ National and international standards in product design</li> </ul> </li> </ul> <p><a href="https://www.aqa.org.uk/subjects/design-and-technology/a-level/design-and-technology-product-design-7552/subject-content">https://www.aqa.org.uk/subjects/design-and-technology/a-level/design-and-technology-product-design-7552/subject-content</a></p>
Entry Requirements	5 in Maths and 5 in Product Design, DEC, Art, Merit at Level 2 Designing the Built Environment
Assessment	<p><b>Technical principles</b> Written exam: 2 hours and 30 minutes 120 marks 30% of A-level</p> <p><b>Designing and making principles</b> Written exam: 1 hour and 30 minutes 80 marks 20% of A-level</p> <p><b>Non-exam assessment (NEA)</b> Practical application of technical principles, designing and making principles. Substantial design and make project 100 marks 50% of A-level</p>
Financial Information	Free copy of Autodesk Fusion 360 to use at home.

Progression Opportunities	<p>University to study: Product design, Industrial design, Engineering, Ergonomics, Interior Design.</p> <p>Apprenticeships: AMRC in Sheffield offers degree apprenticeships in a wide range of engineering fields with multinational employers such as Boeing, Rolls Royce and McLaren.</p>
Further Information about our courses including results	
Trips, visits and extra-curricular	<p>We will be running a trip to the Design Museum in London, taking part in a workshop there and visiting the Young Designers exhibition.</p> <p>In June of Y12 we will be visiting the product design degree show at Sheffield Hallam University to help inform degree choices.</p> <p>Sheffield has a strong history of making and we have links with a number of companies that we can help arrange work experience and visits with.</p>