


# GCSE Design & Technology KS4

The DT Department have selected the AQA specification for GCSE DT (8552) 50% coursework (NEA) and 50% Examination  
<https://www.aqa.org.uk/subjects/design-and-technology/gcse/design-and-technology-8552>

Students will learn:	
Years 9/10	<ul style="list-style-type: none"> <li>• New and emerging technologies</li> <li>• Energy generation and storage</li> <li>• Systems approach to designing</li> <li>• Mechanical devices</li> <li>• Developments in new materials</li> <li>• Materials and their working properties</li> <li>• Selection of materials or components</li> <li>• Using and working with materials</li> <li>• Ecological and social footprint</li> <li>• The work of others</li> <li>• Investigation, primary &amp; secondary data</li> <li>• Design strategies</li> <li>• Communication of ideas</li> </ul> 
Year 11	<ul style="list-style-type: none"> <li>• Specialist techniques and processes</li> <li>• Specialist tools and equipment</li> <li>• Material management</li> <li>• Stock forms, types &amp; sizes</li> <li>• Tolerances</li> <li>• Forces and stresses</li> <li>• Prototype development</li> <li>• Surface treatments and finishes</li> <li>• Scales of production</li> </ul>

Paper 1
<p><b>What's assessed</b></p> <ul style="list-style-type: none"> <li>• Core technical principles</li> <li>• Specialist technical principles</li> <li>• Designing and making principles</li> </ul> <p>In addition:</p> <ul style="list-style-type: none"> <li>• at least 15% of the exam will assess maths</li> <li>• at least 10% of the exam will assess science.</li> </ul>
<p><b>How it's assessed</b></p> <ul style="list-style-type: none"> <li>• Written exam: 2 hours</li> <li>• 100 marks</li> <li>• 50% of GCSE</li> </ul>
<p><b>Questions</b></p> <p><b>Section A – Core technical principles (20 marks)</b>            A mixture of multiple choice and short answer questions assessing a breadth of technical knowledge and understanding.</p> <p><b>Section B – Specialist technical principles (30 marks)</b>            Several short answer questions (2–5 marks) and one extended response to assess a more in depth knowledge of technical principles.</p> <p><b>Section C – Designing and making principles (50 marks)</b>            A mixture of short answer and extended response questions.</p>
Non-exam assessment (NEA)
<p><b>What's assessed</b></p> <p>Practical application of:</p> <ul style="list-style-type: none"> <li>• Core technical principles</li> <li>• Specialist technical principles</li> <li>• Designing and making principles</li> </ul>
<p><b>How it's assessed</b></p> <ul style="list-style-type: none"> <li>• Non-exam assessment (NEA): 30–35 hours approx</li> <li>• 100 marks</li> <li>• 50% of GCSE</li> </ul>
<p><b>Task(s)</b></p> <ul style="list-style-type: none"> <li>• Substantial design and make task</li> <li>• Assessment criteria:               <ul style="list-style-type: none"> <li>• Identifying and investigating design possibilities</li> <li>• Producing a design brief and specification</li> <li>• Generating design ideas</li> <li>• Developing design ideas</li> <li>• Realising design ideas</li> <li>• Analysing &amp; evaluating</li> </ul> </li> <li>• In the spirit of the iterative design process, the above should be awarded holistically where they take place and not in a linear manner</li> <li>• Contextual challenges to be released annually by AQA on 1 June in the year prior to the submission of the NEA</li> <li>• Students will produce a prototype and a portfolio of evidence</li> <li>• Work will be marked by teachers and moderated by AQA</li> </ul>