

# Design & Technology - Product Design KS5

	A Level
	<p>Students follow the A Level Edexcel Product Design specification. The course is divided into two sections, Component 1: 50% Examination Component 2: 50% NEA (Non Examined Assessment)</p> <p>Component 1: Principles of Design and Technology 2 hours 30 minutes 50% of the qualification 120 marks</p> <ol style="list-style-type: none"><li>1: Materials</li><li>2: Performance characteristics of materials</li><li>3: Processes and techniques</li><li>4: Digital technologies</li><li>5: Factors influencing the development of products</li><li>6: Effects of technological developments</li><li>7: Potential hazards and risk assessment</li><li>8: Features of manufacturing industries</li><li>9: Designing for maintenance and the cleaner environment</li><li>10: Current legislation</li><li>11: Information handling, Modelling and forward planning</li><li>12: Further processes and techniques</li></ol> <p>Assessment overview</p> <ul style="list-style-type: none"><li>● The paper includes calculations, short-open and open-response questions, as well as extended-writing questions focused on:<ol style="list-style-type: none"><li>1 analysis and evaluation of design decisions and outcomes, against a technical principle, for prototypes made by others</li><li>2 analysis and evaluation of wider issues in design technology, including social, moral, ethical and environmental impacts</li></ol></li><li>● Students must answer all questions</li><li>● Students must have calculators and rulers in the examination</li></ul>

Component 2: Non-examined assessment  
50% of the qualification  
120 marks

Portfolio of approximately 40 A3 slides

4 Parts to Assessment

- Part 1: Identifying and outlining possibilities for design  
Identification and investigation of a design possibility, investigation of client/end user needs, wants and values, research and production of a specification
- Part 2: Designing a prototype  
Design ideas, development of design idea, final design solution, review of development and final design and communication of design ideas
- Part 3: Making a final prototype  
Design, manufacture and realisation of a final prototype, including tools and equipment and quality and accuracy
- Part 4: Evaluating own design and prototype  
Testing and evaluation

Students are expected to source their own materials for component 2. Alternatively, the D&T department can order materials and students can pay once the project is complete.

**Useful Links: Resistant Materials / Graphics / Product Design**

[www.technologystudent.com](http://www.technologystudent.com)

[www.edexcel.com](http://www.edexcel.com)

[www.bbc.co.uk/schools/gcsebitesize/design](http://www.bbc.co.uk/schools/gcsebitesize/design)

<http://www.bpf.co.uk/>