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| Course name: Design and Technology – Resistant Materials |
| Which course/ syllabus will I be following?  Pearson Edexcel GCSE (9-1) Design and Technology |
| Reason  By studying Design and Technology, you will be able to develop your creativity, [problem solving](https://successatschool.org/advicedetails/600/How-can-problem-solving-help-me-at-work%3F), planning, and evaluation skills. Since many projects rely on students working collaboratively and cooperatively, you will also gain [communication](https://successatschool.org/advicedetails/605/How-to-Improve-Your-Communication-Skills-For-Work) and [teamwork](https://successatschool.org/advicedetails/586/How-to-Improve-Your-Teamworking-Skills-and-Impress-Employers) skills.  There are strong links between Design and Technology and subjects such as Art, Science (particularly Physics and Chemistry), Maths and IT in addition to the other Technology subjects. Scientific knowledge of how physical and chemical processes work will be most useful when designing different products.  The GCSE specification in Design and Technology will enable you to understand and apply iterative design processes through which you explore, create and evaluate a range of outcomes. This specification will enable you to use creativity and imagination to design and make prototypes (together with evidence of modelling to develop and prove product concept and function) that solve real and relevant problems, considering your own and others’ needs, wants and values.    You will acquire subject knowledge in Design and Technology that build on your learning at Key Stage 3, incorporating knowledge and understanding of different materials and manufacturing processes in order to design and make, with confidence, prototypes which respond to issues, needs, problems and opportunities. You will learn how to take design risks, helping you to become a resourceful, innovative and enterprising citizen. |
| How is the course assessed?  There are two areas of assessment.  **The NEA, (Non-Examined Assessment)**: Students produce coursework over a period of 7 months, which is presented as 15 –20 pages of A3 paper or as a PowerPoint presentation. This is a recording of the student's ability to investigate, design, manufacture and evaluate a product that helps solve a particular problem identified by the student using a real client and a real situation. *The NEA is worth 50% of the marks for the whole GCSE, is internally assessed, and is marked out of 100.*  **The Written Exam:** This exam lasts 1 hour and 45 minutes. Students are expected to answer questions in depth on one material category. They will also be asked to answer questions on core technical principles and other material categories.  *The written exam is worth 50% of the marks for the whole GCSE, is externally assessed, and is marked out of 100.* |
| Which careers/ post 16 courses will this course help me to prepare for?  Design and Technology can set you up for a career in a wide variety of industries such as [fashion](https://successatschool.org/careerzonesummary/39/Fashion-Beauty), [engineering](https://successatschool.org/careerzonesummary/2/Engineering), architecture, [information technology](https://successatschool.org/careerzonesummary/28/IT-The-Internet), [careers in hospitality](https://successatschool.org/careerzonesummary/21/Hospitality-Leisure-Tourism), and even [education](https://successatschool.org/careerzonesummary/8/Education-Teaching).  Popular careers for people with Design and Technology qualifications include: fashion designer, tailor, product designer, architect, software engineer, civil engineer, furniture designer and systems designer.  If you want to study design and technology at university level, some courses require you to have completed the subject as part of your [A-levels](https://successatschool.org/advicedetails/546/What-are-A-levels?).  Although some university courses may not list design and technology as an entry requirement, it can still be very helpful for courses in architecture, engineering, information technology and computer science. |