

Subject:

Graphics

Graphics Intent:

Graphics enables students to think creatively, converting ideas and raw materials into the products and services that we all need and use every day of our lives. Everything around us has been designed and this subject enables students to gain a better understanding of the world they live in and to improve and sustain this for future generations. Graphics is a creative and technical subject which involves designing, making and problem solving. Students use the iterative design process to develop innovative solutions to design problems and will be introduced to a range of design, modelling techniques and CAD packages.

Our Exam Board is: Edexcel

The Big Questions...

Year 12	Year 13
<p>Product Design (Sept to Dec) Design Brief- Design and Manufacture a shelter for a chosen site in Yateley School Investigate and analyse the design brief- What are the needs, wants and values of the client and users? How will materials and manufacturing processes impact the design? How could the work of designers/architects and existing produced be incorporated? What are the limitations and opportunities with regards to the site? Design and Development- How can design strategies be used to design and develop proposals? How can we review and analyse proposals and ensure designs fit the specification? How can the iterative design processes be used to test, model and refine designs? How can CAD software be used to generate accurate final drawings?</p> <p>Product Investigation (Jan to Feb)- How is a performance analysis and technical specification produced for a range of products? What properties are required from materials? How is blow moulding, injection moulding and flexography used to manufacture a drinks bottle? How is lithographic printing, hot-foil blocking and embossing used to manufacture a chocolate box? How does quality assurance, quality control and quality standards impact the design and manufacture of products?</p> <p>Product Manufacture (March to April)- How are hand and machine tools used to manufacture a high quality final prototype? How can production planning aid the manufacturing process? How can we evaluate products in relation to client's needs, specification criteria and life-cycle assessment?</p> <p>Theory Assignments (on-going throughout year 12 and 13- see list in year 13)</p>	<p>Independent Design and Make Project (April in yr12 to March)- client led design brief- 50% of the A Level Student will adopt a commercial approach and produce a design folder and practical outcome in response to a client led design brief. There are four parts to the assessment:</p> <p>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.</p> <p>Designing a prototype: Design ideas, development of design idea, final design solution, review of development and final design and communication of design ideas</p> <p>Making a final prototype: Design, manufacture and realisation of a final prototype, including tools and equipment and quality and accuracy</p> <p>Evaluating own design and prototype: Testing and evaluation</p> <p>Theory Assignments (on-going throughout year 12 and 13) Materials, performance characteristics of materials, processes and techniques, digital technologies, factors influencing the development of products, effects of technological developments, potential hazards and risk assessment, features of manufacturing industries, designing for maintenance and the cleaner environment, current legislation, information handling, modelling and forward planning.</p>

What skills will I develop?

The A Level in Graphics enables students to understand and apply iterative design processes through which they explore, create and evaluate a range of outcomes. They will adopt a commercial design approach, develop design strategies and manufacturing techniques to respond to specifications and develop solutions that fit the needs of a real client/ user group. They will use CAD/CAM techniques and work with a range of materials and processes at an advanced level. The course gives students opportunities to apply knowledge from other disciplines, including mathematics, science, art and design, computing and the humanities.

How will I be assessed?

Project work is monitored through the use of progress tracking charts and formative feedback is given throughout projects, detailing the strength and areas for improvements against the A level assessment criteria. The 6th form referral systems is used to ensure that students complete work to their target grade or higher and respond to our feedback. Assignments and theory work runs throughout the course and students complete weekly flash cards to support revision. Teacher feedback is given verbally and on assessed work so that pupils can improve their understanding before moving on. Coursework accounts for 50% of the A level grade and the exam, sat in June in yr13, accounts for the other 50%.

What great resources can I use?

Our Edexcel A Level Design and Technology textbook- this covers the theory topics and has practice questions which are useful for revision.

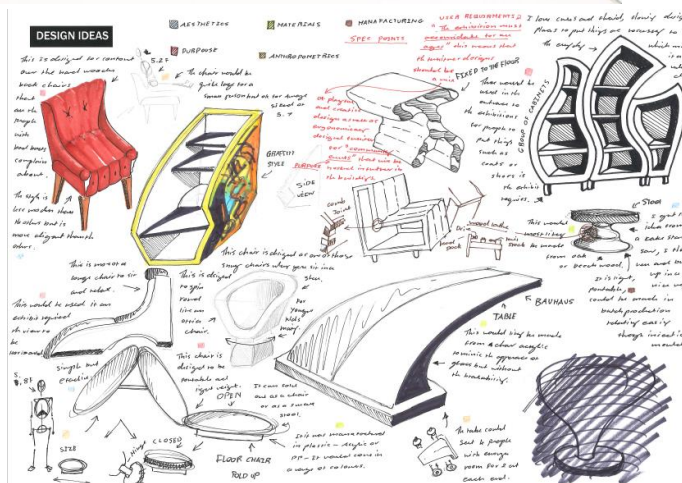
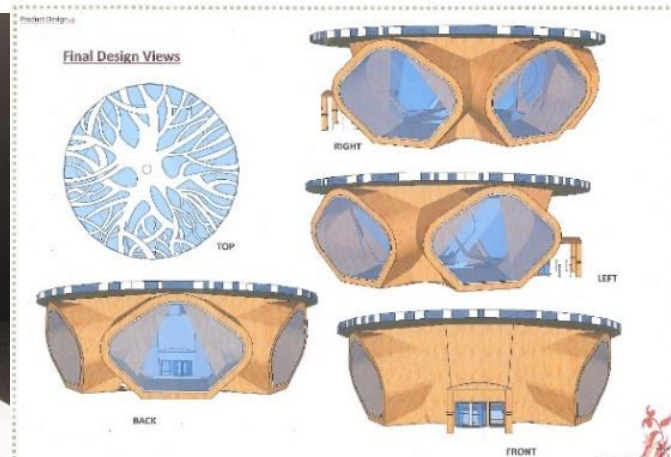
<https://www.focuselearning.co.uk>- Design and Technology resource on the VLE- great diagrams and videos to explain materials and processes

The theory PowerPoints saved on the R drive along with the practise exam questions- these cover each theory topic relating to the assignments that run throughout the course.

Three ways that parents/carers can help...

1. Encourage your child to meet the mini deadlines for coursework and respond to the feedback we give them following each assessment- ask them if they are 'green' for each piece of work on the progress tracker.
2. Encourage your child to complete all theory assignments, exam questions and flash cards for the deadlines set on SMHW.
3. Talk to your child about their project work, ask to see their design folder. They will need to gain third party feedback on their design work so you will be able to support them with this or even act as a client!

A Level Graphics Example work



What have our Graphics students gone on to do?



CREATIVE PATHWAYS



we love design

