

	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13
overview	In DT and Textiles pupils learn a knowledge of the 6 key components of graphic design, packaging, nets and accuracy in drawing. Knowledge of materials and processes and building basic skills when using plastics and metals. Pupils will experiment with a range of decorative techniques with textiles.	In DT and Textiles pupils will develop an understanding and knowledge of the 6 key components of graphic design, packaging, nets and accuracy in drawing. Knowledge of materials and processes and building basic skills when using woods, plastics, and CAD/CAM. Pupils learn about circuits and components. Pupils will develop a knowledge of textile techniques and become independent learners.	Pupils will further develop understanding and knowledge of the 6 key components of graphic design, packaging, nets and accuracy in drawing. Pupils will experiment and apply these to design briefs. Projects will investigate into different manufacturing processes and develop an understanding of the engineering world and develop skills and techniques.	GCSE Design and Technology will prepare students to participate confidently and successfully in an increasingly technological world. Students will gain awareness and learn from wider influences on Design and Technology including historical, social, cultural, environmental, and economic factors. Students will get the opportunity to work creatively when designing and making and apply technical and practical expertise.	Substantial design and make task. Assessment criteria: Identifying and investigating design possibilities Producing a design brief and specification Generating design ideas Developing design ideas Realising design ideas Analysing & evaluating Students will produce a prototype and a portfolio of evidence.	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. 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.	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. Students undertake a major design and make project which will demonstrate a high level of design and practical ability.
Term 1	Develop a secure understanding of health and safety. Using Aluminium to design and make a product. Make moulds using the vacuum former and plaster casting. Using a range of hand tools and machines.	Develop and appreciate a secure understanding of health and safety. Design a wooden maze game that has been designed using CAD/CAM and the laser machine. Learning about using wood and acrylic.	Demonstrate a secure understanding of health and safety. Design and make a wooden storage box. Cutting joints, learning methods of finishing. Using a range of hand tools and machines.	Mini focussed practical tasks to build skills ready for the NEA. The FPT's will engage pupils in a variety of materials, tools, equipment and processes. Pewter casting, clock project, etc. Theory lessons and homework will build the core exam knowledge.	Students are to begin the NEA project focussing on research, investigation and design work. Then, to develop and plan the final product. Students will also develop and build upon their specialist exam knowledge – practice exam questions and mock exams.	Mini focussed practical tasks to build skills ready for the NEA. The FPT's will engage pupils in a variety of materials, tools, equipment and processes. Pupils will be building skills for A level knowledge and projects by experimenting with a variety of processes and techniques.	Students are to begin the NEA project focussing on research, investigation and design work. Then, to develop and plan the final product. Students will also develop and build upon their specialist exam knowledge – practice exam questions and mock exams.
Term 2	Produce a range of design ideas for the cushion cover using the research that they have completed as inspiration. Produce a range of annotated sketches. Create card/paper pattern pieces for the final design. Machine sewing tools and equipment Hand sewing tools and equipment. Students can use a range of hand stitched decorative techniques or embellishments.	Produce a range of design ideas for the cushion cover using the research that they have completed as inspiration. Produce a range of annotated sketches. Create card/paper pattern pieces for the final design. Machine sewing tools and equipment Hand sewing tools and equipment. Students can use a range of hand stitched decorative techniques or embellishments.	Produce a range of design ideas for a textile bag using the research that they have completed as inspiration. Complete a design specification to ensure that the needs of the target market are met. Machine sewing tools and equipment Hand sewing tools and equipment. Students can use a range of hand stitched decorative techniques or embellishments.	Mini focussed practical tasks to build skills ready for the NEA. The FPT's will engage pupils in a variety of materials, tools, equipment and processes. Metal construction project and card modelling. Theory lessons and homework will build the core exam knowledge.	Students are to begin the NEA project focussing on making the final outcome. Students will also develop and build upon their specialist exam knowledge – practice exam questions and mock exams. Completion of the product and focussing on revision.	Mini focussed practical tasks to build skills ready for the NEA. The FPT's will engage pupils in a variety of materials, tools, equipment and processes. Pupils will be building skills for A level knowledge and projects by experimenting with a variety of processes and techniques.	Students are to begin the NEA project focussing on making the final outcome. Students will also develop and build upon their specialist exam knowledge – practice exam questions and mock exams. Completion of the product and focussing on revision.
Term 3	Research of electronic products from the past and inventors. Identify where and when the electronic moisture sensor could be used – identify a user/client and their needs. Soldering iron and relevant equipment, vacuum former, Solder, specialist tools, pcb, electronic components. Electronic devices, products and developments.	Research of bridges and frame structures from around the world. Structure must span a given size gap and support weights placed in middle. Focus on Triangulation, different methods of construction. H/w task about famous bridges around the world, and the engineer, Brunel. Full class testing by hanging weights from structure to see strength.	Research and analyse the work of past jewellery designers; ie Charles Rennie Mackintosh, George Jensen and Henning Koppel Develop design ideas for an item of jewellery or medal. Investigate the use of laser cut jewellery items and the use of polymorph. Learn how to design using CAD and how to manufacture a quality product through the casting of pewter.	Mini focussed practical tasks to build skills ready for the NEA. The FPT's will engage pupils in a variety of materials, tools, equipment and processes. Vacuum forming project and CAD/CAM 3D printing. Theory lessons and homework will build for the core exam	Exam preparation and revision of core and specialist subject knowledge. Continue to develop a wide range of skills by making various focussed practical tasks. Using smart materials and learning the 3D printer capabilities.	Students are to begin the NEA project focussing on the initial research and design tasks. Students will also develop and build upon their specialist exam knowledge – practice exam questions and mock exams. Completion of the product and focussing on revision.	Exam preparation and revision of core and specialist subject knowledge.