


	Overall aim of DT at Blessed Robert Sutton all pupils from Year 7 to Year 11 will gain a coherent knowledge and understanding about the diverse designing and manufacturing techniques, designers, and materials, together with a deep understanding of Design and Technology enlightened by the Sutton Way .
	Subject will teach spiritual development by DT will teach spiritual development by pupils developing an appreciation of God's creation and an understanding of the spiritual connections to Design and manufacturing. Pupils will understand the importance of DT in different cultures. Pupils will learn to contribute to and engage as confident citizens and future professionals to the culture, creativity, economic success, leisure, material and emotional wellbeing of our society within both national and global contexts.
	Subject will teach social excellence through DT will teach social excellence through a range of teaching strategies that allow opportunities for pupils to work effectively as a community. Class discussions will develop pupils' abilities to work effectively as a team; communicating, respecting all in society and catering for their needs, listening and developing each other's ideas. DT provides an opportunity for and engagement in leisure pursuits that can yield lifelong benefits in health, wellbeing and life satisfaction.
	Subject will teach academic excellence by DT will teach academic excellence by enabling students to engage with and explore visual, tactile and other sensory experiences and how to recognise and communicate ideas and meanings. These opportunities enable them to work with traditional and new techniques, so that they develop confidence, competence, imagination and creativity to solve a contextual problem. Through these opportunities they learn to appreciate and value iconic design across times and cultures, and to understand the contexts in which they were made. Experiences will enable students to learn how to reflect critically on their own and others' work.
Enrichment opportunities in this subject include: Curriculum challenges	

The KS3 DT-Product Design curriculum takes account of the National Curriculum and the need to prepare students for GCSE DT through understanding the 4 assessment objectives. However the rationale behind the curriculum is driven by a vision of what all students should know, understand and be able to do by the end of key stage 3.

KS3 National curriculum

" Design and technology is an inspiring, rigorous and subject area. Using creativity and imagination, pupils design and make products that solve real and relevant problems within a variety of contexts, considering their own and others' needs, wants and values. They acquire a broad range of subject knowledge and draw on disciplines such as mathematics and art. Pupils learn how to take risks, becoming resourceful, innovative, enterprising and capable citizens. Through the evaluation of past and present design and technology, they develop a critical understanding of its impact on daily life and the wider world. High-quality design and technology education makes an essential contribution to the creativity, culture, wealth and well-being of the nation."

Aims:

- ✓ develop the creative, technical and practical expertise needed to perform everyday tasks confidently and to participate successfully in an increasingly technological world
- ✓ build and apply a repertoire of knowledge, understanding and skills in order to design and make high-quality prototypes and products for a wide range of users
- ✓ critique, evaluate and test their ideas and products and the work of others

Content:

Through a variety of creative and practical activities in Design and Technology, pupils should be taught the knowledge, understanding and skills needed to engage in an iterative process of designing and making. They should work in a range of domestic and local contexts [for example, the home, health, leisure and culture], and industrial contexts [for example, engineering, manufacturing, construction, food, energy, agriculture (including horticulture) and fashion].

Assessment

Students will be assessed through a personal learning checklist, grading their progress based on a RAG rating. Formal Knowledge and Skill check assessments will take place each term. Through the term short knowledge tests will be completed.

Ways to help your child succeed

Check the personal learning checklist in their assessment booklets and focus on developing any areas in red.

Share Design in the news articles and literature with your child to help support learning in the classroom.

Useful websites: BBC bitesize, Pinterest for research and inspiration

Our key stage 3 DT curriculum aims to ensure the following skills and knowledge are developed by the end of KS3, with 1 term per academic year studying DT – Product Design on a DT rotation

We propose a forward-looking DT curriculum that fosters a broad range of modes of thinking, including visual perception and visual awareness. That embraces the historic, the contemporary and the future; and signposts to potential further and higher education, career choices and opportunities within the visual arts, creative and cultural industries.

Providing a high quality Design and Technology education that will engage, inspire and challenge students, equipping them with the knowledge and skills to participate in, experiment with, invent and create their own Product Design outcomes.

- All students should have some understanding in:
- Drawing techniques for both 2 Dimensional as well as 3 Dimensional
 - A good understanding of basic hand tools skills in all domestic materials
 - Ability to produce CAD details that can be sent to CAM outputs
 - Research and design approaches to create a personal and developed final design
 - The ability to review and reflect on progress and outcomes, setting targets for future developments

Design

For students to explore a wide variety of work produced by artists and designers. Develop ideas that are informed by these studies and analyse these contextual sources.

Make





To refine and reflect upon work as it progresses. Selecting and experimenting with appropriate media, materials, techniques and processes.

Evaluate

To record ideas through first-hand observations, especially drawing including examples of line, colour, tone and form. Reflect on progress and identify areas to develop.

Technical knowledge

To present personal, imaginative and meaningful final outcomes. Make connections to media and artists explored in the project.

	Overall aim of Textiles at Blessed Robert Sutton all pupils from Year 7 to Year 11 will gain a coherent knowledge and understanding about diverse artworks, artists, media and materials, together with a deep understanding of the Arts enlightened by the SuttonWay .
	Subject will teach spiritual development by Art will teach spiritual development by pupils developing an appreciation of God's creation and an understanding of the spiritual connections to artwork. Pupils will understand the importance of Art in different religions and the Catholic faith. Pupils will learn to contribute to and engage as confident citizens and future professionals to the culture, creativity, economic success, leisure, material and emotional wellbeing of our society within both national and global contexts.
	Subject will teach social excellence through Art will teach social excellence through a range of teaching strategies that allow opportunities for pupils to work effectively as a community. Class discussions will develop pupils' abilities to work effectively as a team; communicating, respecting, listening and developing each other's ideas. Art provides an opportunity for and engagement in leisure pursuits that can yield lifelong benefits in health, wellbeing and life satisfaction.
	Subject will teach academic excellence by Art will teach academic excellence by enabling students to engage with and explore visual, tactile and other sensory experiences and how to recognise and communicate ideas and meanings. These opportunities enable them to work with traditional and new media, so that they develop confidence, competence, imagination and creativity. Through these opportunities they learn to appreciate and value images and artefacts across times and cultures, and to understand the contexts in which they were made. Experiences will enable students to learn how to reflect critically on their own and others' work.
Enrichment opportunities in this subject include: Curriculum challenges Art competitions within school and the community	

KS4 CGSE Design & Technology

' 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. Our GCSE allows students to study core technical and designing and making principles, including a broad range of design processes, materials techniques and equipment. They will also have the opportunity to study specialist technical principles in greater depth..'

This specification encourages students to:

- actively engage in the creative process of art, craft and design in order to develop as effective and independent learners, and as critical and reflective thinkers with enquiring minds
- develop creative, imaginative and intuitive capabilities when exploring and making images, artefacts and products
- become confident in taking risks and learn from experience when exploring and experimenting with ideas, processes, media, materials and techniques
- develop critical understanding through investigative, analytical, experimental, practical, technical and expressive skills
- develop and refine ideas and proposals, personal outcomes or solutions with increasing independence

Assessment

Students will be assessed through a personal learning checklist for each unit of work, grading their progress based on a RAG rating and a teacher digital tracker. A formal assessment of each unit will take place using the GCSE assessment objectives.

Exam: 50% of qualification: 100 marks

Section A – Core technical principles (20 marks)

A mixture of multiple choice and short answer questions assessing a breadth of technical knowledge and understanding.

Section B – Specialist technical principles (30 marks)

Several short answer questions (2–5 marks) and one extended response to assess a more in-depth knowledge of technical principles.

Section C – Designing and making principles (50 marks)

A mixture of short answer and extended response questions.

Non-examined Assessment (NEA): 50% qualification: 100 marks

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
- In the spirit of the iterative design process, the above should be awarded holistically where they take place and not in a linear manner
- Contextual challenges to be released annually by AQA on 1 June in the year prior to the submission of the NEA
- Students will produce a prototype and a portfolio of evidence
- Work will be marked by teachers and moderated by AQA

Our key stage 4 DT curriculum aims to ensure the following skills and knowledge are developed for them to achieve a GCSE DT

Our GCSE Design and Technology specification sets out the knowledge, understanding and skills required to undertake the iterative design process of exploring, creating and evaluating. The majority of the specification should be delivered through the practical application of this knowledge and understanding. Topics and themes have been grouped to help you teach the specification, but these are not intended as a route through the specification, you can teach the content in any order. The subject content has been split into three sections as follows:

Core technical principles

- new and emerging technologies
- energy generation and storage
- developments in new materials
- systems approach to designing
- mechanical devices
- materials and their working properties.

Specialist technical principle

- selection of materials or components
- forces and stresses
- ecological and social footprint
- sources and origins
- using and working with materials
- stock forms, types and sizes
- scales of production
- specialist techniques and processes
- surface treatments and finishes.

Designing and making principles

- investigation, primary and secondary data
- environmental, social and economic challenge
- the work of others
- design strategies
- communication of design ideas
- prototype development
- selection of materials and components
- tolerances
- material management
- specialist tools and equipment
- specialist techniques and processes

Assessment Objective 1,
Identify, investigate and outline design possibilities to address needs and wants.

Assessment Objective 2,
Design and make prototypes that are fit for purpose.

Assessment Objective 3
Analyse and evaluate:

- design decisions and outcomes, including for prototypes made by themselves and others
- wider issues in design and technology.

Assessment Objective 4, Demonstrate and apply knowledge and understanding of:

- technical principles
- designing and making principles.