

How the DT curriculum/dept. addresses the

Whole school Curriculum Intent

Our aim is to provide an ambitious and relevant education for all our students so that we are 'Shaping Exceptional Futures' and are living our principles. We will do this by ensuring our curriculum:

Whole School Curriculum Intent	How the ... department addresses that intent
<ul style="list-style-type: none"> is centred around The National Curriculum and is at least as ambitious. 	<p>We use a mix of both project and unit based work, ensuring the whole DT national curriculum is embedded in the tasks undertaken. Alongside this, it is our intention to develop well rounded students who are equipped with skills and knowledge that will benefit and improve their lives away from the study of DT. Each project begins with a realistic project brief and students follow a process of designing (including research and skill development), making (including the learning and development of skills) and evaluation , as set out in the three categories stipulated in the national curriculum document for DT. The units we use focus on particular areas that develop transferable skills and knowledge that as well as being on the national curriculum, require more of a focussed practical approach (e.g. drawing and systems and control) and develop skills students can utilise in everyday life outside of the study of DT.</p>
<ul style="list-style-type: none"> identifies powerful knowledge and the key knowledge students should have in their "toolkit". 	<p>See Long Term Plans and Medium Term Plans</p>
<ul style="list-style-type: none"> teaches students to be effective communicators, literate and numerate. 	<p>Students are set client briefs for all project based learning that require them to interpret the brief, perform their own research, and formulate and develop their own plans and solutions. As part of this process, students will communicate these plans and solutions in written, 2D, 3D and verbal form. Students will analyse and explain existing products, explain and in some cases verbally present their own ideas and development through</p>

	<p>annotation as well as evaluate them both as they progress and at the end of the project. All projects require an extent of explanations and reasoning alongside use of number for measurement, weighing, costing etc</p>
<ul style="list-style-type: none"> • equips students with the skills for the next stage in their education or employment. 	<p>Across the curriculum, projects and units of study require students to develop independent working skills, work alongside and in partnership with others, study and respond to the needs of others (including both responses to set design briefs and the study and interpretation of customers and clients physical, emotional and practical needs and wishes). This is variously done through both annotation of their creative responses, and physical and verbal presentation. During yr9, we require all students to undertake the study and identification of a variety of career pathways that will signpost them towards the next stage of education and employment if pursuing a career relating to DT.</p>
<ul style="list-style-type: none"> • teaches the knowledge and skills to enable students to be active and engaged participants in society. 	<p>Students are taught how to respond to everyday life problems, analyse products that are already in society and explain how well they work, they study the environment and all projects have an environmental aspect to their teaching, all projects are based on real life scenarios with any possible solutions requiring a focus on the needs and wants of real people and their lives (including - aesthetic, physical, medical, nutritional). All projects require students to engage in empathy e.g Specialist diets where students learn about and design specialist diet plans for people with a variety of different dietary requirements (Diabetes, Vegan, Coeliac, High blood pressure, Endurance sport, Power sport). We also engage in discussion around eating disorders during this project.</p> <p>We study (in the practical sense through making) the environment and how we can reuse/recycle materials to produce products and items people will want, therefore giving an awareness of important issues. We study careers and employment opportunities relevant to our local area during year 9 specifically, and at a time students are choosing options</p>
<ul style="list-style-type: none"> • offers a wide range of subjects and provides quality time for students to participate in a wide range of 	<p>Students study a variety of projects with each having a different focus.</p> <p>Year 7</p> <ul style="list-style-type: none"> • FOOD - Product design (a food and packaging project),

extracurricular opportunities, so as to enrich their personal development and broaden the quality of education.

- DESIGN - Textiles and the environment are studied via our Environmental horrors unit, where students will design and make a stuffed toy from waste materials, while learning how to sew by hand/machine. Systems / control/electronics is also covered through the design of a lighting circuit for the toy's eyes.
- CONSTRUCTION - (1) Bridges unit where we study forces, building and structural types. We also study (2) Recycling/environment via our Represent Jewellery unit through the making of personal jewellery made from recycled drinks bottles we melt and reform in school

Year 8

- FOOD - Specialist diet unit - Diet and nutrition focus with students designing diets and making food for people requiring specialist diets (Diabetics, coeliacs, endurance athletes etc) as well as discussion around eating disorders. This builds on the basic knowledge of nutrition and use of the kitchen built in yr7 Transition.
- DESIGN -. (1) Drawing unit develops drawing and visual presentation skills both on paper and using CAD
(2) Creative Entrepreneur unit deals with creativity and how to formulate and present ideas through free thinking, and utilises / develops skills acquired in yr7 (transition / Environmental horrors) and the previous drawing unit.
- CONSTRUCTION - Kiosk unit - Architecture/Construction project, that has students designing and modelling commercial buildings based on a client of their choice from a set list. This develops learning around structures and forces from the Bridge unit in year 7, Drawing skills developed across yr7 and in the previous drawing unit Use of CAD is also a major part of the work. Systems and control / electronics are developed from yr7's Environmental horrors unit with circuits designed and tested that enable a flashing/moving sign and a controllable eclectic shutter for the kiosk.

Year 9 Employment and careers

- FOOD - Chef - Students undertake a term long focussed unit studying hygiene, nutrition, aspects of the catering industry which is

central to the local economy and one of the biggest employers in the city region. As well as developing practical cooking skills they can use for life and building on knowledge developed in yr7 Transition and yr8 Specialist diets units.

- DESIGN - Graphic designer - Students study the work of graphic designers and develop their photoshop and drawing skills built during year 7 (transition and Environmental horrors) and 8 (Drawing unit, Creative entrepreneur, Kiosk unit). They learn how to work with industry standard software and learn how designers use their skills to encourage people to make certain choices. Again developing a level of knowledge that will allow students to be critical thinkers alongside developing practical transferable skills
- CONSTRUCTION - Students focus on hand and machine tools and build a wooden toy from scratch. This develops their measuring skills, use of tools that will likely be the tools they would use in everyday life to perform DIY tasks as they get older, and builds on the knowledge (practical, systems and control/electronics) developed in yr7 (transition, Bridges) and yr8 (Kiosk unit) Systems and control / electronic knowledge is further developed and built upon from yr 7 and 8. In this unit, students program circuits to respond to external inputs such as light and temperature. Students will learn how to program flashing lights, sirens, fans that respond to temperature etc.

Extra curricular

- Food club - Every Thursday, open to all students across all years. Students cook a vast repertoire of dishes, covering costing, timing, nutrition, and techniques over and above what is achievable at KS3,
- DT/Craft club - Every Tuesday, open to all students across all years. Students create an array of resistant material based products, using tools and materials that they may not get a chance to use until KS4. This is done through the reuse and upcycling of found materials as often as possible.
- Saturday morning mechanic sessions - Our DT technician runs a voluntary Saturday morning mechanic session where students are stripping a car and a motorbike with the intention of repairing, renovating and

	<p>rebuilding both.</p> <ul style="list-style-type: none"> ● We also enhance our curriculum further, through site visits for construction students, entering external design competitions with our Graphic design students (one of our year 10 students recently reached the final of a national competition where working on his own, he had to compete against and beat groups of students from 6th form colleges. He alongside another student, received a weeks work experience with international branding and design agency Dentsu) ● Enthuse project - We have identified our yr9 female cohort as a focus for careers in engineering and construction and are working with various organisations and companies such as WSP engineering, Anwyl construction and STEM to provide extra curricular visits, talks and experiences designed to encourage students into careers in these industries. ● Food champions - We have a group of 12 KS3 students working every week to identify and improve health and wellbeing of students across the school around food and diet. They are working with the department and with our catering providers, and meet every week to discuss and develop their approach and focus in trying to affect whole school change in this area.
<ul style="list-style-type: none"> ● teaches and encourages students to have high aspirations and be excited about learning. 	<p>Teachers have high aspirations for positive achievement and behaviour for learning. Projects are based on real life scenarios and situations and students learn how these issues are addressed by current designers/chefs and taught that they are capable of doing the same work themselves. Students undertake a study during yr9 of local successful people within the world of DT to show they too can achieve success in these areas if they wish to pursue a career in the area. During these units in yr9, students also study and identify pathways they can take through school, college, university/apprenticeships to achieve these careers. DT is all around them and the issues it solves are being solved by people from the same area and background as themselves. Students are encouraged to work hard, take pride and complete work to the best of their ability, revisiting work that</p>

	can be improved as and when appropriate and as part of a planned process to ensure students know that only their best is good enough.
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Curriculum Intent statement

5 Key bullet points that summarise your Curriculum Intent and that Inspectors will expect to see in your classroom/delivery

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| <ul style="list-style-type: none">• Is based upon and mapped against the national curriculum covering all entitlements across ks3 |
| <ul style="list-style-type: none">• Engages their curiosity and develop their enterprise and problem solving skills, |
| <ul style="list-style-type: none">• Provide learning through topics, units and projects that are relevant to both their own, and peers' lives, and will develop highly transferable practical skills and knowledge that will be useful whether they continue to study DT related subjects or not. |
| <ul style="list-style-type: none">• Provide a grounding in nutrition and the ability to research, analyse and provide solutions to both their own and others needs, develop their ability to plan and cook cheap and simple (but nutritious) meals for themselves and their family. |
| <ul style="list-style-type: none">• Help our learners to become well rounded individuals, who leave our school better prepared for their lives ahead. |