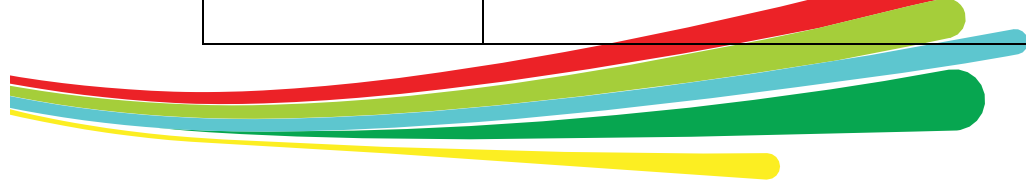




Technology – curriculum information

Year 7	
Learning outcomes	<p>PRODUCT DESIGN - Students will learn a broad range of skills to prepare them for KS4. They will complete three booklets throughout the year; a drawing booklet; a making skills booklet and a technical graphic skills booklet.</p> <p>Oblique, isometric and two-point perspective are just some drawing techniques that they will learn. They will then draw a design idea using a recognised drawing technique, model in 3D and present. Students will also learn many different manufacturing skills including vacuum forming, laser cutting, vinyl cutting and die cutting. They will also learn about pop up design and packaging. Students will also learn how to use a vacuum former to create chocolate moulds and take part in a batch production of a 'chocolate factory'. Students will also complete design tasks. They will learn to understand a design brief based on a graphic product i.e. a poster, packaging or display. They will then research, design and make.</p>
Topics taught	<p>Drawing:</p> <ul style="list-style-type: none"> • Colour theory • Shading/ rendering • Thick and thin lines • Free hand sketching • Isometric • Oblique • One and two-point perspective • Interpreting a design brief and designing <p>Making:</p> <ul style="list-style-type: none"> • Line bending • Packaging • Die cutting • Vinyl cutting • Laser cutting • Vacuum forming • Pop up cards • Modelling
Year 8	
Learning outcomes	<p>PRODUCT DESIGN - Students will learn a broad range of skills to prepare them for KS4. They will complete one booklet throughout the year filled with tasks to help them learn lots of different manufacturing methods including laser cutting, vinyl cutting and die cutting. They will also learn about pop up design and packaging. Students will also learn how to use a vacuum former to create chocolate moulds and take part in a batch production of a 'chocolate factory' as well as design and produce an exciting promotional material for a product.</p> <p>FOOD - Students will be asked to investigate, trial and make a selection of dishes following a design brief. Students will be expected to use a range of savoury ingredients including seasonal and non-convenience products. Students will be expected to demonstrate competence when using equipment.</p>



<p>Topics taught</p>	<p>PRODUCT DESIGN</p> <ul style="list-style-type: none"> • Colour theory • Typography • Embossing • Packaging • Line bending • Packaging • Die cutting • Vinyl cutting • Laser cutting • Vacuum forming • Pop up cards • Modelling • Designing a promotional item <p>FOOD</p> <ul style="list-style-type: none"> <input type="checkbox"/> Investigation <input type="checkbox"/> Design processes <input type="checkbox"/> Trialing <input type="checkbox"/> Making and evaluation
<p>Year 9</p>	
<p>Learning outcomes</p>	<p>FOOD - Students will be taught a range of practical, food science and theoretical lessons. Students will understand the processes and understanding behind the functional properties of food ingredients. Students will look at the components that create a balanced and nutritional meal.</p> <p>SMART PRODUCT DESIGN AND MANUFACTURE- Student will undertake various mock briefs set by the exam board and will complete 3 units which consist of researching, designing, modelling, electronic research and creating a final electronic prototype. This will prepare them for when they start the course in year 10.</p>
<p>Topics taught</p>	<p>FOOD</p> <ul style="list-style-type: none"> <input type="checkbox"/> Knife skills <input type="checkbox"/> Prepare combine and shape <input type="checkbox"/> Tenderise and marinate <input type="checkbox"/> Select and adjust a cooking process <input type="checkbox"/> Water based methods using the hob <input type="checkbox"/> Dry heat and fat based methods using the hob <p>PRODUCT DESIGN</p> <ul style="list-style-type: none"> • Drawing skills • Sustainability • Researching • Commercial manufacturing processes • Materials and components • Tools and equipment • ICT, CAD and CAM • Systems and processes • Electronics • Modelling

Year 10

Learning outcomes	<p>FOOD - Students will be expected to select and investigate a range of food related topics. Students will use research skills and tasks to answer the question outlined in the task. Students will prepare and cook a number of dishes relating to the tasks and decide on a suitable menu from these dishes.</p> <p>SMART PRODUCT DESIGN AND MANUFACTURE- Student will begin their coursework which is worth a total of 70% of their final grade. Students will create a portfolio of evidence covering three units which consist of researching, designing, modelling, electronic research and creating a final electronic prototype.</p>
Topics taught	<p>FOOD</p> <ul style="list-style-type: none"><input type="checkbox"/> Research skills<input type="checkbox"/> Food preparation and cookery skills<input type="checkbox"/> Budget and managing finance.<input type="checkbox"/> Nutritional analysis <p>PRODUCT DESIGN</p> <ul style="list-style-type: none">• Drawing skills• Sustainability• Researching• Commercial manufacturing processes• Materials and components• Tools and equipment• ICT, CAD and CAM• Systems and processes• Electronics• Modelling

Year 11

Learning outcomes	<p>FOOD - Students will complete a selection of past papers and revision techniques. and make using different tools and equipment as well as relying heavily on the use CAD/CAM. Students will create a 20-page portfolio showing this journey as well as make a final product.</p> <p>SMART PRODUCT DESIGN AND MANUFACTURE – Students will use this year to complete their portfolio and revise for the exam which is 30% of their final grade.</p>
Topics taught	<p>FOOD</p> <ul style="list-style-type: none"><input type="checkbox"/> The industry<input type="checkbox"/> Job roles and responsibilities<input type="checkbox"/> Hygiene and safety<input type="checkbox"/> Methods of cookery and preparation techniques<input type="checkbox"/> The environment<input type="checkbox"/> Legislation<input type="checkbox"/> First aid<input type="checkbox"/> Terminology<input type="checkbox"/> Food commodities and seasons<input type="checkbox"/> Menu planning<input type="checkbox"/> Costing and portion control<input type="checkbox"/> Safe use of specialist equipment<input type="checkbox"/> Communication and record keeping<input type="checkbox"/> Food packaging <p>PRODUCT DESIGN</p> <ul style="list-style-type: none">• Product analysis• Sustainability and legislative issues• Designers• Commercial manufacturing processes• Materials and components• Tools and equipment• Making• ICT, CAD and CAM• Systems and processes.• Electronics