DESIGN TECHNOLOGY

What will you know and understand from your study of Design and Technology?

Across the curriculum the aims of the Design and Technology curriculum is to include the development of capability within the subject, along with broad general skills. Below details the skills and knowledge that will be gained across the five years and this list whilst not exhaustive also includes skills and knowledge gained in key stage 3.

What skills will the study of Design and Technology teach you?

Design and Technology use knowledge, skills and understanding from within the subject itself and also a wide range of other sources, especially but not exclusively science and mathematics. Design and Technology will teach you to:

- Develop resilience by not being afraid of challenges when solving problems, but to break them down and keep trying.
- Be creative in developing solutions to real world problems.
- Use modelling and annotated sketches to develop and communicate ideas.
- How to act responsibly within a practical environment thinking of the safety of yourself and others.
- Identify how to competently use a range of practical techniques across a range of disciplines.
- Apply and use CAD/CAM equipment to design and manufacture a range of products and components considering scale of production and precision.
- Work independently and part of a team to solve complex problems.
- Construct reasoned arguments to ethical, social and moral problems that have arisen due to technology and communicate these in an
 effective way.
- Identify links between different materials and contextual references.
- Test, evaluate and refine their ideas and products against a specification, taking into account the views of intended users and other interested groups.





- Demonstrate their understanding that all design and technological activity takes place in contexts that influence the outcomes of a final design concept
- Develop realistic design ideas that come through exploring design opportunities and users' needs, wants and values
- Use imagination, experimentation and combine ideas when designing
- Develop the skills to analysis and enhance their own ideas while designing and manufacturing
- Communicate their design ideas and decisions using different methods and media.
- Develop skills, including the planning and organisation of time and resources when managing their own project work
- Develop a broad knowledge of materials, components and technologies and practical skills to develop high-quality, innovative and functional prototypes
- Be open to explore and take design risks in order to stretch the development of design ideas
- Consider the costs, commercial viability and marketing of products
- Use key design and technology terminology, including those related to: designing, innovation and communication; materials and technologies; making, manufacture and production; analysing, values and ethics.

What skills will the study of Hospitality and Catering teach you?

Hospitality and Catering use knowledge, skills and understanding from within the subject itself and also a wide range of other sources, especially but not exclusively science and mathematics. Hospitality and Catering will teach you to:

- Understand and apply the principles of nutrition and health.
- Cook a repertoire of predominantly savoury dishes so that they are able to feed themselves and others a healthy and varied diet.
- Become competent in a range of cooking techniques (for example, selecting and preparing ingredients: using utensils and electrical equipment, applying heat in different ways: using awareness of taste, texture and smell to decide how to season dishes and combine ingredients, adapting and using their recipes).
- Understand the source, seasonality and characteristics of a broad range of ingredients.
- Menu planning
- The skills and techniques of preparation, cooking and presentation of dishes
- Evaluating cooking skills
- How cooking methods can impact on nutritional value
- Factors affecting menu planning
- How to plan production
- Food safety practices
- Reviewing of dishes
- Reviewing own performance

What will you know and understand from your study of Design and Technology?

- How to classify materials including smart materials and discuss their physical properties.
- How to use simple electronic circuits incorporating inputs and outputs.
- How to manufacture products with reference to their materials physical properties.
- Students will learn to use and adjust equipment and machinery dependent on tasks.
- Use learning from science and mathematics to help design and manufacture components and products.
- Students will learn to consider the influence of a range of lifestyle factors and consumer choices when designing and analysing products.
- Students will know and understand additional factors to consider such as ergonomics, anthropometrics or dietary needs.
- How to use a variety of approaches, for example biomimicry and user-centred design to generate creative ideas and avoid stereotypical responses.
- Students will be able to evaluate their work against an increasing range of designers, engineers, chefs, technologists and manufacturers and be able to relate their product to their own designing and making.
- Students will be able to evaluate products through disassembly to determine how they are constructed and function and consider the life cycle analysis.
- How to competently use a range of cooking techniques for example, selecting and preparing ingredients; using utensils and electrical equipment.

What will you know and understand from your study of Hospitality and Catering?

- Hospitality and catering providers
- Working in the hospitality and catering industry
- Working conditions in the hospitality and catering industry
- Contributing factors to the success of hospitality and catering provision
- The operation of the front and back of house
- Customer requirements in hospitality and catering
- Hospitality and catering provision to meet specific requirements
- Health and safety in hospitality and catering provision
- Food Safety
- Food related causes of ill health
- Symptoms and signs of food-induced ill health

- Preventative control measures of food-induced ill health
- The Environmental Health Officer (EHO)

In the core knowledge section of the GCSE course you will learn about the following topics:

- The impact of new and emerging technologies and how these can affect people's lives and the environment
- How to evaluate new and emerging technologies that can inform design decisions
- Different forms of energy generation, storage and knowing how to choose the appropriate source
- Smart and composite materials, and technical textiles
- Mechanical devices used to produce movement
- Electronic systems
- Programmable components
- Categorisation of ferrous and non-ferrous metals
- Papers and boards
- Thermoforming and thermosetting polymers
- The categorisation of fibres, and textiles
- Natural and manufactured timbers
- All design and technological practice takes place within contexts which inform outcomes
- Challenges that influence the processes of design and making
- Investigate and analyse the work of professionals and companies to inform design
- Using different design strategies
- Using communication techniques to present design ideas

In the specialist material area of Timbers, you will learn about the following topics:

- Design contexts
- Sources of timber
- Selection of timber
- Strengthening timber
- Stock forms and sizes
- Manufacturing processes
- Equipment and processes used to make prototypes
- Surface treatments and finishes for functional and aesthetic purposes

In unit 1 - The hospitality and catering industry section of the course you will learn about the following topics:

- Commercial (residential)
- Commercial (non-residential)
- Non-commercial (residential)
- Non-commercial (non-residential)
- Food service
- Residential service
- Hotel and guest house standards (star ratings), restaurant standards, AA Rosette Award, Good Food Guide, Michelin stars.
- Working in the hospitality and catering industry
- Personal attributes
- Qualifications and experience
- Working conditions in the hospitality and catering industry
- Contributing factors to the success of hospitality and catering provision
- The operation of the front and back of house
- Customer requirements in hospitality and catering
- Hospitality and catering provision to meet specific requirements
- Health and safety in hospitality and catering provision
- Food safety
- Food related causes of ill health
- Symptoms and signs of food-induced ill health
- Preventative control measures of food-induced ill health
- The Environmental Health Officer (EHO)

In unit 2 - Hospitality and catering in action section of the course you will learn about the following topics:

- Understanding the importance of nutrition
- How cooking methods can impact on nutritional value
- Factors affecting menu planning
- How to plan production
- How to prepare and make dishes
- Presentation techniques

- Food safety practices
- Reviewing of dishes
- Reviewing own performance

How does your study of Design and Technology support your study in other subjects?

Maths skills are fundamental to design and technology. These skills will be embedded in the examination for this qualification. Science skills, knowledge and understanding underpin the theory and practice of design and technology. These skills will be embedded in the examination for this qualification. In addition to maths and science, the GCSE in Design and Technology embeds knowledge, techniques and practises from a wide range of subjects, including art and design, business, computer science and geography. As part of the teaching of the qualification, students gain an awareness and appreciation of the ways in which these subject areas relate to and inform decisions in design.

How does your study of Hospitality and Catering support your study in other subjects?

In addition to maths and science, the Hospitality and Catering course embeds knowledge, techniques and practises from a wide range of subjects, including art and design, languages, business and geography. As part of the teaching of the qualification, students gain an awareness and appreciation of the ways in which these subject areas relate to and inform decisions in Hospitality and Catering.

How can students deepen their understanding of Design and Technology?

In KS4, students may have the great opportunity of visiting relevant, interesting and inspiring organisations such as the Jaguar/Land Rover manufacturing plant in Solihull, where they get to see vehicles being built by robotics. This enables students to see how products are manufactured in industry. In addition, any opportunities for students to have meaningful employer engagement opportunities are critical. In KS4, Students can also strengthen their subject knowledge and practical skills by attending enrichment sessions that run throughout the course. There are great websites that can also further their knowledge within the subject, these are BBC Bitesize and Technology Student.

How can students deepen their understanding of Hospitality and Catering?

In KS4, students may have the great opportunity of visiting relevant, interesting and inspiring organisations such as the Spring Board Hospitality takeover event at Clever and Wake hotel and restaurant in Nottingham, where they get to see a wide range of hospitality and catering careers that are available within the industry. They get the opportunity to work behind the cocktail bar and set up tables for fine dining. They also get to see a Master Chef winner 2018 chef showing their culinary skills within a range of different dishes they prepare and serve at this high end restaurant.

How are you assessed in Design and Technology?

There are 6 assessment points each year that we term Praising Stars©. We assess how students at their current stage of study are on track to reach their end of stage targets which are formulated on aspirational expectation from their Key Stage 2 starting points. For younger years we base our assessment on our subject mapping of the age-related expectations across the curriculum, assessing students' performance at their current stage of study against expectation. In GCSE students are assessed using the following assessment objectives (AO 1-4), which form the basis of assessment at GCSE. At GCSE we make informed predictions from our holistic assessments based on our subject mapping of expectation across the Edexcel GCSE (9-1) Design and Technology curriculum, their progress against the key assessment objectives and their aspirational GCSE targets. These are also the basis for any appropriate support and intervention.

Key Assessment Objectives for Design and Technology GCSE:

AO1 – 10%

• Identify, investigate and outline design possibilities to address needs and wants

AO2 - 30%

• Design and make prototypes that are for purpose

AO3 - 20% - Analyse and evaluate -

- Design decisions and outcomes, including for prototypes made by themselves and other
- Wider issues in design and technology

AO4 – 40% - Demonstrate and apply knowledge and understanding of:

- Technical principles
- Designing and making principles

How are you assessed in Hospitality and Catering?

There are 6 assessment points each year that we term Praising Stars©. We assess how students at their current stage of study are on track to reach their end of stage targets which are formulated on aspirational expectation from their Key Stage 2 starting points. For younger years we base our assessment on our subject mapping of the age-related expectations across the curriculum, assessing students' performance at their current stage of study against expectation. In vocational awards students are assessed using the following assessment objectives (AO 1-3), which form the basis of assessment at vocational awards. At vocational awards we make informed predictions from our holistic assessments based on our subject mapping of expectation across the Eduqas level 1/2 vocational award in Hospitality and Catering curriculum, their progress against the key assessment objectives and their aspirational vocational award targets. These are also the basis for any appropriate support and intervention.

Key Assessment Objectives for Hospitality and Catering Vocational Award :

AO1 – 25%

• Demonstrate knowledge and understanding from across the specification

AO2 - 50%

• Apply skills (including practical skills), knowledge and understanding in a variety of contexts and in planning and carrying out investigations and tasks

AO3 – 25%

• Analyse and evaluate information, making reasoned judgements and presenting conclusions

How can Design and Technology support your future?

Of course we offer the study of Key Stage 3 and Key Stage 4 Design and Technology and we encourage your continued study in this fantastic subject. Yet we know that choice and personal interest are important aspects of worthy study. Whether you have continued your study of Design and Technology into GCSE or not you will have gained access to this enriching subject and its study will have taught you to think differently and deeply.

The very fact that Design and Technology develops such a wide range of transferable skills such as problem solving, organisation, communication, creativity, business management, analytics, and discipline, these transferable skills will help your future application be they for colleges, universities, apprenticeships or employment.

There are a variety of courses at a range of universities where you can continue your study in this area. For example, some popular courses include; Design and Technology, Product Design and Technology, Product Design and Craft, Fashion Design and Technology, as a single honours or a joint honours subject studied alongside other disciplines.

Design and Technology fulfil a wide range of careers;

- CAD CAM Software Engineer
- Mechanic
- Designer
- Carpenter
- Teaching
- Machine technician
- Civil Engineering
- Architecture
- Plumbing
- Robotic technician
- Building trade
- Health and safety/environmental supervisor
- Model maker
- Interior designer
- Quality control/assurance technician
- Silversmith

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Hospitality and Catering can fulfil a wide range of careers;

- Advanced Bakers
- Butcher
- Dietitian
- Fishmonger
- Food Technologist
- Chef De Parties
- Supply Chain Practitioners
- Advanced Dairy Technicians
- Hospitality Team Member
- Senior Production Chef
- Food and Drink Engineer
- Commis Chef
- Production Manager
- Research Scientist
- Event Manager
- Nutritional Therapist
- Quality Manager
- Scientific Laboratory
- Technician
- Hotel Manager

Curriculum Planning

It is recognised schools are teaching a wide range of Key Stage 4 specifications, the themes and subject content have been identified from the following sources :

- The Design and Technology programmes of study for Key Stage 3
- Edexcel GCSE subject content for Design and Technology

• EDUQAS Level 1/2 in Hospitality and Catering.

Curriculum content only covers core knowledge common to all Key Stage 4 specifications. It is expected schools will include additional content from their chosen specification into their planning

DESIGN AND TECHNOLOGY CURRICULUM PROGRESSION OVERVIEW –

The Design and Technology course at Key Stage 3, provides students with the necessary skills and knowledge to access the various routes available at Key Stage 4. It also provides an environment for students to learn through the practical application, allowing for creative solutions to real, complex problems. Fundamentally, the early years key stage 3 projects allow students to access and refine the skills needed to study at Key Stage 4, which is taught over a two year period. All lessons are to be taught by specialist teachers, but this can change depending on how the timetable has been structured.

Assessment

Assessment Objectives Design and Technology

	Design	Make	Evaluate	Technical Knowledge
KS4	Understand that all design and technological practice takes place within contexts which inform outcomes Investigate and analyse the work of past and present professionals and companies in the area of design and technology in order to help inform their own ideas Use different design strategies, such as collaboration, user-centred design and	Develop and apply in-depth knowledge by selecting and working with appropriate materials and components in order to produce a prototype Apply in depth knowledge using appropriate and accurate marking out methods including: measuring and use of reference points, lines and surfaces; use templates, jigs and/or patterns; work within tolerances; understand efficient cutting and how to minimise waste. Follow procedures for safety and write risk assessments.	Test, evaluate and refine their ideas and products against the specification taking into account the views of intended users and other interested groups. Critically evaluate new and emerging technologies to inform design decisions; considering contemporary and potential future scenarios from different perspectives, such as ethics and the environment.	Understand the impact of new and emerging technologies on industry, enterprise, sustainability, people, culture, society and the environment, production techniques and systems. Know how energy is generated and stored in order to choose and use appropriate sources to make products and to power systems.

	systems thinking, to generate initial ideas and avoid design fixation. Design and develop at least one prototype that responds to needs and/or wants and is fit for purpose, demonstrating functionality, aesthetics, marketability and consideration of innovation Consider additional factors such as ergonomics and anthropometrics.	Use specialist techniques and processes to shape, fabricate, construct and assemble a high quality prototype, including techniques such as wastage, addition, deforming and reforming, as appropriate to the materials and/or components being used Use appropriate surface treatments and finishes for functional and aesthetic purposes	Evaluate an increasing range of designers, engineers, technologists and manufacturers and be able to relate their products to their own designing and making.	Understand developments in modern and smart materials, composite materials and technical textiles. Understand how electronic systems provide functionality to products and processes, including sensors and control devices to respond to a variety of inputs, and devices to produce a range of outputs Understand how the use of programmable components are used to embed functionality into products in order to enhance and customise their operation Understand the functions of mechanical devices, to produce different sorts of movement, changing the magnitude and direction of forces: Know how to make adjustments to the settings of equipment and machinery such as sewing machines and drilling machines. Use learning from science and maths to help design and make products that work.
Y9	Work confidently within a range of relevant domestic, local and industrial contexts, such as the home, health, leisure, culture, engineering, manufacture etc.	Produce costings spreadsheets for products they design and make. Match and select suitable materials and their fitness for purpose.	Evaluate the concept of circular economy approaches in relation to product development and consumption.	How to construct and use simple and compound gear trains to drive mechanical systems from a high revving motor.
	Consider the influence of a range of lifestyle and consumer choices when designing products.	Adapt their method of manufacture to changing circumstances.	Test, evaluate and refine their ideas and products against the specification taking into account the views of intended users and other interested	How to make adjustments to the settings of equipment and machinery such as sewing machines and drilling
	Take creative risks when making design decisions.	Recognise when it is necessary to develop a new skill or technique.	groups.	machines.

	Analyse where human values may conflict and compromise has to be achieved. Decide which design criteria clash and determine which should take priority. Consider additional factors such as ergonomics and anthropometrics.	Follow procedures for safety and understand the process of risk assessments. Make independent choices when selecting and using a broad range of manufacturing techniques including hand craft skills and machinery to manufacture products precisely. Apply a range of finishing techniques to a broad range of materials.	Evaluate new and emerging technologies. Evaluate an increasing range of designers, engineers, technologists and manufacturers and be able to relate their products to their own designing and making.	Use learning from science and maths to help design and make products that work. Understand the properties of materials, including smart materials, and how they can be used to advantage.
Y8	Use research and begin to exploration, such as the study of different cultures, to identify and begin to understand user needs.	Select from a wider, more complex range of materials and components, taking into account their properties.	Select appropriate methods to evaluate their products in use and modify them to improve performance.	How to apply computing and use electronics to embed intelligence in products that respond to inputs.
	To identify and solve issues within a design development task.	Make simple use of planning tools for instance Gantt charts, communicate their plans clearly so that others can implement them.	Produce short reports making suggestions for improvements.	How to control outputs such as actuators and motors.
	Develop specifications to inform the design of innovative, functional, appealing products that respond to needs in a variety of uses. Use a variety of influences, to generate creative ideas and avoid stereotypical responses.	others can implement them.EnUse a broad range of material joining techniques including stitching, mechanical fastenings, heat processes and adhesives.EnMake independent choices when selecting and using CAD/CAM to manufacture products/components and apply surface finishing techniques to increase the standard of quality.EnFollow procedures for safety and understand the process of risk assessments.TeMake independent choices when selecting and using a broad range of manufacturing techniques including hand craft skills and machinery to manufacture products precisely.TeApply a range of finishing techniques to a broad range of materials.En	Evaluate products that they are less familiar with using themselves. Evaluate products considering life cycle analysis. Evaluate how products can be developed considering the concept of	How to use software and hardware to develop programmes and transfer these programmable components for example, microcontrollers. How to make use of microcontrollers in products they design and manufacture themselves. How to make adjustments to the
	Use 2D and 3D to model and develop their ideas.		cradle to grave. Test, evaluate and refine their ideas and products against the specification taking into account the views of intended users and other interested groups.	settings of equipment and machinery such as sewing machines and drilling machines.
	Use CAD software to validate their designs in advance of manufacture.			Use learning from science and maths to help design and make products that work.
	using annotated sketches, detailed plans, 3-D and mathematical modelling, oral and digital presentations and computer-based tools.		Evaluate new and emerging technologies.	Understand the properties of materials, including smart materials, and how they can be used to advantage.
	Consider additional factors such as ergonomics and anthropometrics.		Evaluate an increasing range of designers, engineers, technologists and manufacturers and be able to	

			relate their products to their own designing and making.	
Y7	Use research, such as the study of different cultures, to identify user needs. Be able to outline a simple specification	Produce ordered sequences and schedules for manufacturing products they design detailing resources required.	Evaluate their products against their original specification and identify ways to improve them.	How to classify materials by structure e.g. hard words, soft wood, ferrous and non-ferrous, thermoplastics and thermosetting plastics.
	to inform design ideas and guide their thinking.	Make use of specialist equipment to mark out materials.	Actively involve others in the testing of their products.	Consider the physical properties of materials. E.g. brittleness malleability.
	Use 2D packages to model their ideas. Produce models of their ideas using CAM to test ideas	Use a broad range of material joining techniques including stitching, mechanical fastenings, heat processes and adhesives.	Evaluate products through disassembly to determine how they are constructed and function.	How to use simple electronic circuits incorporating inputs and outputs.
	Be able to independently generate	Select and use CAD/CAM to manufacture products/components and apply surface finishing techniques to increase the standard of guality.	Evaluate the positive and negative impact that products can have in the wider world.	Consider textile fibre sources e.g. natural and synthetic.
	features relating to brief/specification.	Investigate and develop skills in modifying the appearance of materials including textiles and other manufactured materials.	Test, evaluate and refine their ideas and products against the specification taking into account the views of	How materials can be cast in moulds.
	Consider additional factors such as ergonomics and anthropometrics.	Follow procedures for safety and understand the process of risk assessments.	intended users and other interested groups.	Make use of sensors to detect heat, light etc such as thermistors and light dependent resistors.
		Select and use a broad range of manufacturing techniques including hand craft skills and machinery to manufacture products precisely. Apply a range of finishing techniques to a broad range of materials.	Evaluate new and emerging technologies. Evaluate an increasing range of designers, engineers, technologists and manufacturers and be able to relate their products to their own designing and making.	How to make adjustments to the settings of equipment and machinery such as sewing machines and drilling machines. Use learning from science and maths to help design and make products that work. Understand the properties of materials, including smart materials, and how they can be used to advantage.

Assessment Objectives Cooking and Nutrition

Key Stage 3 Programmes of Study for cooking and nutrition Key messages, advice and explanatory notes (1-8) for schools	AO1: Understand health and safety relating to food and cookery (Explanatory note 2)	AO2: Understand and apply the principles of nutrition and health (Explanatory notes 1 and4)	AO3: Understand the source, seasonality and characteristics of a broad range of ingredients (Explanatory notes 5,7and8)	AO4: Understand factors relating to food choice (so that they are able to feed themselves and others a healthy and varied diet). (Explanatory note 3 and6)	A05: Develop practical cooking skills (so that they become competent in a range of cooking techniques and able to cook a repertoire of predominantly savoury dishes) (Explanatory note 2)
KS4	Be able to explain food safety legislation and the role of the Environmental Health Officer. Know and understand the HACCP system and the purpose for food businesses.	Be able to analyse and evaluate diets and make recommendations for improving nutritional profile. Be able to calculate energy and nutritional content of recipes Be able to explain health risks of an unbalanced diet and give sound nutritional advice on how to improve it.	Know and understand how cooking methods affect the nutritional content of dishes Know and understand why and how food is cooked and the chemical and physical changes that occur.	Know and understand how medical conditions determine food choices: Cardiovascular, obesity, bone health, dental health, type 2 diabetes, iron deficiency anaemia bowel disorders, allergies and intolerances.	Learners are able to organise their time, dovetailing planning to produce more than one complex dish in the time available. They are able to use equipment, including electrical equipment, with confidence. They are able to use presentation and food styling techniques independently. Be able to accurately portion foods.
Year 9	Know and understand the factors that affect bacterial growth and their control (including temperatures) Know and understand the main causes of food contamination and the steps that need to be taken to prevent food poisoning.	Know and understand the causes and effects of an unbalanced diet and understand how to amend and develop a recipe to suit nutritional needs of individuals.	Know and understand how processing affects the physical, sensory and nutritional properties of foods.	Know and understand how economic factors determine food choices and nutritional health: High and low budgets effects of food poverty Know how to make informed choices about food from packaging and labelling.	Learners continue to develop their food preparation and cooking skills making complex dishes that meet the needs of users They are able to follow recipes independently. They are developing presentation and styling techniques.
Year 8	Know and understand how to identify risks (food poisoning, cross contamination) and	Know and understand how nutritional requirements differ for specific groups of people	Know and understand how ingredients have different effects in a recipe and be able to describe the	Know and understand the range of cultural and ethical factors that determine food choices:	Learners will make dishes of increasing complexity that further develop their food preparation

minir cooki Know the d use b dates Know the p stora rehea	imise hazards in the king environment. w and understand difference between by and best before es) w and understand principles of safe age, cooking and eating foods.	(Life stages, allergies and intolerances). To understand how nutritional information and allergy advice on food packaging can be used to help make healthy choices (traffic lights).	sensory, nutritional and physical functions of ingredients in recipes.	Religion Vegetarian/vegan Fair trade Animal welfare Advertising/marketing.	and cooking skills and use a range of commodities. -Making/shaping doughs -Sauce making - Blending - Frying -Whisking -Seasoning -Test for readiness
Year 7 Safe Worki the p can t and h Know safe clear utens	w and understand and hygienic king practices and practical steps they take to remain safe hygienic. w and understand preparation, usage, ning and storage of sils and equipment	Know and understand what is meant by a balanced diet using the current UK dietary recommendations (Eatwell guide and 8 Tips) Know the sources and understand the functions of the nutrients that make up a balanced diet Know and understand the importance of exercise and energy balance in maintaining a healthy weight.	know and understand the main food groups and examples of foods for each group (cereals, fruit, vegetables, meat, fish, eggs, fats/oils, milk/dairy food products) know and understand that foods come from a range of sources (caught, reared, grown). Know and understand that raw ingredients are processed to create food products (primary, secondary processing)	Know and understand the range of social and environmental factors that determine food choices: Personal/family preference Availability (seasonal/locality) Food miles Organics Food waste Packaging and recycling	Learners will be able to demonstrate a range of basic food preparation and cooking skills using a variety of food commodities -Weighing/measuring -Knife skills (bridge/ claw) -Peeling - Segmenting -Boiling/ simmering -Rubbing in -Creaming/ all-in-one - Melting - Folding - Baking

Assessment Grids – Assessment Descriptors

Design and Technology

Scheme of Work	Design	Make	Evaluate	Technical Knowledge

Grade 8 - 9	I can explain how engineers/ designers from different sectors contribute /generate a product. I can create imaginative, creative and innovative ideas, fully avoiding design fixation and with full consideration of design functionality, aesthetics and innovation. I can produce detailed annotation that clearly justifies how I have considered the user/client needs and links directly to the context selected. I can produce a complex investigation into the work of others and use this to inform my designs.	I can develop an improved final solution using CAD and modelling in relation to the brief. I have correctly used tools, equipment and materials (including CAM where appropriate) have been consistently used or operated safely with a high level of skill. I can produce a high quality prototype that has the potential to be commercially viable and has been made to meet the needs of the end user. I have evidenced a constant use of quality control to ensure a high quality, accurate prototype. I have clearly shown where I have adapted my work to include feedback from QC checks and/or users.	I can fully justify the development of an improved final solution and evaluate use of the design process, with reference to the brief and peer review. I have a comprehensive understanding of testing, analysing and evaluating existing products and ongoing work. I used judgements for independent and external feedback to inform and record modifications that I make.	I have knowledge and understanding of the impact of new and emerging technologies from a user, designer and manufacturers point of view. I can discuss and explain the impact of resource consumption on the planet and measures taken to improve this. I can implement a sensitive approach with design and evaluation, and avoid negative impact on individuals and groups. E.g inclusive design/religious beliefs. I can identify and explain when/why and how various production techniques and systems are used in manufacture. For example, automation, JIT.
Grade 6 - 7	I research and explore relevant information based on the user's needs. I know how to use social, moral and cultural information to understand the user more clearly. I can independently solve design problems and understand how to develop problems that are given to me. I have developed a specification that allows me to be innovative, functional, and create an appealing	I can select specialist tools in my practical and my choices are justified. I justify the reasons for my choice of materials, taking into consideration their properties. I justify the process that I choose to make my product. I can use CAM in my work. I am accurate and precise when I work. I can work very safely and can coach others to do.	I can compare and contrast existing products, analysing them and explaining how this will influence my design. I understand and can explain developments in DT, for example use of robotics in manufacturing. I test, evaluate and refine my ideas and products against a specification. I always take into account the views of users/groups. I understand the responsibilities of designers and engineers and clearly show this in my work.	 I understand and use the properties of materials and the performance of structural elements to achieve functioning solutions. I understand how more advanced mechanical systems are used in my products and enable changes in movement and force. I understand how more advanced electrical and electronic systems can be powered and used in my product. I apply computing and use electronics to ebed intelligence in my product that responds to inputs, and

	design that responds to the users needs. I have used a variety of approaches, for example, biomimicry and user centred design which has generated creative ideas that avoid stereotypical response to the brief.		This could include inclusive design, sustainability etc. I can evaluate the impact of my product on individuals, society and the environment.	control output, using programmable components.
Grade 4 - 5	I use research to state and describe the user's needs. I can generate at least three different ideas, listing the constraints and develop them so they're improved following user/specification analysis. I analyse research to write a full specification which includes users views/needs. I can select different methods to develop and improve ideas e.g. CAD/Modelling in response to the specification. I annotate ideas in response to the specification and clearly show how/why the design has been improved.	I can describe the tools and equipment I use. I can describe a range of materials that I use. I can describe the processes that I use. My work is generally accurate and I pay attention to quality of finish. I always work safely adhering to workshop safety rules.	I analyse existing products on the market that are relevant and use these to inform my ideas. I can test and evaluate my product against the specification and improve my product as a result. I understand what my responsibilities are as a designer including reference to positive and negative impacts that products may have on the wider world. I can describe new technologies and smart materials and describe how they can help the environment and end product.	 I can understand the properties of materials and select them to improve functioning solutions. I understand how electrical and electronic systems can be powered and used in their products. I apply computing and use electronics in my product that respond to input and control outputs. I understand how mechanical systems are used in my product to enable changes in movement and force. I can independently select and use CAD/CAM in design and manufacture of my product (identify between 2D and 3D).

Grade 2 - 3	I use research to identify the user's needs. I can generate at least three different ideas and develop them so they're improved. I use research to write a basic specification. I use different methods to develop and improve ideas e.g. CAD/Modelling. I annotate ideas so they're clear to others.	I can name the tools and equipment I use. I can name a range of materials that I use. I can list the processes that I use. My work is mostly accurate. I work safely adhering to workshop safety rules.	 I look at existing products on the market that are relevant and use these to inform my ideas. I can test and evaluate my product against the specification. I understand what my responsibilities are as a designer and show this in my work. I know about new technologies and smart materials and know how they can help the user. 	I can recall the properties of materials. I understand systems and control and know what an input and output is. I understand mechanical systems. I can select how CAD/CAM can be used in manufacture (identify between 2D and 3D).
Grade U - 1	I can outline how the product meets my own needs. I know what a specification is and can work from one. My ideas are sketched and labelled with basic notes.	I can prepare myself for practicals. I can name some of the tools I use. I can use equipment safely. Practical work is reasonably accurate.	I look at products to help me with my ideas. I can outline what I designed and what I made and state improvements needed. I know what some of my responsibilities are as a designer. I know a bit about new technologies and smart materials and how they can help the user.	I can identify the properties of some materials. I understand a little about systems and control and know what an input and output is. I understand basic mechanical systems. I know how CAD/CAM can be used in manufacture.
Assessment Objective	Design AO1	Make (Include HandS) AO2	Evaluate AO3	Technical Knowledge AO4

(Assessment Objectives refer to Design and Technology Programmes of Study)

Cooking and Nutrition

Scheme of Work	Understand health and safety relating to food and cookery	Understand and apply the principles of nutrition and health	Understand the source, seasonality and characteristics of a broad range of ingredients	Understand factors relating to food choice	Develop practical cooking skills
Grade 8 - 9	I can describe a range of control measures to reduce the risk of food poisoning.	I can evaluate the risks of not following a balanced diet and can give advice on which foods should be eaten or avoided to prevent diet related illness.	I am able to evaluate the impact of using incorrect ingredients, methods, temperatures and timings on the quality of outcomes.	I can evaluate the effects of budget on food choice and nutritional health.	I can make dishes that demonstrate higher level practical skills in preparation for Year 9. I can demonstrate a range of finishing techniques that ensure my products are well presented and attractive. I can use accurate portion control.
Grade 6 - 7	I can describe some of the causes and symptoms of food poisoning and can name a range of food poisoning bacteria and sources.	I can apply my knowledge of diet and nutrition to adapt a recipe to suit individual needs.	I can explain the impact of different cooking methods on the nutritional content of foods (boiling, steaming, grilling and frying)	I can explain the causes of food poverty in the UK and the wider world. I can explain the benefits of Fair Trade. I can describe how advertising and marketing affects food choices.	I can work independently using my own recipe. I am able to independently resolve problems that arise during practical work. I can work with accuracy and precision. I can prepare well-presented dishes
Grade 4 - 5	I can explain the causes of cross contamination and food poisoning and how they can be prevented (linked to storage, cooking and reheating). I can demonstrate high levels of food hygiene when preparing foods I can explain the difference between a best before date and a use by date.	I can describe the nutritional needs of different groups of people (life stages, allergies and intolerances) I can explain how the information on food packaging can be used to make healthy choices	I can describe the physical, sensory and nutritional properties of the ingredients in my recipes.	I can explain why individuals choose or avoid foods based on their beliefs/ethics including animal welfare. I can explain the benefits of choosing organic produce.	I can follow a recipe independently. I am able to select the most appropriate equipment for the practical task. I can prepare dishes that demonstrate a range of more complex food preparation and cooking techniques I can taste and season foods.

					I can judge when foods are cooked/ready.
Grade 2 - 3	I can identify possible hazards and suggest how they can be made safe. I am able to use the cooker safely and independently. I can use a range of kitchen equipment safely and independently. I can explain how and where to store foods correctly.	I can explain what makes a healthy diet using the Eatwell Guide and 8 tips for healthy eating. I can identify the function and sources of a range of nutrients. I can explain energy balance and the importance of diet and exercise in maintaining a healthy weight.	I can name a range of foods within each commodity group. I know that foods are processed to create products and can explain the difference between primary and secondary processing.	I know that people choose food for different reasons including budget. I can explain the benefits of eating seasonal produce. I can explain food miles and the effect they have on the environment.	I can demonstrate a range of basic food preparation and cooking techniques. I can follow a recipe with guidance and prompts.
Grade U - 1	I can prepare myself and my work area for practical work. I can use and clean basic equipment safely. I can identify which foods need to go in the fridge.	I can classify foods using the Eatwell guide. I can identify which foods I should eat less of and which foods I should eat more of. I can explain which foods cause the main health problems (sugar, fat, salt)	I can name some food commodities (cereals, fruit, vegetables, meat, fish, eggs, fats/oils, milk/dairy food products) I can identify whether foods are caught, reared or grown. I can identify foods that are primary processed and secondary processed.	I know that people choose food based on likes/dislikes. I can identify a range of UK seasonal produce. I know I can identify a range of imported foods including Fair Trade products.	I can prepare and cook a recipe following teacher demonstrations and with support. I can identify and select the correct equipment for the task with guidance.
Assessment Objective	AO1 Health and Safety	AO2 Nutrition and Health	AO3 Source, Seasonality and Characteristics of Ingredients	AO4 Food Choice	AO5 Cooking Skills

(Assessment Objectives refer to Design and Technology Programmes of Study)

Below is an overview of what is taught within each year of our Key Stage Courses

	YEAR 7 – Food and Nutrition / DT - Electronics / Resistant Materials	YEAR 8 – Food and Nutrition / DT - Electronics / Resistant Materials	YEAR 9 – Food and Nutrition / DT – Electronics & Resistant Material	YEAR 10 – Design and Technology – Edexcel GCSE (9-1)	YEAR 11 – Design and Technology – Edexcel GCSE (9-1)
Autumn Term 1	 H&S in the workshop H&S in cooking Steady hand game project Whirligig project Healthy food dishes 	 H&S in the workshop H&S in cooking Desk / Docking Station Organiser project Healthy food dishes 	 Audio Amp Speaker DT Practical Life Skills Restaurant Dishes - starters. 	 Introduction to the course and the Design and Technology world. 5V Desk Lamp project: 2 hours per week / Theory and exam content 1 hour per week 	 NEA - 2 hours per week / Theory and weekly homework set to support mock exams in Y11.
Autumn Term 2	 Steady hand game project Whirligig project Healthy food dishes 	 Desk / Docking Station Organiser project Healthy food dishes 	 Audio Amp Speaker DT Practical Life Skills Restaurant dishes - main courses. 	 5V Desk lamp project: 2 hours per week / Theory and exam content 1 hour per week 	• NEA - 2 hours per week / Theory and weekly homework set to support mock exams in Y11.
Spring Term 1	 Steady hand game project Whirligig project Healthy food dishes 	 Desk / Docking Station Organiser project Healthy food dishes 	 Audio Amp Speaker DT Practical Life Skills Restaurant dishes - desserts and sides. Food hygiene and safety certificate 	 Toolbox project: 2 hours per week / Theory and exam content 1 hour per week 	 NEA - 2 hours per week / Theory and weekly homework set to support mock exams in Y11.
Spring Term 2	 H&S in the workshop H&S in cooking Steady hand game project Whirligig Project Healthy Food Dishes 	 H&S in the workshop H&S in cooking Desk / Docking Station Organiser project Healthy food dishes 	 Audio Amp Speaker DT Practical Life Skills Restaurant Dishes - starters. 	Toolbox project: 2 hours per week / Theory and exam content 1 hour per week	 NEA - 2 hours per week / Theory and weekly homework set to support mock exams in Y11.

Summer Term 1	 Steady hand game Project Whirligig Project Healthy Food Dishes 	 Desk / Docking Station Organiser project Healthy food dishes 	 Audio Amp Speaker DT Practical Life Skills Restaurant dishes - main courses. 	CAD/CAM project: 2 hours per week / Theory and exam content 1 hour per week	• Exam preparation 2 hours per week. Final examination in the middle of June.
Summer Term 2	 Steady hand game project Whirligig project Healthy food dishes 	 Night light project Fliplid box project Healthy food dishes 	 Audio Amp Speaker DT Practical Life Skills Restaurant dishes - desserts and sides. Food hygiene and safety certificate 	 NEA - 2 hours per week / Theory and weekly homework set to support mock exams in Y11. 	 Course has finished at the middle of June
Project Breakdown	DT: Electronics - Steady hand game project: This is an exciting way of introducing students to a basic system and some knowledge of a basic circuit and some simple electronics. The students will learn to use soldering irons and how to construct a basic circuit and to also fault find should problems occur. They get the opportunity to design their own game from three different themes, so it will help to enhance their design skills.	DT: Electronics and Resistant Materials – Desk / Docking Station Organiser: In this project students strengthen their knowledge and understanding of new components and their function within the project and where these components are used within the real world Students investigate the design context and the client they are producing the project for. Also students look at the environmental and sustainable issues with	DT: Electronics and Resistant Materials - MP3 Audio amp project: The context for the first project in Y9 is a audio amp portable speaker. The students will analyse the context and think about a possible client. Students are required to gain knowledge and understanding of new components and their functions within the project. Students will develop further understanding of the inputs, process and outputs of the project.	5V Desk Lamp project: The context of the first project is to design and manufacture a 5V desk lamp. Students will look at the design problem and create a specification to help solve the problem identified. Students then look at existing desk lamps to inspire them to create some initial design ideas. Students will gain a stronger understanding of resistors and use Ohms law to work out different voltage, current and resistance. Students have to use a range of	NEA Controlled Assessment: This is where students will choose one contextual challenge from a selection of three themes, which have two contextual challenges in each theme. Students will complete this NEA over the whole of Y11 and focus and be marked on the four following AOs: Key Assessment Objectives AO1 – 10% Identify, investigate and outline design possibilities to address needs and wants – AO2 – 30%

The project also continues to look at non-ferrous metals which the student must shape therefore they discover the malleability of a metal. The knowledge students will gain will be mostly basic electric circuits and	using certain materials in products. Within the project students cover the following, introduction to the design context, client, project brief, materials, sustainability, understanding components, recap on	The rationale behind this is to further develop knowledge of systems within DT. Students will also develop an understanding of how to work out surface areas using mathematical formulas and equations.	different materials to manufacture a full size prototype of the desk lamp that they will be creating. This will provide students with the relevant knowledge and understanding to manufacture the final product correctly.	Design and make prototypes that are for purpose AO3 – 20% - Analyse and evaluate – Design decisions and outcomes, including for prototypes made by themselves and other Wider issues in design and
students cover introduction to the project brief, materials, specification, project designs, self/peer assessment, practice soldering, understanding printed circuit boards (PCBs) and components, soldering components, vacuum forming, marking and drilling casing for project, assessing tools and equipment used, final evaluation of project, self/peer assessment of final project using assessment grid.	section of desk / docking station organiser project, using templates to mark out and cut timber sections of the project. Assembling final project, final evaluation of project, self/peer assessment final project using assessment grid. Cooking and Nutrition - see below for detailed breakdown of each lesson and links to AO's.	 Changing a fuse and wiring a plug Assembling and disassembling flatpack furniture Putting up a bookshelf Changing a car tyre, checking oil and water Cooking and Nutrition - see below for detailed breakdown of each lesson and links to AO's.	students are directed to produce some form of a toolbox storage which can include different areas within the toolbox to store different tools and equipment that they require. The rationale behind this is to further develop their knowledge of timbers and how to work worth timbers in the workshop. CAD/CAM Projects: - Games / CD Rack and Tape Cassette Coaster Set The context for the third project with the GCSE course is for students to	Designing and making principles Final examination completed at the end of May that focuses on core principles and one specialist material area. EDUQAS - Hospitality - see below for detailed breakdown of each lesson and links to assessment criteria.

DT:Resistant Materials -	design and manufacture
Whirligig Project:	a games / CD rack and
	set of tape cassette
The focus of the project	coasters with casing
is to introduce the	only using CAD/CAM for
students to Design	production For both of
Technology and health	these projects students
and safety in the	have to work
and salety in the	independently using
workshop. The project	independentity using
gives the students the	Instructions on now to
opportunity to use the	design each project
workshop machines and	using 2D design
a range of workshop	software. Students have
tools such as the belt	to adapt the examples
sander, pillar drill, tenon	that are provided within
saw, coping saw and	the instruction and
several marking out tools.	design and make them
	relevant to them.
Knowledge covers health	
and safety in a workshop.	
Softwoods and	Systems, timbers and
manufactured boards and	CAD/CAM are several of
their source and different	the tenior several in
types.	the topics covered in
21	section A of the exam.
Students cover	
introduction to the project	
brief, materials.	EDUQAS - Hospitality -
sustainability project	see below for detailed
designs self/neer	breakdown of each
assessment methods of	lesson and links to
production cutting	assessment criteria.
marking and drilling for	
project, assembling initial	
project, final evaluation of	
project, seit/peer	
assessment of final	
project using assessment	
grid.	

Cooking and Nutrition -		
see below for detailed		
breakdown of each		
lesson and links to AO's.		

Year 7 Curriculum Topic Delivery Plan - Cooking and Nutrition			
Lesso n	Dish	Activities	
1	AO1: Understand health and safety relating to food and cookery	Introduction to the subject. Health and safety. Treasure hunt	
2	Demonstration fruit crumble AO1: AO2: AO3: AO4: AO5:	Starter – bingo (key words) Watch a demonstration – stewing fruit and crumble topping. Weigh out for crumble topping. Demonstrate washing up correctly.	
3	Fruit crumble AO5:	Hygiene and safety. Stewing fruit – peeling, bridge and claw, use of hob, simmering. Crumble topping – sieving, rubbing in, layering, oven baking. Washing and cleaning.	

	•	
4	Demonstration fruit salad AO1: AO2: AO3: AO4:	Evaluation. Importance of fruit in the diet. 5 a day. Eatwell guide. Knife safety.
5	Fruit salad AO5:	Hygiene and safety. Safe use of knife Use of equipment Washing up Health and safety.
6	Demonstration of scones AO1: AO2: AO4:	Evaluation. Rubbing in method demonstration with binding. Additional ingredients and adaptations to recipes. Oven safety. Weighing and measuring.
7	Scones AO5:	Hygiene and safety Rubbing in, Binding, Shaping, Safe use of oven. Health and safety
8	Demonstration Victoria sandwich AO1: AO2:	Evaluation Creaming method Folding Cracking eggs Greasing and lining tins Weighing and measuring (ratios)
9	Victoria sandwich AO5:	Hygiene and safety. Oven safety, creaming, egg cracking, sieving, folding, lining and greasing tins, oven baking, Timing, Following a method. Washing and cleaning up.
10	Demonstration flapjack AO1: AO2: AO4:	Evaluation Melting method Safe use of the hob Reminder of oven safety

		Oats in the diet – eatwell guide. Weighing and measuring.
11	Flapjack AO5:	Hygiene and safety. Practical, Melting method. Safe use of hob and oven.
12	Demonstration baked bean and potato bake AO1: AO2: AO3: AO4:	Evaluation. Potatoes in the diet – eatwell guide. Peeling, mashing, boiling, draining, and chopping. Safe use of hob.
13	Full baked bean and potato bake AO5 :	Skills – peeling, bridge and claw, boiling, draining, mashing, layering, use of hob. Washing and cleaning. Hygiene and safety.
14	Demonstration sausage rolls. AO1: AO2:	Evaluation. Use of puff pastry. Rolling. Handling raw meat safely. Glueing, rolling, glazing, hedge hogging. Safe use of the oven. Meat in the diet – eatwell guide.
15	Full sausage rolls AO5:	Hygiene and safety. Use of convenience commodities. Safe handling of raw meat. Safe use of the oven. Rolling, binding, glueing, glazing, hedge hogging. Washing up. Cleaning.
16	Demonstration of Swiss roll AO1: AO2:	Evaluation Whisking method – final method for cake making. Use of electric equipment.

	AO4:	Safety. Weighing and measuring. Discussion on fat in the diet – fat free sponge.
17	Full Swiss roll AO5:	Hygiene and safety. Cracking eggs, greasing and lining tins, whisking, folding, baking, rolling, spreading. Safe use of the oven. Safe use of equipment. Washing and cleaning.
18	Demonstration on bread rolls AO1: AO2: AO4:	Evaluation What is bread made from? Regional dialect on cobs. Demonstration in bread making – producing dough, kneading, stretching, proving, shaping. Weighing and measuring.
19	Full bread rolls AO5:	Hygiene and safety Sieving, rubbing in, yeast dissolving, binding, kneading, stretching, shaping, proving and baking. Washing up.
20	Demonstration on chocolate chip cookies AO1 :	Evaluation of bread rolls. Demonstration on cooking making. QandA session on skills and methods during the demonstration. Where does it fit into the eatwell guide? Weighing and measuring.
21	Full chocolate chip cookies AO5:	Hygiene and safety. Dusting baking tray, rubbing in, binding, shaping, chopping, oven baking. Washing and cleaning up.
22	Demonstration tomato soup AO1: AO2: AO3: AO4:	Evaluation. Demonstration - Fine dicing onion, chopping bacon, making a roux, making stock, use of hand blender. Nutrients within the soup. Where does it fit in the eatwell guide?
23	Full tomato soup AO5:	Hygiene and safety.

		Fine dicing, chopping, safe working practises, handling raw meat, making stock, using a kettle, making a roux, boiling, simmering, and using a hand blender. Washing up.
24	Demonstration chocolate chip muffins. AO1:	Evaluation Carbohydrates in the diet – starches, sugars and fibre. Watch a demonstration. Weighing and measuring.
25	Full chocolate chip muffins. AO5:	Hygiene and safety Creaming, sieving, and cracking eggs, binding, folding, chopping, accuracy, oven safety. Washing and cleaning.
26	Demonstration toad in the hole AO1: AO2: AO4:	Evaluation Protein in the diet. Watch a demonstration. Q and A session on skills during demonstration. Weighing and measuring.
27	Full toad in the hole AO5 :	Hygiene and safety Sieving, cracking eggs, making batter, roasting sausages, pouring batter, safe use of cooker. Washing and cleaning.
28	Demonstration jam tarts AO1: AO2: AO4:	Evaluation Role of fat in the diet Watch the demonstration Weighing and measuring
29	Full jam tarts AO5:	Hygiene and safety Sieving, rubbing in, binding, rolling pastry, use of cutters, filling pastry, oven baking. Washing and cleaning.
30	Demonstration puff pastry tart AO1: AO3: AO4:	Evaluation Importance of presentation of food. Watch a demonstration. Decide on the presentation of your own dish – colours and shapes.
31	Full puff pastry tart	Hygiene and safety

	AO5:	Rolling pastry, scoring, filling, chopping, bridge and claw, grating, slicing, fine dicing, oven baking. Washing and cleaning up.
32	Demonstration Dutch apple cake AO1:	Evaluation Demonstration on cake making. Q and A session during demonstration. Weighing and measuring – ratios.

Year 8 C	Year 8 Curriculum Topic Delivery Plan - Cooking and Nutrition			
Lesso n	Dish	Activities		
1	Demonstration pizza dough AO1: AO4:	Starter – foods with yeast. What is yeast? What does it do? Where is it found? Experiment to demonstrate how yeast makes dough rise. Watch demonstration - pizza dough making. Weigh out pizza dough.		
2	Pizza dough AO5:	Hygiene and safety. Full pizza dough making – sieving, activating yeast, making dough, kneading, stretching and freezing. Washing and cleaning. Homework – ingredients and baking tray.		
3	Full pizza making AO5:	Hygiene and safety. Knocking back dough, rolling, shaping, layering, topping, chopping, slicing, dicing, grating, crushing and oven baking. Washing and cleaning up.		
4	Demonstration Bakewell Tart AO1: AO3: AO4:	Evaluation Local dishes – discussion. Demonstration on shortcrust pastry and cake making. Weighing and measuring.		

		Homework - apron, jam, egg.	
5	Bakewell Tart AO5 :	Hygiene and safety. Sieving, rubbing in, binding, rolling, lining tin, cake batter making, dotting technique, baking. Washing and cleaning up.	
6	Demonstration Fajitas AO1: AO2: AO3: AO4:	Evaluation International foods in the diet. Nutrients in the dish. Demonstration. Homework – ingredients, apron and container.	
7	Fajita Practical AO5:	Hygiene and safety. Practical – fine dicing, chopping, paysanne, julienne, stock making, sweating, stirring, frying, and simmering. Safe use of hob. Washing and cleaning up	
8	Demonstration Chicken curry AO1: AO4:	Evaluation. Food Poisoning – salmonella. Demonstration on curry with emphasis on safe handling of raw chicken. Video clip showing how salmonella affects the body – questions to answer. Homework – ingredients, container and apron.	
9	Full chicken curry AO5:	Hygiene and safety. Fine dicing, sweating, handling raw chicken, use of chopping boards, cooking with spices, making curry sauce, simmering. Cleaning.	
10	Demonstration of Fridge Cake AO1: AO2: AO4:	Evaluation Bingo – key words. Demonstration – Q and A session. Key equipment – Bain-Marie. Recipe adaptations. Identification of ingredients and nutrients and explain where it fits into the diet. Homework - ingredients, apron.	
11	Full Fridge Cake AO5:	Hygiene and safety. Crushing, melting method, use of bain-marie. Safe use of hob. Safe use of equipment.	

		Washing and cleaning.	
12	Demonstration on chilli / bolognese AO1: AO2: AO4:	 Evaluation Minced beef as an ingredient – discussion on nutrients and cost. Watch a demonstration. QandA session on skills etc. Timeplan to work from. Homework – ingredients for next lesson. 	
13	Full chilli / bolognese AO5:	Hygiene and safety Fine dicing, crushing, making stock, chopping, bridge and claw, sweating, simmering, boiling. Washing up.	
14	Demonstration on Apple Pie AO1: AO3: AO4:	Evaluation. Demonstration on Apple pie – enriched pastry. Q andA session on skills and methods during the demonstration. Weighing and measuring. Homework - cooking apple, 1 egg, apron.	
15	Full Apple Pie AO5:	Hygiene and safety. Sieving, rubbing in, enriching, sweetening, binding, rolling, peeling, fine slicing, layering, glueing, crimping, glazing, and baking. Washing and cleaning up.	
16	Demonstration chicken chow Mein AO1: AO3: AO4:	Evaluation. Culture – foods around the world. Demonstration. Q and A session. Chinese culture information and quiz. Homework – ingredients, container and apron.	
17	Full Chicken Chow Mein AO5:	Hygiene and safety. Fine dicing, slicing, handling raw meat, sauce making, stir frying. Washing up.	
18	Demonstration Chocolate Brownies A01: A04:	Evaluation Cost of food Watch a demonstration.	

		Q and A session. Weighing and measuring. Homework - foil lined baking tray and apron.	
19	Full chocolate brownies AO5 :	Hygiene and safety Melting method, bain-marie, whisking, folding, simmering, and baking. Washing and cleaning.	
20	Demonstration Mars Bar Cake AO1: AO4:	Evaluation Shopping and equipment lists Watch the demonstration Writing a timeplan Homework - 2 Mars bars, 200g chocolate, and apron.	
21	Full Mars Bar Cake AO5 :	Hygiene and safety Melting method, bain-marie, chopping stirring, melting chocolate, use of fridge. Washing and cleaning.	

Year 9 C	Year 9 Curriculum Topic Delivery Plan - Cooking and Nutrition		
Lesso n	Dish	Activities	1 - 6 - ₁ -
1	Demonstration of leek and potato soup AO1: AO2: AO3: AO4:	Evaluation. Nutrients within the soup. Seasonality of ingredients – what does this mean? Demonstration Homework – ingredients and container	
2	Leek and potato soup	Hygiene and safety	

	A05:	Making stock, fine dicing, macedoine, paysanne, sweating, simmering, boiling and blending. Washing and cleaning up.	
3	Demonstration of Spring Rolls AO1: AO2: AO3: AO4:	Multicultural starters.	
4	Practical Spring Rolls AO5:	Hygiene and Safety, cutting techniques, using filo pastry, stir-frying, baking, washing up.	
5	Demonstration Quiche AO1: AO2: AO4:	Evaluation Eggs as a commodity – Amazing eggs. Demonstration. Weighing and measuring. Homework - cheese, fillings, eggs, milk, apron.	
6	Full Quiche AO5:	Hygiene and safety Rubbing in, sieving, binding, rolling, grating, chopping, fine dicing, layering, egg whisking, coagulation of eggs, oven baking. Washing and cleaning up.	
7	Demonstration Sweet and Sour Pork AO1: AO2: AO3: AO4:	Evaluation Regional Foods Watch a demonstration. Q and A session on skills during demonstration. Comparison of differences in culture. Homework – ingredients, apron and container.	
8	Full Sweet and Sour Pork A05 :	Hygiene and safety Fine dicing, chopping, julienne, paysanne, and cornflour sauce making, stir frying, use of wok. Washing and cleaning.	
9	Demonstration Pasta Bake AO1: AO4:	Evaluation Demonstration on roux sauce making. Q and A session during demonstration. Pasta as a commodity.	

		Homework – ingredients, oven proof dish, apron.	
10	Full Pasta Bake (roux sauce) AO5:	Hygiene and safety. Boiling pasta, draining, paysanne, frying bacon, roux sauce making, cooking au gratin. washing and cleaning.	
11	Demonstration cheesecake AO1: AO2: AO3: AO4:	Evaluation. Dairy produce – calcium and vitamin D. Demonstration – QandA session. Discussion on recipe adaptations. Decide on adaptations and nutritionally analyse the ingredients in the dish. Homework – ingredients, container and apron.	
12	Demonstration Enriched Yeast Dough Dessert AO5:	Evaluation What makes a good dessert? Demonstration Q & A. Discussion on recipe adaptations. Who works in a kitchen? - Kitchen brigade.	
13	Full Enriched Yeast Dough Dessert AO1: AO2: AO3: AO4:	Hygiene & Safety. Making enriched dough, handling, kneading, stretching, shaping, filling, proving, baking. Safe use of equipment. Washing and cleaning.	
14	Full Cheesecake AO5 :	Hygiene and safety. Crushing, melting, whisking, whipping, mashing, folding, layering, presentation, use of fridge, safe use of hob. Washing up and cleaning.	
15	Demonstration Pasties AO1: AO2: AO3: AO4:	Evaluation Snacks and accompaniments on a menu. demonstration of pasty making - choice of recipes. Q & A session Weighting and measuring. Homework - ingredients, baking tray and apron.	
16	Full practical Pasties A05 :	Hygiene and safety. Making shortcrust pastry, making filling, crimping, glazing and baking Washing and cleaning up.	

		Health and safety.
17	Demonstration burgers AO1: AO2: AO3: AO4:	Evaluation Lunchtime options Demonstration on burgers different dietary needs on a menu Homework - ingredients, baking tray and apron.
18	Full practical burgers AO5 :	Hygiene and safety making burgers (vegetarian or meat option) Washing up and cleaning
19	Demonstration sour bread and homemade butter AO1: AO2: AO3: AO4:	Evaluation Life Skills - Keeping costs down in the kitchen making own bread and butter weighing and measuring Homework - ingredients, baking tray and apron.
20	Full practical sour bread and homemade butter AO5 :	Hygiene and safety, making your own butter, making soda bread, baking. Washing up and cleaning
21	Demonstration samosas AO1: AO2: AO3: AO4:	Evaluation Multi-cultural foods and a multicultural society demonstration - Q & A session. Costs of making your own food vs buying food. Homework - ingredients, baking tray and apron.
22	Full practical samosas AO5 :	Hygiene and safety. chopping, handling raw meat, making filling, handling filo pastry, baking. Washing up and cleaning
23	Demonstration Finish fruit platt AO1 :	Evaluation Sweet Treats and where they fall into eating well

	AO2: AO3: AO4:	demonstration - Q & A session. Weighing and measuring. Homework - ingredients, baking tray and apron.	
24	Full practical Finish fruit platt AO5 :	Hygiene and safety. Developing skills in bread making and plaiting for presentation. Washing up and cleaning	
25	Demonstration korma AO1: AO2: AO3: AO4:	Evaluation How did Curry come to be one of the UK's most popular dishes. Demonstration on making curry - Q & A session Planning using a timeplan. Homework - ingredients, baking tray and apron.	
26	Full practical korma AO5:	Hygiene and safety. Making Korma, handling raw meat, cross contamination, making curry sauce, boiling, simmering and frying. Washing up and cleaning	
27	Demonstration cheese and bacon muffins AO1: AO2: AO3: AO4:	 Evaluation Breakfast alternatives - why is breakfast so important? Demonstration - Q & A session. weighing and measuring Homework - ingredients, baking tray and apron. 	
28	Full practical cheese and bacon muffins AO5 :	Hygiene and safety. grating, chopping, mixing, folding, chopping, baking. Washing up and cleaning	
29	Demonstration quesadillas AO1: AO2: AO3: AO4:	Evaluation Easy lunch time options and the importance of not skipping meals. Demonstration - Q & A session evaluating your own diet and making improvements.	
30	Full practical quesadillas	Hygiene and safety, chopping, fine dicing, macedoine, brunoise, using the hob, frying.	

A05:	Washing up and cleaning

DESIGN AND TECHNOLOGY CURRICULUM PROGRESSION OVERVIEW - KS4		
Subject: Eduqas Hospitality Level 1/2	Year 10 - Term 1 Unit 1 - Externally assessed Unit 2 - Internally assessed	

Week	Double Lesson	Single Lesson
1	Unit 2	Unit 1
	LO3: Be able to cook dishes	LO4: Know how food can cause ill health.
	Knife Skills	Introduction to food hygiene and safety
	Fruit and vegetables as a commodity	Online safety course
	Types of knives and different cuts.	6 weeks.
	Place mat exercise cutting different vegetables into	
	shapes.	
2	Practical	Food Safety Course (2)
	Minestrone soup - paysanne, chiffonnade, brunoise,	N 1 1
	macédoine.	
	Fruit cuts – apple swans, tomato roses, carrot feathers	
	etc.	
3	Pastry making	Food Safety Course (3)
	Cereals as a commodity	
	Quiche - rubbing in method	

4	Pastry making	Food Safety Course (4)
	Sugar pastry – creaming method	
	Bakewell Tart	
5	Pastry making	Food Safety Course (5)
	Puff pastry – convenience commodity	
	Mediterranean Tarts.	
6	Pastry making	Food Safety Course (6)
	Choux pastry - melting method	Completion
	Profiteroles	
7	Sauces – Roux based sauce	LO1 - Nutrition
	Lasagne, cauliflower cheese.	Eatwell guide link
	Uses of sauces.	
8	Sauces - cornflour sauces	AC 1.1 Protein
	Egg custard	What is it, where do we get it? How much do we need?
		<u>AC 1.2</u> Different life stages needs.
		Link to guide
9	Yeast Dough's	<u>AC 1.1</u> Carbohydrates
	Bread making (savoury)	Sugars and starches
	Kneading, proving, knocking back, shaping.	What is it, where do we get it? How much do we need?
		<u>AC 1.2</u> Different life stages needs.
		Link to guide.
10	Yeast Dough's	AC 1.1 Fat
	Bread making (sweet)	What is it, where do we get it? How much do we need?
		<u>AC 1.2</u> Different life stages needs.
		Link to guide.
11	Cake making	<u>AC 1.1</u> Vitamins
	Genoise sponge	What is it, where do we get it? How much do we need?
		<u>AC 1.2</u> Different life stages needs.
		Link to guide.
12	Cake making	AC 1.1 Minerals
	Whisking method - fatless sponges	What is it, where do we get it? How much do we need?
	Decorated Swiss rolls.	AC 1.2 Different life stages needs.
		Link to guide.

DESIGN AND TECHNOLOGY CURRICULUM PROGRESSION OVERVIEW - KS4		
Subject: Eduqas Hospitality Level 1/2	Year 10 - Term 2 Unit 1 - Externally assessed Unit 2 - Internally assessed	

Week	Practical Activity	Theory Activity
1	Poultry as a commodity Jointing a chicken. Stuffing the breast Chicken Ballotine	Temperature control Temperature probing
2	Chicken thighs Marinating and making curry sauces. Chicken curry	LO2 AC 2.1 Poultry as a commodity Purchase, nutrients, methods of cooking, environmental issues, sustainability, cost, free range, organic.
3	Meat as a commodity Beef dish Chilli / bolognaise / lasagne etc.	Food Poisoning and Food Storage
4	Meat as a commodity Lamb dish	
5	Meat as a commodity Pork dish	

6	Fish as a commodity Filleting fish Fish pie / sushi / fishcakes	LO2 AC 2.1 Fish as a commodity Purchase, nutrients, methods of cooking, AC 2.2 environmental issues, sustainability, cost.
7	Eggs as a commodity Meringue making (sweet) Chocolate hazelnut roulade	LO2 AC 2.1 Eggs as a commodity Purchase, nutrients, methods of cooking, AC 2.2 environmental issues, sustainability, cost.
8	Eggs as a commodity Spanish Tortilla (savoury)	As above
9	Dairy as a commodity Butter and Cheese in dishes Savoury dish	LO2 AC 2.1 Dairy as a commodity Purchase, nutrients, methods of cooking, <u>AC 2.2</u> environmental issues, sustainability, cost.
10	Dairy as a commodity Yogurt and cream in dishes Sweet or savoury	As above
11	Vegetarian Protein Foods Quorn dish	LO2 AC 2.1 Vegetarian alternatives as a commodity Purchase, nutrients, methods of cooking, AC 2.2 environmental issues sustainability, cost.
12	Vegetarian Protein Foods Tofu dish	As above

DESIGN AND TECHNOLOGY CURRICULUM PROGRESSION OVERVIEW – KS4

Subject: Eduqas Hospitality Level 1/2	Year 10 - Term 3 Unit 1 - Externally assessed Unit 2 - Internally assessed	

Week	Practical Activity	Theory Activity
1	Presenting dishes (Look at the chef coming in to do a master class?)	Unit 1 LO1: Understand the environment in which hospitality and catering providers operate. Types of establishments Residential / non-residential Commercial / non-commercial Contract catering
2	Vegetarian cooking Prepare, cook and present a dish suitable for a vegetarian. AC 2.3	Styles of service Self-service, buffet, fast food, take-away, plated, sliver, gueridon, vending, travel.
3	Vegan Cooking Prepare, cook and present a dish suitable for a vegan.	Kitchen and restaurant brigades Job descriptions. Qualities needed for different jobs.
4	Gluten free Prepare, cook and serve a dish suitable for a coeliac.	Types of menus
5	Low fat diets	What makes a business work

	Prepare, cook and serve a dish suitable for a low fat diet.		
6	Lactose intolerant Prepare, cook and serve a dish suitable for a lactose intolerant.	Services provided	
7	Healthy school meals Prepare, cook and serve a meal suitable for a school student.	Suppliers	

<u>Year 11 Term 1 - 12 weeks</u>

week	double lesson	single lesson
1	Bake off Technical Challenges	Where hospitality is provided at non-catering venues
2	Bake off Technical Challenges	Standards and ratings
3	Bake off Technical Challenges	Job roles within the industry
4	Bake off Technical Challenges	Job roles within the industry
5	Bake off Technical Challenges	Job roles within the industry
6	Bake off Technical Challenges	Exam questions on LO1: Understand the environment in which hospitality and

		catering providers operate.
7	Bake off Technical Challenges	
8	Bake off Technical Challenges	
9		

Wider Subject Curriculum — enrichment, homework programs, quizzing, awards, trips, visits, reading / vocabulary lists, competition etc.

Resources

Glossary of key terms, rules & formula - to be spelt / used correctly

Key Terms

Vocabulary	Description
Sustainability	Working in a way that will ensure a continued supply of resources and energy for future generations (renewable/non-renewable/finite).
Environmental	Concerned with the impact or change in the environment.
Aesthetic	Our perception of beauty including sight, sound, smell, touch (mainly visual for Product Design).
Texture	The feel, appearance or consistency of a surface, substance or fabric.

Durability	The ability of a material to be hard-wearing.
Hardwoods	Come from deciduous or broadleaf trees. They are generally slow growing, hard, sold by cubic meter then rough sawn to size or mould (dowel).
Softwoods	Come from coniferous trees with needles instead of leaves. They are generally faster growing, softer, easier to work with. Supplied in standard sizes that are either rough sawn or planed smooth (PSE).
One-off	Only one product is made at a particular time (usually high quality/unique).
Batch	A series of identical products are made together, in small or large numbers (usually for a specific event).
Mass production	Products made on a production line with each worker responsible for a particular stage. Products are made in larger numbers to reduce the cost of each item.
Prototype	An accurate or working representation of what the product will do.
Quality control	Guarantees the accuracy of a product (size, material quality/ visual features).
Quality Assurance	Checks the machines, systems and staff within an organisation that make the products.
Risk assessment	The likelihood of safety problems arising from an activity (in designing and making a product).
CAD	Computer aided design is a drawn product or part of a product on a software package that can then be exported to an CAM machine (Increases accuracy and ease of repeat cuts).
CAM	Computer aided manufacture, a machine that turns a digital drawing into numerical code that plots a path for an item to be cut/drilled/milled out of a section of material.

Thermoplastics	These soften when heated and can be reshaped.	
Thermosetting	Heated and moulded into shape these plastics cannot be reshaped with heat because the polymer chains have been interlinked.	
plastics		