

# CoDA Curriculum

Design + Innovation  
(Food & Cookery)



CITY OF DERBY  
ACADEMY

*Improving the life chances of all students*

## Design + Innovation

The Key Stage 3 Design + Innovation curriculum combines the KS3 National curriculum for Design and technology with the KS3 National curriculum for Computing.

For the first 13 weeks of Year 7 learners complete an Introduction to D+I unit, where they experience different subject areas within the faculty. After this they commence a regular carousel rotation program until the end of Year 8, where they do units of work in: Food and Cookery (lunchtime and world foods); Fashion and Textiles (cultural influences: Mexico and Japan); Design and Technology: Material Properties (polymers and metals); Design and Technology: Systems and Devices (mechanisms and electronics); and Information and Computer Technology (e-Safety, computing basics, and Programming).

In Year 9, learners have the opportunity to study a curriculum designed to join the skills and knowledge developed in Years 7 and 8 to those needed for subjects which may be taken in Year 10. The Year 9 units of work are: Food and Cookery (food for life); Fashion and Textiles (clothing and accessories); Design and Technology: Materials (timbers); Computer-Aided Design (Fusion360); and Creative iMedia (visual identity and digital graphics).

The Key Stage 4 Design + Innovation curriculum intends to give learners the skills and knowledge needed to make progress onto the next step following their secondary education, and currently includes qualifications in: Business; Construction; Creative iMedia; Design and Technology; Engineering Manufacture; Fashion and Textiles; and Food and Cookery.

## Food and Cookery Curriculum Intent

We aim to deliver a curriculum that will give students the skills and knowledge to:

- Be able to consistently and effectively apply health and safety skills and knowledge when preparing and cooking food products.
- Know how to use a range of different tools and equipment to apply a variety of food preparation and presentation skills and techniques.
- Use knowledge of nutrition to analyse and evaluate food choices for themselves and others, taking into account lifestyle factors and medical needs.
- Adapt recipes to suit a range of different needs and life stages.
- Apply planning, sequencing and time management skills to successfully make a range of food products.
- Know where foods are sourced, including how foods are grown, manufactured and raised.,

At Key Stage 4 students will follow the specifications:

<b>SUBJECT TITLE NFCE Level1/2 Technical award in Food &amp; Cookery will encourage and enable students to:</b>	
<ul style="list-style-type: none"> <li>• focus on the study of food and cookery.</li> <li>• offer breadth and depth of study, incorporating a key core of knowledge.</li> <li>• provide opportunities to acquire a range of practical and technical skills The objectives of this qualification are to:</li> <li>• provide an understanding of health and safety relating to food, nutrition and the cooking environment</li> <li>• provide an understanding of legislation in the food industry</li> <li>• identify and understand food provenance</li> <li>• provide an understanding of the main food groups, key nutrients and what is required as part of a balanced diet</li> <li>• identify factors that can affect food choice</li> <li>• explore recipe development and how recipes can be adapted</li> <li>• understand how to cater for people with specific dietary requirements</li> <li>• demonstrate menu and action planning</li> <li>• be able to evaluate and consider how to improve completed dishes</li> <li>• demonstrate the application of practical skills and techniques through all aspects of the qualification content areas</li> </ul>	
<b>Students will be taught and assessed on their ability to:</b>	
<b>AO1</b>	<b>Recall knowledge and show understanding.</b> The emphasis here is for learners to recall and communicate the fundamental elements of knowledge and understanding.
<b>AO2</b>	<b>Apply knowledge and understanding.</b> The emphasis here is for learners to apply their knowledge and understanding to real-world contexts and novel situations.
<b>AO3</b>	<b>Analyse and evaluate knowledge and understanding.</b> The emphasis here is for learners to develop analytical thinking skills to make reasoned judgements and reach conclusions.
<b>AO4</b>	<b>Demonstrate and apply relevant technical skills, techniques and processes.</b> The emphasis here is for learners to demonstrate the essential technical skills relevant to the vocational sector by applying the appropriate processes, tools and techniques.
<b>AO5</b>	<b>Analyse and evaluate the demonstration of relevant technical skills, techniques and processes.</b> The emphasis here is for learners to analyse and evaluate the essential technical skills, processes, tools and techniques relevant to the vocational sector.

<b>Students will be taught and assessed on:</b>	
<b>NEA: Principles of engineering manufacture</b>	
Assessed by an exam.  Externally set Written examination Externally marked	Non-exam assessment (NEA) Assessment method Description NEA Externally set Internally marked and externally moderated 60% of the technical award 96 marks The completion time for the NEA is 16 hours 30 minutes plus 2 hours preparation and research time. The NEA will assess the learner's ability to effectively draw together their knowledge, understanding and skills from across the whole vocational area. The NEA will target the following assessment objectives (AOs): AO1, AO2, AO3, AO4 and AO5. NEA availability The learner should not undertake the NEA until all content areas have been delivered. This is to ensure learners are in a position to complete the NEA successfully. A different NEA brief will be released every September.
<b>EA:</b>	
This is assessed by a set assignment.	40% of the technical award Written examination: • 80 marks • 1 hour 30 minutes • a mixture of multiple-choice, short-answer and extended response questions The written EA is a terminal assessment and will assess the learner's knowledge and understanding of all content areas and target the following AOs: AO1, AO2 and AO3. Learners will safely plan and produce a one-off product by using appropriate processes, tools and equipment. This will include: planning the production of a one-off product, measuring and marking out, safely use processes, tools and equipment to make a product.
<b>R016: Manufacturing in quantity</b>	
This is assessed by a set assignment.	Learners will learn how to manufacture using simple jigs and templates to support manufacturing in volume using Computer Aided Design (CAD) software and Computer Numerical Control (CNC) equipment. This will include: preparing for manufacture, develop programmes to operate CNC equipment, safely use processes and equipment to make products in quantity

# Year 10

Topic	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
End Points (Knowledge and Skills)	<b>Content area 3. Food groups, key nutrients and a balanced diet</b>  3.1 Food groups  3.2 The components of a balanced diet 3.2.1 Proportions of the food groups 3.2.2 UK government healthy eating tips  3.3 Nutrients 3.3.1 Sources and functions of macronutrients	<b>Content area 3. Food groups, key nutrients and a balanced diet</b>  3.3.2 Sources and functions of micronutrients 3.3.3 Sources and functions of minerals 3.3.4 Sources and functions of water  3.4 Nutrient imbalances  3.5 Fibre  3.6 Nutritional requirements for different groups of people	<b>Content area 3. Food groups, key nutrients and a balanced diet</b>  3.7 Food-related health conditions 3.7.1 Health conditions 3.7.2 Intolerances 3.7.3 Allergies  3.8 Nutritional information on food labels	<b>Content area 1. Health and safety relating to food, nutrition and the cooking environment</b>  1.1 Safe and hygienic working practices relating to the individual and the cooking environment  1.2 Potential hazards and risks in the cooking environment  1.3 Hazard Analysis and Critical Control Point (HACCP)  1.4 Minimising risk in the cooking environment  1.5 Safe and hygienic working practices when using cooking equipment and utensils	<b>Content area 2. Food legislation and food provenance</b>  2.1 The Food Standards Agency and food safety legislation  2.2 Food provenance 2.2.1 Grown 2.2.2 Reared 2.2.3 Caught  2.3 Food transportation  2.4 Food processing 2.4.1 Why food is processed 2.4.2 Advantages of processed food 2.4.3 Disadvantages of processed food  2.5 Food manufacturing 2.5.1 Why food is manufactured 2.5.2 Advantages of manufactured food 2.5.3 Disadvantages of manufactured food	<b>Content area 4. Factors affecting food choice</b>  4.1 Social factors  4.2 Environmental factors  4.3 Seasonality
What is assessed	Classwork Homework Initial assessment	Classwork Homework Mid unit test	Classwork Homework End of unit test	Classwork Homework Examination	Classwork Homework Examination	Classwork Homework Examination
Key Vocabulary	<b>Macronutrients</b> Eatwell Guide <b>Protein</b> (Essential) amino acids Protein complementation Denaturation Low biological value High biological value	<b>Micronutrients</b> <b>Vitamins</b> Antioxidants <b>Minerals</b> Rickets Soluble fibre Insoluble fibre  Reference intake	Allergens Biological contamination Coronary heart disease Coeliac disease Osteoporosis Peak bone mass Type 2 Diabetes Anaphylactic shock Hypersensitivity	4Cs Bacteria Toxins (Biological/chemical/physical) contamination Food poisoning Moulds Yeasts Personal hygiene	Farmed fish Imported food Intensive farming pesticides	Seasonality Organic (farms/foods) Diwali Passover Ramadan Kosher foods Halal food Haram food Food miles

	<b>Carbohydrates</b> Gluten Monosaccharides Disaccharides Polysaccharides  <b>Fat</b> Lipids Hydrogenated fat Monounsaturated fats Polyunsaturated fats Saturated fats Cholesterol	Puberty	Reference intake	Sanitizer Salmonella E. coli Staphylococcus Risk assessment Temperature probe HACCP		Vegetarian
Literacy Skills Developed (Writing/Oracy/Tier 2)	Literacy skills developed through quality teaching and the embedding of high expectations regarding the presentation of books. Key words are provided during theory lessons. Opportunities taken for oracy when appropriate.					
Career Links (Employability Skills, Career Opportunities)	Dietician Nutritionist Food Scientist/Technologist	Nutrition Educator Researcher Sports Nutritionist	Public Health Nutritionist Health Coach Corporate Wellness Consultant	Environmental Health Officer HACCP Coordinator Food Safety Inspector	Food Policy Analyst Food Fraud Investigator Sustainability Manager	Food Sociologist/Anthropologist Food Journalist/Writer Behavioral Scientist
SMSC Links	Spiritual: Learners apply government guidelines for healthy eating and dietary requirements to make healthy life choices.	Cultural: When researching, planning and making meals, learners are encouraged to learn about traditional British dishes in addition to dishes which originate from overseas regions. The wealth of different cultures within the classroom helps to ensure rich learning opportunities.	Social: Learners work together and accept responsibility for their behaviour and the safety of others when working in practical environments and online. We encourage them to look out for each other and ensure safe working practices are adhered to. Learners are encouraged to accept each other's strengths and weaknesses and teach them how to offer constructive feedback during peer assessment in a variety of curriculum areas.	Moral: Learners are taught about the FSA - Food Standards Agency, Natasha's law which helps to protect people with allergies and the food safety act 1990. These are recapped from year 9 and studied in more detail. Moral: A wider range of factors affecting food choices are studied in greater detail at KS4 in content area 4. These include social factors (religion, upbringing etc), environmental factors (carbon footprint, food miles etc) and seasonality.	Spiritual: F&C – vegan and vegetarianism is studied - beliefs around food. F&C – students learn about different religions food related rules.	

Topic	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
End Points (Knowledge and Skills)	Practical tasks will be given throughout the year 5. Food preparation, cooking skills and techniques 5.1 Key stages and the purpose of a recipe 5.2 The characteristics and function of ingredients 5.3 Preparation skills					

	<p>5.4 Cooking techniques and skills 5.5 Presentation skills to include garnishing and decoration</p> <p>A range of selected practical tasks, usually weekly, to enable students to practise and demonstrate the range of skills and techniques required by the GCSE. These include (but not limited to): knife skills, presentation techniques, weighing and measuring, testing for readiness, use of equipment (eg blender, pasta machine, food processor), use of different cooking methods, rolling out, shaping, coating, sauce making, dough making (eg bread, pasta, pastry), use of various raising agents, setting mixtures.</p> <p>Students will initially be given set recipes to follow. As the year progresses, students are expected to be increasingly independent and source (with guidance) their own recipes to fit the topics being studied.</p>
What is assessed	Ongoing teacher assessed practical.
Key Vocabulary	<p>Bridge hold Claw hold Caramelisation Dextrinisation Gelatinization Cooking utensils Cooking equipment Lamination Plasticity Shortening Aeration Knead</p>
Literacy Skills Developed (Writing/Oracy/Tier 2)	Literacy skills developed through quality teaching and the embedding of high expectations regarding the presentation of books. Key words are provided during theory lesson. Opportunities taken for oracy when appropriate.
Career Links (Employability Skills, Career Opportunities)	<p>Chef Caterer Food Stylist Food educator Recipe Developer</p>
SMSC Links	<p>Cultural: Learners cook a range of recipes from various influences across the globe. Self evaluation in food is critical to making progress and being a better cook. Learners are encouraged to evaluate every dish they make. Learners work together and accept responsibility for their behaviour and the safety of others when working in practical environments and online. We encourage them to look out for each other and ensure safe working practices are adhered to. Learners are encouraged to accept each other's strengths and weaknesses and teach them how to offer constructive feedback during peer assessment..</p> <p>Social: Food Learners will develop an understanding of how to adapt recipes to meet the needs of a range of individuals. By learning how other learners adapt recipes to suit their own needs, this will build tolerance and support diversity.</p>

# Year 11

Topic	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
End Points (Knowledge and Skills)	<b>6. Recipe amendment, development, and evaluation</b>  6.1 Recipe amendment  6.1.1 Amending and developing recipes  6.2 Evaluating completed dishes	<b>7. Menu and action planning for completed dishes</b>  7.1 Interpreting a customer brief  7.2 Menu planning  7.3 Action planning  7.4 Evaluating the planning and outcome of completed dishes against the requirements of a customer brief	<b>NEA tasks – (16.5 hours – 5.5 weeks)</b>  An internal synoptic project which will assess the knowledge and understanding from across the qualification.  The maximum mark for this assessment is 96.  This is a mixture of written work and practical tasks. These could include being asked to plan, prepare, and cook a number of dishes, as well as providing the relevant nutritional information linked to each dish.	<b>Completion of NEA and Exam Preparation</b>  Revision of all topics studied in year 10 to include any gaps in knowledge.  Pupils will use a variety of revision techniques including online tools, quizzes, demonstrations and past papers.	<b>Exam Preparation and Final written exam (80 marks).</b>  1h30m written exam.	
What is assessed	On going assessment	Mock exam	<b>Non-exam assessment (NEA)</b> Externally set, internally marked and externally moderated. 60% of the technical award. 96 marks The completion time for the NEA is 16 hours 30 minutes plus 2 hours preparation and research time.		Externally assessed written exam: 1 hour 30 minutes, 80 marks, 40% of GCSE.  A mixture of multiple-choice, short-answer and extended response questions.	
Key Vocabulary	Sensory evaluation Taste Texture Appearance Aroma	Action plan Customer brief Primary research Secondary research Dovetailing Menu	See vocabulary from previous units.			



Literacy Skills Developed (Writing/Oracy/Tier 2)	Literacy skills developed through quality teaching and the embedding of high expectations regarding the presentation of books. Key words are provided during theory lesson. Opportunities taken for oracy when appropriate.				
Career Links (Employability Skills, Career Opportunities)	Chef Caterer Food Stylist Food educator Recipe Developer Dietician Nutritionist Food Scientist/Technologist Nutrition Educator Researcher Sports Nutritionist Public Health Nutritionist Health Coach Corporate Wellness Consultant Environmental Health Officer HACCP Coordinator Food Safety Inspector Food Policy Analyst Food Fraud Investigator Sustainability Manager Food Sociologist/Anthropologist Food Journalist/Writer Behavioral Scientist				
SMSC Links	Social: Food Learners will develop an understanding of how to adapt recipes to meet the needs of a range of individuals. Learners secure their knowledge of factors that affect food choice, covered in Content Area 4. By learning how other learners adapt recipes to suit their own needs, this will build tolerance and support diversity.	Cultural: When researching, planning and making meals, learners are encouraged to learn about traditional British dishes in addition to dishes which originate from overseas regions. The wealth of different cultures within the classroom helps to ensure rich learning opportunities.	Spiritual: Learners are encouraged to use their prior knowledge of foods and previous practical experience to enhance their dishes.		