



Ansford Academy

Curriculum Booklet: Design and Technology

Department Lead: Mrs Claire Swallow

The Design and Technology curriculum at Ansford Academy aims to inspire, engage and enthuse by designing and making products that solve real and relevant problems, allowing students to learn iteratively using up to date technologies and processes, ensuring success for all by raising all students' aspirations to prepare them for career pathways suited to the 21st century.

We provide high quality design and technology education that encourages creativity and educates our students in essential knowledge of social, moral, sustainable, environmental and cultural issues along with basic life skills; we are a significant contributor in equipping our students with skills to be healthy, independent and capable, with empathy for the world and environment around us.

We actively promote STEM careers by exposing them to many career related pathways and to give them a sense of purpose as to the knowledge that they are being taught. At Ansford Academy we have high expectations of all children, including those with SEND, to follow the Design and Technology National Curriculum in full up to the end of Year 9. Design and Technology also lends itself to raising attainment and a sense of achievement for those students that typically find more traditional academic subjects harder to access; by naturally unpacking the learning by making more use of visual aids and prompts, physical aids, exemplary work and instruction aids. Students build confidence to take this subject further at KS4 and typically go on to make high levels of progress compared to their prior KS2 attainment. The subject has strong links with local industry, raising awareness of careers in design, engineering, business and other STEM related pathways and empowering our students to be confident to achieve their ambitions, without prejudice, based on their talents and interests.

We encourage our pupils to become 'designers of tomorrow'. We seek to ensure all of our pupils are well equipped with powerful knowledge that they will require during their life in the 21st century and an ever increasing technological world. By studying design and technology, pupils are given the opportunity to explore the world, understand humanity, to gain global knowledge and a glimpse into history. Just like professional designers, pupils are encouraged to undertake an innovative and iterative approach to their outcomes, to be adaptable and to take creative risk. We are seeking to develop critical thinkers who build confidence to solve problems and who are not afraid to reflect, seek constructive feedback or ask questions to further their development. To be successful in design and technology, attention to detail is vital and pupils will be expected to create high quality outcomes which are precise and accurate at all times, demonstrating the importance of good presentation and taking pride in one's work.

We have 'Golden Threads' running throughout the curriculum, which encompasses the core values of the subject and will stand our students in good stead for their future lives as a consumer, but above all, as a moral member of our society. These threads which are developed and built upon over the three years within KS3 include: Health & Safety, Sustainability and Ethics, Principles of Design, Drawing Skills, Computer Aided Design and Manufacture (CAD/CAM) and Materialogy.

Upon completion of their design and technology course here at Ansford Academy, our students will have a greater sense of being human. We hope that they understand the philosophies of user-centred design and user-experience design and are able to talk confidently to other humans to understand their needs and wants. Our students should be able to respond to this and to resolve problems. They should be able to think critically within different contexts and participate in solution-focussed discourse.

As a consumer, students should understand the human footprint on the world and be able to make educated choices. They should be able to consider dilemmas from a moral and ethical viewpoint. They should be able to sketch ideas creatively, using a number of different angles and perspectives. They should be able to draw to scale and create with precision and accuracy. They should understand the purpose of quality control and be able to recognise this, both within their own work and that of others. They should be able to justify their decisions and articulate their thoughts with confidence, defending that which they firmly believe in. They should be able to work collaboratively with others, to be flexible in team building situations and to be able to take the lead when necessary to ensure the job gets done. Finally, they should be able to manage their time effectively and work to deadlines sufficiently. They should be able to listen to feedback and to act upon this feedback objectively.

Key Stage 3 Curriculum Implementation

Ansford Academy has based KS3 Design and Technology on the National Curriculum and has divided it into four strands to improve student and parent understanding of related curriculum pathways at KS4. Using the National Curriculum's KS3 Design and Technology and the Principles of Study and guidance and training from the Design and Technology Association, our curriculum is based on a five-year generative programme, where knowledge and skills are introduced and built on from Year 7 to Y11 so that students are confident in the broad range of materials and processes needed for GCSE Design and Technology.

Students are taught in mixed ability groups at both KS3 and KS4, so our planning has an emphasis on providing support and challenge for all students. A range of differentiated activities are provided to students, including challenge tasks for students who require stretching and support and scaffolding of tasks for those who require more support.

Students are given regular opportunities to practise retrieving and applying their historical knowledge and understanding through low stakes quizzes and formal assessments. Students are also taught how to apply their knowledge and understanding to a range of skills-based, short and long written questions. We support the school's drive on reading by supplying students with a wide range of stimulus materials to work from including reading of different text types.

Key Stage 3

The school follows the MNSP Trust D&T curriculum. In KS3, students have 4 Design and Technology lessons a fortnight. In Year 7, Year 8 and Year 9 this enables students to experience approximately 10 weeks of lessons, on rotation, in each of the following:

- Textiles
- Product Design & Design Skills
- Food and Nutrition
- Design skills

A significant number of our students arrive at Ansford Academy with limited or no prior KS2 experience in Design and Technology and limited experience of the technical equipment and facilities available at our school, therefore the first unit in Year 7 for each of the specialisms focuses on health and safety in the respective area.

Key Stage 4

In KS4, students study can opt to study the following discipline, as part of the school's Options Process in Year 9:

- Level 1 and 2 Technical Award: Hospitality and Catering -provides learners with opportunities to study vocational subjects alongside GCSEs
- GCSE Product Design
- GCSE Textiles Design

Each year's actual curriculum delivery at KS4 depends on each individual cohort, but each course is designed to ensure that students can progress to study at College vocational course or academic A Level courses at Sixth Form.

Allocated Curriculum Time:

	Y7	Y8	Y9	Y10	Y11
Fortnightly lesson allocation	4	4	4	5	5

Year 7 Programme of Study

Rotation	Curriculum Foci	Assessment Criteria
1	Textiles - Ugly Doll. - Analyse existing products through product analysis - Design a product for a Target Market Group (TMG) - Develop your hand sewing skills - Accurately manufacture your own quality product - Understand embroidery techniques. - Research about how natural fibres are made into fabrics. - Understanding how to make textiles products more sustainable.	20 marks written test for Knowledge of Textiles materials and processes 30 marks drawing task for Designing a Bag for Life 50 marks for Making a Bag for Life
2	Food and Nutrition - Cooking Nutrition and Healthy Lifestyles - Applying health and safety when working in the kitchen - Understanding the importance of healthy eating and nutrition to health - Developing basic kitchen skills: peeling, chopping, rubbing in and presentation - Evaluating food products using sensory descriptors and star profile	40 marks written test for Knowledge of health and safety, the eatwell guide and the importance of nutrients to health 10 marks written task for Designing a healthy scone based pizza 50 marks for Making a range of healthy meals
3	Product Design - Sustainable Design - Understanding where materials come from. - Know about sustainability and renewable materials - Understand how to design for a target market. - Health and Safety in the workshop - Working with wood to make high quality products using a range of tools and processes. - Develop skills in designing and evaluating design ideas"	30 marks written test for Knowledge of sustainable materials. 30 marks drawing task for Designing a phone holder 30 marks for Making a phone holder using pine 10 marks for Evaluating products and their impact on Planet Earth
4	Design Skills - Develop your knowledge of Polymers. - Design for a Target Market Group. - Develop your CAD skills by learning how to design using 2D-Design software. - Know the advantages and disadvantages of using CAM equipment. - Be able to manufacture high quality and accurate products.	40 marks for Knowledge of Polymers 40 marks for Designing and developing a bookmark. 20 marks for Making processes using CAD and CAM

Rotation	Curriculum Foci	Assessment Criteria
1	Art Textiles - A Bag for Life - Understand about textile fibre sources e.g. natural and synthetic and fabrics, plain and woven. - Know how to set up and control the sewing machine. - Know how to construct a seam, construct a bag for life and how to insert handles onto a bag - Know how to use sublimation printing and hand embroidery as a method of adding surface decoration - Develop and communicate design ideas using annotated sketches	20 marks written test for Knowledge of Textiles materials and processes 30 marks drawing task for Designing a pyjama top 50 marks for Making pyjama shorts.
2	Food and Nutrition - Special Diets - Applying health, safety and food hygiene when working in the kitchen - Identify the different types of special diets, reasons for following and understanding their impact on organoleptic qualities and health - Understand and be able to adapt a recipe to meet the needs of an individual who has a specific dietary requirement - Further developing your practical kitchen skills (building from year 7) - Analysing food products using sensory descriptor words, completing a star profile and writing an evaluation.	10 marks for Designing knowledge for adapting recipes that are for special diets. 40 marks for Knowledge of Health and Safety and Nutrients 50 marks for Making a range recipes for special diets.
3	Product Design - Working with Metals - Understand how to identify different metals and their properties - Understand how to work with metal - Know how to cast metal using pewter - Know how to add an enamel finish to copper	40 marks for Knowledge of metals 20 marks for Designing based on a chosen design movement 40 marks for Making a range of metal products
4	Design Skills - STEM - Understand about a range of STEM knowledge and careers - Develop knowledge of different forms of energy - Develop knowledge of sustainability and renewable energy - Understand types of structures and forces - Understand different types of motion and mechanical systems - Work in teams on design challenges - Develop skills in designing, testing and improving design ideas.	50 marks for Knowledge of types of energy, structures and mechanisms 30 marks for Designing an architectural model in a chosen design style 20 marks for a Making a card mechanism storyboard.

Year 9 Programme of Study

Rotation	Curriculum Foci	Assessment Criteria
1	Art Textiles - Creative waste and Wearable Art - Understand the impact that the fashion and textiles industry has on the environment. - Know the 6R'S of sustainability and how they can help reduce the impact on the environment. - Work with a range of textiles materials - Know how to independently set up and control the sewing machine. - Explore a range of decorative embroidery including hand and machine embroidery. - Test, evaluate and refine their ideas and products against a specification, taking into account the views of intended users and other interested groups. - Understand how to produce a range of samples using decorative techniques: stitch and slash, sublimation printing, reverse applique, hand embroidery, beading. - Analyse the work of other textiles artists to gather inspiration for their own design. - Develop and communicate design ideas using annotated sketches	20 marks written test for Knowledge of sustainable fashion and decorative embroidery and printing techniques. 30 marks drawing task for Designing a creative panel inspired by the work of other textile artists. 50 marks for Making a panel that can be added to an item of clothing.
2	Food and Nutrition - What's on the menu? And Fakeaways. - Understand the importance of good nutrition - Understand specific nutritional requirements of specific groups - Understand health implications if nutritional needs are not met - Develop your preparation, knife and cooking skills by cooking a range of challenging dishes - Adapt recipe dishes to meet the needs of a specific group - Plan a recipe that is more considerate to the needs of a specific group - Evaluate recipe dishes using sensory descriptors, completing a star profile - Apply health, safety and food hygiene in the kitchen - Identify and understand the big challenges facing our food industry - Take practical action to become more sustainable	50 marks written test for Knowledge of designing menus to meet specific nutritional requirements and considering sustainability. 50 marks for Making a range healthy recipes for a school canteen.
3	Product Design - Lighting - Understand different production methods - Understand the impact of AI of product design and manufacture - Develop skills in CAD/CAM - Laminate timber to create curves - Work with wood to make high quality products using a range of tools and processes. - Understand how production aids are used in batch production - Create production schedules and flow charts - Carry out non stereotypical design - Create high quality products making use of CAD/CAD - Understand systems, control, intelligent electronics,	30 marks written test for Knowledge of industrial manufacture and electronic products 30 marks drawing task for Designing a lamp using technical drawing methods. 30 marks for Making a USB powered lamp 10 marks for Evaluating electronic products and their impact on Planet Earth

	sensors, feedback systems, actuators, motors and microcontrollers • Understand new and emerging technologies	
4	• Understand how designs are influenced by different target market group needs. • Understand the difference between market pull and technology push. • Model and prototype using the iterative design process and user centred design. • Work as part of a team to test, develop solutions to real world design problems. • Carry out relevant research to aid design development. • Present design ideas, showing oracy skills, entrepreneurial skills and attributes.	• 20 marks for Knowledge of designing principles • 20 marks for Designing and developing a prototype.



https://www.wjec.co.uk/qualifications/level-1-2-vocational-award-in-hospitality-and-catering/#tab_keydocuments

Term	Curriculum Foci	Assessment Criteria
1	Unit 1 - The Hospitality and Catering Industry Students study and understand hospitality and catering provision (1.1) Learning tasks: • Know the different types of hospitality and catering providers • Understand working in the hospitality and catering industry • Understand working conditions in the hospitality and catering industry • Understand the factors that contribute to the success of hospitality and catering provision • Developing practical cooking skills and presentation (Unit 2 – Hospitality and Catering in Action)	40 mark knowledge assessment on Hospitality and Catering provisions.
2	Unit 1 – The Hospitality and Catering Industry Students study and understand how hospitality and catering provisions operate (1.2) Learning tasks: • Understand the operation of front and back of house • Understand how the industry meets customer requirements • Understand how hospitality and catering provision meets specific requirements, e.g. customer requirements, expectations and customer demographics Health and safety and in hospitality catering (1.3) Learning tasks: • Understand health and safety in hospitality and catering provision • Know and understand the importance of food safety • Developing practical cooking skills and presentation (Unit 2 – Hospitality and Catering in Action)	40 mark knowledge assessment on How Hospitality and Catering providers operate.
3	Unit 1 – The Hospitality and Catering Industry Students study and understand food safety in hospitality and catering (1.4) Learning tasks: • Know food related causes of ill health • Know and understand symptoms and signs of food induced ill health • Know and understand preventative control measures to prevent food induced ill health • Know and understand the role of the Environmental Health Officer • Developing practical cooking skills and presentation (Unit 2 – Hospitality and Catering in Action)	40 mark knowledge assessment on How Hospitality and Catering providers apply food safety.

4	Unit 2 – Hospitality and Catering in Action Students study and understand the importance of nutrition (2.1) Learners tasks: • Know and understand the importance of nutrition • Know and understand how cooking methods can impact on nutritional value • Developing practical cooking skills and presentation (Unit 2 – Hospitality and Catering in Action)	40 mark assessment on The Importance of Nutrition.
5.	Unit 2 – Hospitality and Catering in Action Students study and understand the importance of menu planning (2.2) Learning tasks: • Understand factors affecting menu planning, e.g. cost, portion control etc. • Know how to plan production • Developing practical cooking skills and presentation (Unit 2 – Hospitality and Catering in Action)	40 mark assessment on factors that affect menu planning.
6.	• Unit 2 – Hospitality and Catering in Action • Students will take part in a <u>mock synoptic project</u> (Unit 2) • • Learners tasks: • A synoptic project is based around a brief issued from the exam board and has set criteria that students need to complete, including a practical assessment. • Students will apply their knowledge gained over the course to the brief (theory tasks 1, 2 & 4) and carry out a practical (task 3) where students must demonstrate their knowledge of health and safety, food safety and their practical skills (preparation, knife, cooking and presentation skills), relevant to the brief, meeting situational and customer requirements). • In year 10, Term 6 students will also take part in a mock exam fo	Mock NEA assessment on full mock synoptic project.



https://www.wjec.co.uk/qualifications/level-1-2-vocational-award-in-hospitality-and-catering/#tab_keydocuments

Term	Curriculum Foci	Assessment Criteria
1	Unit 2 – Hospitality and Catering in Action Students will have a focused term recapping unit 2 knowledge and x4 intensive practicals to prepare for their synoptic project in term 2 Learning tasks: • Importance of nutrition • Cooking methods • Menu planning • Production planning • Intensive practicals	40 mark assessment recapping Unit 2 knowledge.
2	Unit 2 – Hospitality and Catering in Action Students take part in their examined synoptic project (theory and practical) Learning tasks: Students will follow a brief (set by the exam board) that has set criteria the students need to complete, including a practical assessment.	Synoptic project
3	Unit 1 – Hospitality and Catering Industry Students will have a focused term recapping unit 1 knowledge and developing their exam skills and written answers in preparation for their summer examination Learning tasks: • Understand hospitality and catering provision • Understand how hospitality and catering provisions operate	40 mark assessment recapping Unit 1 Knowledge on hospitality and catering provisions.
4	Unit 1 – Hospitality and Catering Industry Students will have a focused term recapping unit 1 knowledge and developing their exam skills and written answers in preparation for their summer examination Learning tasks: • Understand health and safety in hospitality and catering • Understand food safety in hospitality and catering	40 mark assessment recapping Unit 1 knowledge on health and safety.
5	Study Leave	
6	Unit 2 – Hospitality and Catering in Action Students will have a focused term recapping unit 2 knowledge and x4 intensive practicals to prepare for their synoptic project in term 2 Learning tasks: • Importance of nutrition • Cooking methods • Menu planning • Production planning	



- Intensive practicals

Year 10 GCSE Design and Technology/ Product Design (AQA)

Exam Board: AQA

Exam Specification:8552

<https://www.aqa.org.uk/subjects/design-and-technology/gcse/design-and-technology-8552/specification-at-a-glance>

Term	Curriculum Foci	Assessment Criteria
1	Section B: Specialist Technical Principles in working with timber • Theory of timber and boards – characteristics / properties /seasoning and conversion • Sustainability of timber – ethical / ecological / life cycle issues /research on deforestation. • wood finishes – workability of different timbers • Working with wood -chiselling, drilling, planes, laminating, routing, turning • Temporary fittings and components – nuts and bolts, wood screws, countersink, pilot holes, clearance holes, drilling jigs – batch production	40 marks exam style questions from Section B of the paper, focusing on timber specialist knowledge.
2	Section A: Core Technical Principles • Core knowledge of quantity production • Product analysis of electronic products – mobile phone – maintenance issues – built in obsolescence, ecological /social footprint • core knowledge of polymers / natural plastics including life cycle of polymers – 6Rs • 3D drawing techniques – isometric and exploded • Enterprise – crowdfunding / virtual marketing / fairtrade	40 marks exam style questions from Section A (short answer multiple choice) and section C of the paper (Design and Making principles).
3 - 4	Section C: Designing and Making principles Mini contextual challenge to: • Identify a user/client/focus group that is relevant to the contextual challenge and undertake a comprehensive investigation of their needs and wants, with a clear explanation and justification of all aspects. • show evidence of investigation to support and inform ideas and to write a short design brief and define design specification criteria, which is fully justified, linking to the needs and wants of the client/user and informs design ideas. • Sketch out a range of initial design ideas that are imaginative, creative and innovative. These should have been generated avoiding design fixation and with full consideration of functionality, aesthetics and innovation. • Demonstrate evidence of iterative design, which could have resulted from considerations linked to testing, analysis and evaluation of sketches and /or modelling of a prototype.Students then present their idea to other D&T students and obtain evaluative feedback to justify any modifications they would propose for future developments.	Practise mini NEA = 45 marks: • Identify, investigate & outline design possibilities (5 marks) • Producing a design brief and specification (5 marks) • Generating Design Ideas (10 marks) • Development design ideas (10 marks) • Realising design ideas (10 marks) • Analysing and evaluating (10 marks)
5	Section A: Core Technical Principles	Year 10 Exam



	Through a series of theoretical lessons students will learn about a broad range of materials and their properties: • Mechanisms • Papers and Boards • Metals and Alloys • Textiles • Electronics Revision for Year 10 Exam • Revision lessons to recap majority of theory for the mock exam	
6	Non – examined Assessment (NEA) The exam board releases three design contexts for students to choose from in order to start their NEA final project, worth 50% of the GCSE. Through term 6 and the summer holidays students spend their time investigating their chosen design context and establishing their own design brief and specification.	NEA AO1: Identify, investigate & outline design possibilities (20 marks)

Year 11 GCSE Design and Technology/ Product Design (AQA)

Exam Board: AQA

Exam Specification: 8552

<https://www.aqa.org.uk/subjects/design-and-technology/gcse/design-and-technology-8552/specification-at-a-glance>

Following on from starting their NEA final project in term 6 of Y10, students continue with their NEA design development at the start of Year 11. The focus for the first three terms of Year 11 is to complete their NEA, including making a final, functioning prototype. Once the NEA is complete, students recap the theory covered in Year 10 and focus on exam technique in preparation for the final exam.

Term	Curriculum Foci	Assessment Criteria
1	Non- examined-assessment (NEA) - Generating and developing design ideas for the NEA final project. - Students present their initial design ideas to the class and evaluate them, going on to produce further ideas that show experimentation and clear communication, using a wide range of techniques and design strategies for different purposes. Formal external assessment details	NEA –A A01– Investigating chosen design context, Design Brief, Specification (20 marks) = End of September A02 C – Generating design ideas (20 marks) = End of October
2	Non- examined-assessment (NEA) - Realising design ideas and creating a final prototype - Students are to carry out detailed development work using a wide range of 2D and 3D techniques, including CAD where appropriate, in order to develop a prototype - Students need to demonstrate they can select the correct tools, materials and equipment, (including CAM where appropriate, and use them consistently safely and with a high level of skill - Students need to ensure the prototype is made accurately by consistently applying quality control checks to very close tolerances. Formal external assessment details Mock Exam Revision - Recap of knowledge covered in Year 10 for Section A, Section B and Section C of the exam paper Demonstrate and apply knowledge and understanding of: - Core Technical principles - Specialist Technical principles - Designing and Making principles	A02 D – Developing design ideas (20 marks) = End of November AO4 – full mock exam
3	Non- examined-assessment (NEA) - Finalising a final, functioning prototype and testing and evaluating it - Students need to complete comprehensive testing of all aspects of the final prototype against the design brief and specification. They need to justify any modifications they have made or would propose for future developments.	A02 E – Realising Design Ideas (20 marks) = End of February
4	Non- examined-assessment (NEA) Students need to complete comprehensive testing of all aspects of the final prototype against the design brief and	NEA-AO3 – analysing and evaluating plus full NEA marking= Mid



	specification. They need to justify any modifications they have made or would propose for future developments	March
5.	Revision and Exams	



<https://www.aqa.org.uk/subjects/design-and-technology/gcse/design-and-technology-8552/specification-at-a-glance>

Term	Curriculum Foci	Assessment Criteria
1	Section B: Specialist Technical Principles in working with textiles - Theory of textiles – characteristics / properties - Flame retardants reduce combustion and fire hazards. - Sustainability of textiles – ethical / ecological / life cycle issues. - Research on mileage of product from raw material source, manufacture, distribution, user location and final disposal. - Theory of laminating – bagpress – flexiply – compression / bending / grain direction adding strength – tension/compression - Research examples scales of production for textiles products - textiles finishes – workability of different textiles - Working with textiles - how to sew, pleat, gather, quilt and pipe - Temporary fittings and components – zips, buttons, poppers, velcro.	40 marks exam style questions from Section B of the paper, focusing on timber specialist knowledge.
2	Section A: Core Technical Principles - Core knowledge of quantity production - Product analysis of electronic products – mobile phone – maintenance issues – built in obsolescence, ecological /social footprint - core knowledge of polymers / natural plastics including life cycle of polymers – 6Rs 3D drawing techniques – isometric and exploded - Enterprise – crowdfunding / virtual marketing / fairtrade	40 marks exam style questions from Section A (short answer multiple choice) and section C of the paper (Design and Making principles).
3 - 4	Section C: Designing and Making principles Mini contextual challenge to: - Identify a user/client/focus group that is relevant to the contextual challenge and undertake a comprehensive investigation of their needs and wants, with a clear explanation and justification of all aspects. - show evidence of investigation to support and inform ideas and to write a short design brief and define design specification criteria, which is fully justified, linking to the needs and wants of the client/user and informs design ideas. - Sketch out a range of initial design ideas that are imaginative, creative and innovative. These should have been generated avoiding design fixation and with full consideration of functionality, aesthetics and innovation. - Demonstrate evidence of iterative design, which could have resulted from considerations linked to testing, analysis and evaluation of sketches and /or modelling of a prototype. Students then present their idea to other D&T students and obtain evaluative feedback to justify any modifications they would propose for future developments.	Practise mini NEA = 45 marks: - Identify, investigate & outline design possibilities (5 marks) - Producing a design brief and specification (5 marks) - Generating Design Ideas (10 marks) - Development design ideas (10 marks) - Realising design ideas (10 marks) - Analysing and evaluating (10 marks)
5	Section A: Core Technical Principles Through a series of theoretical lessons students will learn about a broad	Year 10 Exam

	range of materials and their properties: • Mechanisms • Papers and Boards • Metals and Alloys • Timbers • Electronics Revision for Year 10 Exam • Revision lessons to recap majority of theory for the mock exam	
6	Non – examined Assessment (NEA) The exam board releases three design contexts for students to choose from in order to start their NEA final project, worth 50% of the GCSE. Through term 6 and the summer holidays students spend their time investigating their chosen design context and establishing their own design brief and specification.	NEA AO1: Identify, investigate & outline design possibilities (20 marks)

Year 11 GCSE Design and Technology/ Product Design (AQA)

Exam Board: AQA

Exam Specification: 8552

<https://www.aqa.org.uk/subjects/design-and-technology/gcse/design-and-technology-8552/specification-at-a-glance>

Following on from starting their NEA final project in term 6 of Y10, students continue with their NEA design development at the start of Year 11. The focus for the first three terms of Year 11 is to complete their NEA, including making a final, functioning prototype. Once the NEA is complete, students recap the theory covered in Year 10 and focus on exam technique in preparation for the final exam.

Term	Curriculum Foci	Assessment Criteria
1	Non- examined-assessment (NEA) - Generating and developing design ideas for the NEA final project. - Students present their initial design ideas to the class and evaluate them, going on to produce further ideas that show experimentation and clear communication, using a wide range of techniques and design strategies for different purposes. Formal external assessment details	NEA –A A01– Investigating chosen design context, Design Brief, Specification (20 marks) = End of September A02 C – Generating design ideas (20 marks) = End of October
2	Non- examined-assessment (NEA) - Realising design ideas and creating a final prototype - Students are to carry out detailed development work using a wide range of 2D and 3D techniques, including CAD where appropriate, in order to develop a prototype - Students need to demonstrate they can select the correct tools, materials and equipment, (including CAM where appropriate, and use them consistently safely and with a high level of skill - Students need to ensure the prototype is made accurately by consistently applying quality control checks to very close tolerances. Formal external assessment details Mock Exam Revision - Recap of knowledge covered in Year 10 for Section A, Section B and Section C of the exam paper Demonstrate and apply knowledge and understanding of: - Core Technical principles - Specialist Technical principles - Designing and Making principles	A02 D – Developing design ideas (20 marks) = End of November AO4 – full mock exam
3	Non- examined-assessment (NEA) - Finalising a final, functioning prototype and testing and evaluating it - Students need to complete comprehensive testing of all aspects of the final prototype against the design brief and specification. They need to justify any modifications they have made or would propose for future developments.	A02 E – Realising Design Ideas (20 marks) = End of February
4	Non- examined-assessment (NEA) Students need to complete comprehensive testing of all	NEA-AO3 – analysing and evaluating plus full

	aspects of the final prototype against the design brief and specification. They need to justify any modifications they have made or would propose for future developments	NEA marking= Mid March
5.	Revision and Exams	

Hospitality and Catering Revision and Support:

There are many ways in which you can support your child in the study of (WJEC Vocational Level 1/2 Hospitality and Catering) such as:

- Encouraging students to cook and bake at home
- Encouraging students to wash up at home
- Reading recipe books together
- Going out to different establishments and looking at how they run front of house.
- Revision guide: [New WJEC Level 1/2 Vocational Award in Hospitality & Catering: Revision Guide \(with Online Edition\) | CGP Books](#)

Hospitality and Catering Final Award Assessment Structure

Component	Weighting	Content
Unit 1: The Hospitality and Catering Industry	40%	Written Exam (External assessment) Topics: • Hospitality and catering provision • How hospitality and catering provisions operate • Health and safety in hospitality and catering • Food safety in hospitality and catering
Unit 2: Hospitality and Catering in Action	60%	Controlled Assessment Task (Internal Assessment) Unit 2 is a synoptic project that is based around a brief issued from the exam board and has set criteria that students need to complete, including a practical assessment. Students will apply their knowledge gained over the course (units 1 & 2) to the brief (theory tasks 1, 2 & 4) and carry out a practical (task 3) where students must demonstrate their knowledge of health and safety, food safety and their practical skills (preparation, knife, cooking and presentation skills), relevant to the brief, meeting situational and customer requirements).

D+T Product Design and Textiles Revision and Support:

There are many ways in which you can support your child in the study of (AQA GCSE (9-1) in DESIGN AND TECHNOLOGY) such as:

- AQA provide lots of very useful resources on their website, including:
 - NEA walkthrough
 - Material Areas
 - Practice questions
- BBC Bitesize also provides a similar resource bank to AQA
- All theory lessons and handouts will be stored on google classrooms for pupil use
- Theory revision session will be run #Once per fortnight
- Additional reading that will support pupils is available, most books are available to borrow.

D+T Product Design and Textiles Final GCSE Assessment Structure

Component	Weighting	Content
Written Exam (2 hrs)	50% of GCSE 100 marks total	Exam: The exam paper consists of three sections: ● Section A is multiple choice and assesses core content of Design and Technology GCSE across all material areas (20 marks) ● Section B is on Specialist Technical Principles in timber (PD) and Textiles. (30 marks). ● Section C assesses Designing and Making Principles without focusing on a material specialism (50 marks) ● Across sections A, B and C it will include 10 marks of applied maths questions at KS3 maths level.
Non-Exam Assessment (NEA)	50% of GCSE 100 marks total	Non-exam Assessment (NEA) Students will undertake an individual, personal project based on a contextual challenge provided by AQA. They will complete a portfolio folder of approximately twenty A3 pages and make a high quality final prototype. The project will test students' skills in- ● Investigating (20 marks) ● Design development (40 marks) ● Making (20 marks) ● Evaluating (20 marks)