

St Michael's Church of England High School Curriculum Plan

Design & Technology



The Aims of the Design and Technology National Curriculum

The national curriculum for Design and Technology at St. Michael's High school aims to ensure that all pupils:

- Develop the creative, technical and practical expertise needed to perform everyday tasks confidently and to participate successfully in an increasingly technological world.
- Build and apply a repertoire of knowledge, understanding and skills in order to design and make high-quality prototypes and products for a wide range of users.
- Critique, evaluate and test their ideas and products and the work of others.
- Understand and apply the principles of nutrition and learn how to cook.

Design and technology is an inspiring, rigorous, knowledge-rich and practical based subject. Using knowledge, skills, creativity and imagination, our pupils design and make products that solve real and relevant problems within a variety of contexts, considering their own and others' needs, wants and Christian values of courage, love, forgiveness, peace and equality. They acquire a broad range of subject knowledge and draw on disciplines such as English (reading, spelling, writing subject specific comprehensions), mathematics (measurements, quantities, percentages, areas and volumes), science, engineering, computing and art. Pupils learn how to take risks, become resourceful, innovative, enterprising and capable citizens. Through the evaluation of past and present design technology, they develop a critical understanding of its impact on daily life and the wider world. High quality and technology education makes an essential contribution to the creativity, culture wealth and wellbeing of the nation.

The national curriculum for design and technology is knowledge rich and ambitiously academic that aims to ensure all pupils:

- Develop the creative, technical and practical expertise needed to perform everyday tasks confidently and to Participate successfully in an increasingly technological world.
- Build and apply a repertoire of knowledge, understanding and skills in order to design and make high quality prototypes and products for a wide range of users.
- Critique, evaluate and test their ideas and products and the work of others.
- Understand and apply the principles of nutrition and learn how to cook.

Make a statement about how year 7 builds on from KS2 NC

Through a variety of creative design and make projects, our pupils at St. Michael's are taught the knowledge, understanding and skills needed to engage in an iterative process of designing and making across our three specialist areas. Students work in a range of domestic and local contexts such as in the home, school farm and industrial contexts including links with industry and industrial processes across all subjects in design and technology.

Key stage three projects are sequenced to ensure pupils build on their prior and existing knowledge, skills and understanding of Design and Technology from KS1 and KS2 and sequencing of topics continues throughout each specialist area.

Students enter **year 7** on a rotation of the three Design and Technology subjects; Resistant materials, Textiles and Food Technology over three terms. This is repeated throughout **year 8** and **year 9**, with skills, knowledge and understanding, revisited and underpinned with weekly quizzes based on knowledge organiser topics, set for homework alongside their class projects.

When designing and making, students are taught to:

Design

- Using research and exploration, such as the study of different cultures, to identify and understand user needs.
- Identify and solve their own design problems and understand how to reformulate problems given to them.

- Develop specifications to inform the design of innovative, functional, appealing products that respond to needs in a variety of situations.
- Use a variety of approaches including user centred design and biomimicry to generate creative ideas and avoid stereotypical responses.
- Develop and communicate design ideas using annotated sketches, detailed plans, 3D and mathematical modelling, oral and digital presentations and computer based tools.

Make

- Select from and use specialist tools, techniques, processes, equipment and machinery precisely, including computer aided manufacture.
- Select from and use a wider, more complex range of materials, components and ingredients, taking into account their properties.

Evaluate

- Analyse the work of past and present professionals and others to develop and broaden their understanding.
- Investigate new and emerging technologies
- Test, evaluate and refine their ideas and products against a specification, taking in to account the views of intended target users and other interested group.
- Understand developments in design and technology, its impact on individuals, society and the environment, and the responsibilities of designers, engineers and technologists.

Technical knowledge

- Understand and use the properties of materials and the performance of structural elements to achieve functioning solutions.
- Understand how more advanced mechanical systems used in student products enable changes in movement and force.
- Understand how more advanced electrical and electronic systems can be powered and used in student products (e.g. control outputs or programmable components)

Cooking and nutrition

As part of the students work with food, students are taught how to cook and apply the principles of nutrition and healthy eating.

'Instilling a love of cooking in students also opens a door to one of the greatest expressions of human creativity' - D&T programme of study

Learning how to cook is a crucial life skill that enables students to feed themselves and others affordably and well, now and in later life.

Students are taught:

- Understanding and applying the principles of nutrition and health.

- Cook a repertoire of predominantly savoury dishes so that they are able to feed themselves and others and health and varied diet.
- Become competent in a range of cooking techniques including selecting and preparing ingredients, using utensils and electrical equipment, applying heat in different ways, using an awareness of taste, texture and smell to decide how to season dishes and combine ingredients, adapting and using their own recipes.
- Understand the source, seasonality and characteristics of a broad range of ingredients.

Year 10

GCSE EDUQAS Design & Technology:

By the end of KS3, all students will have studied design and technology for 3 years covering three terms of each specialist area: resistant materials, food technology and textiles from a structured and sequenced curriculum plan. Students will start the two year GCSE Design and Technology specification, and will continue to explore and complete a range of design and make tasks and projects, building on and further developing their design and practical based skills and further developing their knowledge and understanding of design and technology in our world.

Level 1/2 OCR Child Development

Students prior learning and understanding of Child development is predominately based from their own personal experiences of having younger siblings and who are keen in studying health and social care, child care, nursing and midwifery at KS4 and beyond. Students will have already learnt about healthy eating and nutrition at KS3 which will sequence and prepare students for completing the requirements of RO58 which is partly based on preparing a meal for a child aged between 0-5 years.

The Cambridge National in Child Development encourages students to:

- understand and apply the fundamental principles and concepts of Child Development to include health and well-being, creating a safe environment, the nutritional needs of children from birth to five years, and the development of children from one to five years
- develop learning and practical skills that can be applied to real-life contexts and work situations
- think creatively, innovatively, analytically, logically and critically
- develop independence and confidence in using skills that would be relevant to the childcare sector and more widely

Level 1/2 WJEC Hospitality & Catering

Students who have opted to study this course will have learnt about food technology for one term in years 7, 8 and 9. They will be secure in health and safety requirements of a food environment, understand about nutrition, preparing and cooking healthy and nutritious recipes, seasonality and where food comes from.

Students will complete unit 1 and prepare for unit 2 in the summer term.

Unit 1: Studying the hospitality and catering industry

Unit 2: Hospitality and catering in action (NEA)

GCSE Art Textiles

From September 2017, GCSE Textiles has been taught via the AQA Art Textiles specification in order to match the skills of the teacher where textiles can remain as the specialist focus. Although Textiles now

falls under the Art Curriculum plan, students are equipped with a wide range of practical based skills that will be developed at KS4 through their art textiles GCSE. Skills include a range of print making including screen and block, batik techniques, mark making through embroidery and a range of hand and machine methods of stitching.

Year 11

GSCE EDUQAS Design and Technology

Following on from year 10, students are required to complete the following two components throughout year 11.

- Design and Technology in the 21st Century: written examination -2 hours
(50% of qualification) 100marks which is sat in May.
 - Design and make Design and technology and our world
 - Smart materials
 - Electronics systems and programmable components
 - Mechanical components and devices
 - Materials
- e task: Non examined assessment. Visiting moderator during the first week of May .
(50% of qualification) 100 marks. Contexts are released to students in September. Final entry of grades for NEA is the first week of May.

Level ½ WJEC Hospitality & Catering

Students continue with the principles of hospitality and catering and prepare for the non-examined assessment (Unit 2) which involves both theory and practical based tasks. Exam preparation continues through the months of May and mid June.

Level ½ OCR Child Development

Students

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Year 12 and 13

WJEC A Level Design and Technology

Students opting for A level design and technology explore and develop a greater knowledge of the 10 principles of core knowledge and understanding and 5 topic areas, specialising in natural and manufactured timber. Students continue building upon their existing experience of design and technology in the world we live in, the environmental, social and moral factors within local and wider communities including industrial practice, consumers rights and the law. Industrial links and school trips to local manufacturers and local timber yards allow students to see first-hand experience of manufacturing

processes in action and to research processes and ask questions directly to specialists, furthering opportunities for work experience and bespoke workshops led by people in industry. Trips to local museum and art galleries give students the opportunity to deepen their research skills and departmental links with higher education allow students to network and find out more of the degree courses available and careers that lead from the qualifications.

Key Stage 3

What are the Big Ideas in Design and Technology?

What are the Big Ideas in Design & Technology?

Designing	Problem solving	Manufacturing techniques, processes and systems
<ul style="list-style-type: none"> Research Product analysis Design brief and specification Iterative approach 	<ul style="list-style-type: none"> Design ideas Design development Modelling Materials Analysing and evaluating Environmental considerations (6Rs) 	<ul style="list-style-type: none"> Hand techniques including use of tools/equipment Use of machines, equipment, appliances CAD/CAM Measuring/Dimensions/quantities Scales of production

What are the Big Ideas in Design & Technology?

CAD/CAM	User needs	Tools & Equipment
<ul style="list-style-type: none"> Design development Pros/cons compared to traditional manufacturing methods. 	<ul style="list-style-type: none"> Products in Society Impact on culture Specification Target users Cultural and religious values 	<ul style="list-style-type: none"> Understanding and applying health and safety rules in each specialist room (D&T, Textiles and Food Technology) Hand tools, equipment, machinery, appliances

How are the Big Ideas developed through Key Stage 3

	Resistant materials	Textiles	Food Technology
Year 7	<p>Problem solving: Research children's toys/games</p> <p>Designing:</p> <ul style="list-style-type: none"> Design inspiration and research of popular cartoon faces, selecting a design brief <p>Tools & Equipment: Introduction to personal health and safety and of the workshop inc. machinery, equipment and handheld tools.</p> <p>Design & manufacturing skills, systems</p> <ul style="list-style-type: none"> Design ideas and 	<p>Designing:</p> <ul style="list-style-type: none"> Design inspiration inc. Research popular hand-held puppets, eg. Kermit or traditional glove puppets originating from South West China (historical reference) <p>Tools & Equipment: Introduction to personal health and safety in the textiles room including use of dyes and inks, equipment and sewing machines.</p> <p>Design & manufacturing skills</p>	<p>Problem solving: Research the school canteen menus</p> <p>Tools & Equipment: Introduction to health and safety in the food room environment including the correct use of equipment, utensils and appliances and importance of personal hygiene and keeping surfaces clean, inc. the sink and shelving areas.</p> <p>Manufacturing skills:</p>

	<p>development.</p> <ul style="list-style-type: none"> Practise tasks with pine and MDF materials, measuring and marking with accuracy Using equipment and hand tools inc. steel rules, measuring/markng out, tenon/coping saws and files Using machinery inc. the circular sander and pillar drill. Understanding a basic electronic system, electronic components & soldering methods to create a circuit and common electrical outputs e.g. LEDs and buzzers <p>User needs:</p> <ul style="list-style-type: none"> Understanding what people want/need. Ergonomics <p>Problem solving:</p> <p>Understanding the environment in relation to timber and reducing waste of materials.</p>	<ul style="list-style-type: none"> Design ideas and development Pattern making Hand stitching Transfer printing Tie dye Hand embroidery Sewing machine driving test Using the sewing machine <p>User needs:</p> <ul style="list-style-type: none"> Understanding what people want and need. Ergonomics <p>Problem solving:</p> <p>Understanding the environment in relation to natural/synthetic fibres and where they come and avoiding waste when using fabrics and materials.</p> <p>Understanding 2D flat patterns to manufacture the outcome.</p>	<p>Planning, preparing recipes inc. weighing of ingredients</p> <ul style="list-style-type: none"> Peeling, slicing, chopping, mixing, claw grip, bridge hold, dividing, rolling, whisking Using an oven Using the grill Using the hob <p>User needs:</p> <p>Understanding the Eat Well guide, and ability to modify recipes to suit different user diets including allergies.</p> <p>Problem solving:</p> <ul style="list-style-type: none"> Understanding the environment in relation to food, where it comes from, seasonality and reducing waste Sourcing of ingredients and understanding seasonality
Year 8	<p>Designing, CAD/CAM, manufacturing skills, systems:</p> <p>Building on knowledge of the design process, students develop research through product analysis, design and make skills including</p> <ul style="list-style-type: none"> Research the work of James Dyson computer aided design and manufacture Using the laser cutter Using the strip heater/line bender <p>Further understanding of systems and Control and that systems are made up of an input, process and output.</p> <p>Common electrical inputs and outputs</p> <ul style="list-style-type: none"> Input device - A <u>switch</u> turn a circuit on and off Output device - A <u>motor</u> <p>Problem solving:</p> <ul style="list-style-type: none"> Environmental considerations – carbon footprint using a computer and laser cutter Analysing existing products and own ideas to improve your design Evaluating against the design 	<p>User needs:</p> <p>Building on from understanding of user needs in year 7, a deeper understanding of a specification is explored, designed and applied to the mini monster project.</p> <p>Research existing characters e.g monsters inc.</p> <p>Designing, manufacturing skills</p> <p>Development of skills:</p> <ul style="list-style-type: none"> Researching & selecting patterns Adapting, modifying patterns Screen printing Block printing Advanced embroidery (couching) Advanced machining skills Understanding the use of CAD/CAM to manufacture templates and patterns <p>Problem solving:</p> <ul style="list-style-type: none"> Understanding 2D pattern and turning it in to a 3D outcome. Reducing waste by considering quantities of materials, patterns, using off cuts. 	<p>User needs:</p> <p>Understanding macronutrients and micronutrients and understanding that different people have different nutritional needs.</p> <p>Research celebrity chef Jamie Oliver 'school dinners' documentary</p> <p>Problem solving:</p> <ul style="list-style-type: none"> Where specialist ingredients can be sourced including specialist shops and supermarkets and farmer's markets. Understanding preservatives <ul style="list-style-type: none"> Vinegar to pickle foods like onions, eggs Salt to cure meat e.g. ham, bacon Sugar in jam preserves the fruit in it. <p>Developing cooking methods including baking</p> <ul style="list-style-type: none"> Analysing existing products and own ideas to improve your design Evaluating against the design brief/specification to make further improvements

	brief/specification to make further improvements	<ul style="list-style-type: none"> • Analysing existing products and own ideas to improve your design • Evaluating against the design brief/specification to make further improvements 	
Year 9	<p>Designing, manufacturing skills, systems:</p> <ul style="list-style-type: none"> • Research Brio/ Ikea wooden toys <p>To develop practical and manufacturing skills in the workshop using a combination of materials, components, machine, hand/electric equipment/tools</p> <ul style="list-style-type: none"> • To develop an understanding of ergonomics in design. • To understand testing and the importance of quality control. • To understand and apply the requirements of a design specification • To recognise and use a working drawing. <p>Motions and mechanisms – theory/teacher demo</p> <ul style="list-style-type: none"> • Linear, rotary, oscillating, reciprocating) • Gears, linkages, levers • Cams, Cranks, pulleys <p>Structures</p> <ul style="list-style-type: none"> • Sheet and frame <p>Systems</p> <p>Computer controlled systems</p> <ul style="list-style-type: none"> • Micro controllers • Robots (pros/cons- social/ethical impact on the community) <p>User needs</p> <p>Security systems protect people and property</p> <p>Problem solving</p> <p>Analysing existing products and own ideas to improve your design</p> <ul style="list-style-type: none"> • Evaluating against the design brief/specification to make further improvements 	<p>User needs</p> <p>Research IKEA products soft furnishings (target user need)</p> <p>Using cultural celebrations or biomimicry to inspire design in coming up with new ideas for surface patterns.</p> <p>Research methods to find out more of Day of The Dead or Nature inspired function/aesthetics.</p> <p>Designing</p> <ul style="list-style-type: none"> • A range of ideas that meet the specification • Planning how to make the product with: <ul style="list-style-type: none"> - Processes - Materials - Measurements - Tolerances - Finish - Quality control <p>Problem solving</p> <ul style="list-style-type: none"> • Analysing existing products and own ideas to improve your design • Evaluating against the design brief/specification to make further improvements 	<p>User needs, Designing and manufacturing skills:</p> <ul style="list-style-type: none"> • Research Heston Blumenthal <p>Planning a nutritionally balanced meal for a target user</p> <p>Understanding further cooking methods through teacher led demonstrations inc:</p> <ul style="list-style-type: none"> • Boiling • Simmering and poaching • Steaming • Stewing and braising • Shallow/deep fat frying • Stir frying • Microwaving • Grilling • Roasting <p>Problem solving</p> <ul style="list-style-type: none"> • Analysing existing products and own ideas to improve your design • Evaluating against the design brief/specification to make further improvements

What topics/projects are used to explore these ideas?

	Autumn Term	Spring Term	Summer Term
Year 7	Resistant materials	Textiles	Food Tech

	Steady hand game	Hand puppet project	Healthy eating project
Year 8	<u>Resistant materials</u> The electronic fan project (CAD/CAM) Electronics	<u>Textiles</u> Mini monster project	<u>Food Tech</u> Packed lunch project
Year 9	<u>Resistant materials</u> Sliding lid pencil case Series of teacher demonstrations	<u>Textiles</u> Day of the dead project Series of teacher demonstrations	<u>Food Tech</u> World food project Series of teacher demonstrations

Key Stage 4

GCSE Design and Technology

Exam board: EDUQAS	
Component 1	<p>Design and Technology in the 21st Century: written examination -2 hours (50% of qualification) 100marks</p> <p>Students study the technical principles which are core knowledge and understanding in 5 distinct topic areas and specialise in option C: Natural and manufactured timber to develop in depth knowledge and understanding of the materials.</p>
Component 2	<p>Design and make task: Non examined assessment. Visiting moderator. (50% of qualification) 100 marks</p> <p>Students are required to study core knowledge and understanding of the ten areas listed in the following table and are required to develop and apply these through a range of design and make tasks.</p> <p>In addition to the ten areas, students are required to cover in depth knowledge and understanding for natural and manufactured timber:</p>

How are the Big Ideas developed through Key Stage 4

	Design Principles	Making Principles	Technical Principles
Year 10	<ul style="list-style-type: none"> Understanding design and technology practice Understanding user needs Writing a design brief 	<ul style="list-style-type: none"> Selecting and working with materials and components Marking out Using tools and equipment Using specialist techniques Using surface treatments 	<ul style="list-style-type: none"> Design and technology and our world Smart materials Electronics systems and programmable

	<p>and specifications</p> <ul style="list-style-type: none"> Investigating challenges Developing ideas Investigating the work of others Using design strategies Communicating ideas Developing a prototype Making design and manufacturing decisions. 	<p>and finishes.</p>	<p>components</p> <ul style="list-style-type: none"> Mechanical components and devices Materials plus specialist area in natural and manufactured timbers.
Year 11	<ul style="list-style-type: none"> Understanding design and technology practice Understanding user needs Writing a design brief and specifications Investigating challenges Developing ideas Investigating the work of others Using design strategies Communicating ideas Developing a prototype Making design and manufacturing decisions. 	<ul style="list-style-type: none"> Selecting and working with materials and components Marking out Using tools and equipment Using specialist techniques <p>Using surface treatments and finishes</p>	<ul style="list-style-type: none"> Design and technology and our world Smart materials Electronics systems and programmable components Mechanical components and devices Materials

Teaching Schedule

	Autumn Term	Spring Term	Summer Term
Year 10	<ul style="list-style-type: none"> CAD/CAM Keyring project Sanding block project Jointed timber container 	<ul style="list-style-type: none"> Mock exam Timber container CAD Development Doorbell project (Systems and control, circuits and PCBs) 	<ul style="list-style-type: none"> Coursework preparation (focused practical tasks (Component 2))

Year 11	Component 2 <ul style="list-style-type: none"> • Section a • Section b • Section e 	Component 2 <ul style="list-style-type: none"> • Section c • Section d • Section e 	Component 2: Online grade entry Component 1: Exam in May
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Level 1/2 Hospitality & Catering

Exam board: WJEC	
Unit 1	40% exam
Unit 2	60% coursework

How are the Big Ideas developed through Key Stage 4

	Design and make	Analyse and evaluate	Knowledge/Theory
Year 10	<p>Students observe a variety of teacher led demonstrations before putting in to practise the skills learnt via recipe based tasks.</p> <p>Students prepare and make a variety of savoury and sweet dishes</p>	<p>Students analyse and evaluate on the practical based observations of preparation and cooking skills/techniques led by the teacher, allowing students to make independent and informed decisions for their own recipes and practical based tasks.</p>	<p>All hospitality and catering principles and knowledge is covered in theory lessons alongside using Illuminate H&C text books.</p> <p>Students use their knowledge of hospitality and catering and role play in a real life situation of planning and preparing a meal for a person in a hospitality setting.</p>
Year 11	Unit 2: Controlled assessment preparation	Unit 2: Controlled assessment preparation and tasks	Unit 1: Exam preparation

Teaching Schedule			
	Autumn Term	Spring Term	Summer Term
Year 10	Autumn term 1: Practical observations and tasks Theory based learning Autumn term 2: Practical based tasks Theory based learning Year 10 Mock	Spring term 1: Practical observations and tasks Theory based learning Spring term 2: Practical based tasks Theory based learning	Summer term 1: Unit 2 preparations: Practical observations and tasks Theory based learning Summer term 2: Unit 2 preparations: Practical observations and tasks Theory based learning
Year 11	Autumn term 1: Unit 2 preparation Autumn term 2: Unit 2 preparation Year 11 mock	Spring term 1: NEA/Controlled assessment Spring term 2: NEA/Controlled assessment Exam preparation and revision. Internal moderation External coursework sampling	Summer term 1: Exam preparation Exam Summer 2: Course completed

Level 1/2 Child Development

Exam board: OCR	
RO57 (old RO18)	Health and well-being for child development (Written paper 40%)
RO58 (old RO19)	Create a safe environment and understand the nutritional needs of children from birth to five years
RO59 (old RO20)	Understand the development of a child from one to five years

How are the Big Ideas developed through Key Stage 4

	RO57	RO58	RO59
Year 10	<p>Health and well-being for child development. This is assessed by an exam.</p> <p>In this unit you will learn about the importance of pre-conception health and reproduction, antenatal care and preparation for birth. You'll also learn about postnatal care and the conditions in which a child can thrive.</p> <p>Topics include:</p> <ul style="list-style-type: none"> • Pre-conception health and reproduction • Antenatal care and preparation for birth • Postnatal checks, postnatal care and the conditions for development • Childhood illnesses and a child safe environment 	<p>Create a safe environment and understand the nutritional needs of children from birth to five years. This is assessed by a set assignment.</p> <p>In this unit you will learn how to create a safe environment for children from birth to five years in childcare settings. You'll research and choose equipment that is suitable and safe for use and will learn about children's nutrition and dietary needs.</p> <p>Topics include:</p> <ul style="list-style-type: none"> • Creating a safe environment in a childcare setting • Choosing suitable equipment for a childcare setting • Nutritional needs of children from birth to five years. 	<p>Understand the development of a child from one to five years. This is assessed by a set assignment.</p> <p>In this unit you will learn the physical, intellectual and social developmental norms for children from one to five years. You'll understand the importance of creating plans and providing different play activities to support children in their development.</p> <p>Topics include:</p> <ul style="list-style-type: none"> • Physical, intellectual and social developmental norms from one to five years • Stages and types of play and how play benefits development • Observe the development of a child aged one to five years • Plan and evaluate play activities for a child aged one to five years for a chosen area of development.
Year 11 (New codes are in brackets)	<p>RO18 (RO57) – 3 in every 4 lessons LO3</p> <p>Mop up/finalise RO18</p> <p>Exam preparation</p>	<p>RO19 (RO57) – 3 in every 4 lessons LO4 & LO5</p>	<p>RO20 removed due to COVID adaptations for this 2022-23 only.</p> <p>/</p>

Teaching Schedule

	Autumn Term	Spring Term	Summer Term
Year 10	<p>RO58: Environment, equipment and nutrition LO1-4</p> <p>Access to the internet required for research</p> <p>RO57 - LO1, LO2: Factors when deciding to have a child, pre-natal tests, three stages of labour, pain relief, post-natal checks, development of a child.</p> <p><u>2 hours of controlled assessment RO19 practical in the Autumn term</u></p>	<p>RO58: Environment, equipment and nutrition RO20: PIES study of a child 0-5yrs Lo1-4</p> <p>Access to the internet required for research</p> <p>RO57 – LO1,LO2,LO3: Factors when deciding to have a child, pre-natal tests, three stages of labour, pain relief, baby born, post-natal checks, development of a child</p> <p>Year 10 mock exam</p>	<p>RO59: PIES study of a child 0-5yrs Lo1-4</p> <p>RO57 – LO3, LO4, LO5: LO3- Baby born. LO4- Immunisation and looking after a sick child. LO5- safety around the house, e safety, road safety.</p>
Year 11	<p>Autumn term 1: RO59: LO1, LO2, LO3 – Observation of a child.</p> <p>RO57 –lessons LO3</p> <p><u>Possibility of submitting entries for any January candidates</u></p> <p>Autumn term 2: Year 11 Mock exam</p>	<p>Spring term 1: RO57 –LO4 & LO5</p> <p>RO59: LO4 and continuation of RO57 (exam prep).</p> <p><u>January exam</u></p> <p><u>Submit entries for June candidates</u></p> <p>Spring term 2: Exam preparation and revision.</p> <p>Internal moderation</p>	<p>Summer term 1: Exam preparation and revision.</p> <p>OCR external coursework online entries</p> <p>External moderation samples sent to OCR</p> <p>Summer term 2: Course completed</p>

Key Stage 5

A level Design and Technology

Exam board:	EDUQAS
Paper 1:	50% Exam
Coursework:	50 Coursework

How are the Big Ideas developed through Key Stage 5

Year 12	Students opting for A level design and technology explore and develop a greater knowledge of the 10 principles of core knowledge and understanding and 5 topic areas, specialising in natural and manufactured timber. Trips to local museum and art galleries give students the opportunity to deepen their research skills and departmental links with higher education allow students to network and find out more of the degree courses available and careers that lead from the qualifications.	Students continue building upon their existing experience of design and technology in the world we live in, the environmental, social and moral factors within local and wider communities including industrial practice, consumers rights and the law. Industrial links and school trips to local manufacturers and local timber yards allow students to see first-hand experience of manufacturing processes in action and to research processes and ask questions directly to specialists, furthering opportunities for work experience and bespoke workshops led by people in industry.	Trips to local museum and art galleries give students the opportunity to deepen their research skills and departmental links with higher education allow students to network and find out more of the degree courses available and careers that lead from the qualifications.
Year 13	Contexts released by the exam board in September 80 hour NEA		

Teaching Schedule

	Autumn Term	Spring Term	Summer Term
Year 12	Awaiting confirmation of cohort for Sept 2022		
Year 13			

[illegible]