

Culcheth High School Key Stage 4 Curriculum Map 2026 - 2027

Subject: GCSE Design and Technology Year 11

Exam Board: AQA



	Autumn Term 1	Autumn Term 2	Spring Term 1	Spring Term 2	Summer Term 1	Summer Term 2
	NEA	NEA and PPE1	NEA and PPE2	NEA and Exam Preparation	Exam Revision	Exams
Key Concepts	Classroom based theory: 1 lesson per week dedicated to theory work and exam preparation. NEA: - Continue work on NEA portfolio. 3 lessons per fortnight plus homework. Section A: Identifying and investigating Design Possibilities - Task analysis - Client profile - Product analysis - Research analysis Section B: Producing a design brief and specification	Classroom based theory: 1 lesson per week dedicated to theory work and exam preparation, apart from the week before PPEs when all lessons are focused on exam preparation. PPE 1: - Core technical principles - Specialist technical principles - Designing and making principles NEA: - Continue work on NEA portfolio.	Classroom based theory: 1 lesson per week dedicated to theory work and exam preparation, apart from the week before PPEs when all lessons are focused on exam preparation. PPE 2: - Core technical principles - Specialist technical principles - Designing and making principles NEA: - Continue work on NEA portfolio.	Classroom based theory: 1 lesson per week dedicated to theory work and exam preparation. NEA: - Continue work on NEA portfolio. 3 lessons per fortnight plus homework. Section E: Realising design ideas (continued) - Present evidence of the prototype's manufacture together with tools and materials selected - Detail the sequence of	Classroom based theory: 5 lessons per fortnight dedicated to theory work and exam preparation. NEA: - Assessment and moderation of completed portfolios - Final grades are shared with students and projections are made to indicate exam scores required for target grades	Exam revision: - Core technical principles - Specialist technical principles - Designing and making principles - Self-guided revision with support available from school

	• Write an initial design brief statement • Explain and justify the requirements of the design brief • Produce a list of appropriate success criteria for the design specification • Justify design criteria according to the needs and wants of the user Section C: Generating design ideas • Produce design drawings of proposed solutions intended to meet the criteria outlined in the design specification • Avoid design fixation and experiment with different approaches to design problems • Annotate sketch work to explain function, aesthetics and innovation • Use presentation skills to enhance	3 lessons per fortnight plus homework. Section D: Developing design ideas • Explore the chosen idea • Create models to explore development • Use CAD to develop the chosen idea further • Show consideration of materials, components and client feedback • Produce formal 2D technical drawings • Produce formal 3D presentation drawings • Produce a manufacturing specification Practical outcome: Complete and keep a record of the manufacture of the final prototype ahead of presenting work in the portfolio	3 lessons per fortnight plus homework. Section E: Realising design ideas • Present evidence of the prototype's manufacture together with tools and materials selected • Detail the sequence of manufacture with reference to quality control	manufacture with reference to quality control Section F: Analysing and evaluating • Evidence of testing the product and evaluation of test results • Comparison of the final prototype with the design specification success criteria • Client feedback and summary evaluation • Reflection and proposals for further development • Evidence the completed prototype with annotated photographs		
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	aesthetics and communication					
Themes	Students choose from 3 design challenges set by AQA - They identify a suitable client and work with them to design, develop and manufacture a prototype for a product that meets the user's needs. They completed initial investigations in the later stages of Year 10. - This half term focuses on writing a design brief and specification and the presentation of design ideas - Alongside the NEA students continue to study the specification content based on the three main exam sections: - Core technical principles - Specialist technical principles	Students continue working on their NEA project. - This half term focuses on developing a chosen design proposal and starting to manufacture a prototype of their final design. - Alongside the NEA students continue to study the specification content based on the three main exam sections: - Core technical principles - Specialist technical principles - Designing and making principles - One week is given over to PPEs and students are off-timetable for most lessons. Any timetabled lessons are	Students continue working on their NEA project. - This half term focuses on documenting the production of their final prototype. - Alongside the NEA students continue to study the specification content and prepare for the PPE2 and final exams based on the three main sections: - Core technical principles - Specialist technical principles - Designing and making principles - One week is given over to PPEs and students are off-timetable for most lessons. Any timetabled lessons are given over to revision.	Students conclude their NEA project. - This half term focuses on completing and documenting the production of their final prototype and concluding the portfolio with a summary evaluation. - Projected scores will be shared with students based on portfolio completion; they can respond to this to improve their work prior to final submission - Alongside the NEA students continue to study the specification content and prepare for the PPE2 and final exams based on the three main sections: - Core technical principles	Students continue to study the specification content and prepare for the final exam based on the three main sections: - Core technical principles - Specialist technical principles - Designing and making principles - There is also input related to exam technique and maximising scores for different types of questions - All curriculum content will have been covered by the time exams start	Many students will be taking study leave during this half term however lessons, resources and support will continue to be available to students as timetabled

	Designing and making principles	given over to revision.		- Specialist technical principles - Designing and making principles		
Writing whole school literacy focus	- Writing, explaining and justifying the design brief. - Writing a specification to communicate and justify success criteria. - Annotating design work. - Written notes and completed worksheets in exercise books. - Practise written answers to exam style questions.	- Annotating development work. - Ongoing evaluation of development work. - Written explanation of a sequence of manufacture. - Using key vocabulary relating to materials, equipment and processes. - Written notes and completed worksheets in exercise books. - Practise written answers to exam style questions.	- Documenting the sequence of manufacture and demonstrating a clear understanding of tools, equipment, materials and fixings. - Explaining health and safety as well as quality control. - Written notes and completed worksheets in exercise books. - Practise written answers to exam style questions.	- Written explanation and justification of the prototype testing process. - Written documentation of and reflection on client feedback as well as personal reflections and proposals for further development of the NEA solution. - Written notes and completed worksheets in exercise books. - Practise written answers to exam style questions.	- Written notes and completed worksheets in exercise books. - Practise written answers to exam style questions.	Completing practice exam questions and extended response questions.
Spiritual, Moral, Social and Cultural theme (SMSC) Fundamental British Values	- Generating success criteria based on the needs and wants of a specific user / client - Showing consideration to the wants and needs of others and how they	- Developing design solutions in light of client feedback - Showing consideration of others in development work - Awareness of cultural impact of	- Communicating with others via images and text - Consideration of health and safety precautions to avoid potential hazards to themselves and others	- Sustainability and the impact of design and manufacture on society and the environment - Responsibility to meet requested deadlines	- Sustainability and the impact of design and manufacture on society and the environment - Moral and ethical approaches to design	- Independent study, perseverance and organisation - Seeking help where required (teacher support in school or via Google Classroom)

	- may differ from other people - Generating design solutions to meet the needs of other people - Sustainability and the impact of design and manufacture on society and the environment	- design and development and making appropriate decisions when selecting design features - Sustainability and the impact of design and manufacture on society and the environment	- Listening to and reflecting on the opinions of others - Checking own progress against success criteria - Sustainability and the impact of design and manufacture on society and the environment - Responsibility to meet requested deadlines	- Moral and ethical approaches to design - Technology push and its implications - Market pull and how consumers help drive design and development - Communication via visual media and dealing with language barriers - Independent study to improve work responding to feedback	- Technology push and its implications - Market pull and how consumers help drive design and development - The work of others and their influence on society	
Key Assessment Foci, suggested Assessments and Feedback week	- NB: All NEA work will be formally assessed and moderated following Spring term 2 after submission of completed portfolios and working to the holistic assessment criteria set by AQA. - Interim deadlines and marking are to be completed using estimated indicators that reflect the	- NEA Section C&D: (QMA2) Estimated grade - PPE 1 marked and moderated within the department, feedback to students during lessons. - NEA practical prototype assessment: ongoing verbal feedback and support. - Students are allowed to make further	- PPE 2 marked and moderated within the department, feedback to students during lessons. - Identify students required to make improvements and plan and implement support to ensure work is completed. - Students are allowed to make further improvements to their portfolio	- NEA Section E&F: Estimated grade - Initial assessment of NEA relating to level of portfolio completion and completed practical outcomes. - If necessary, students will be allowed to make further improvements to their portfolio during the half term break.	- Full day off timetable for all department staff to complete final moderation of design portfolios and agree upon proposed scores for all candidates. - NEA assessment focuses on quality and completion of work based on the holistic marking system prescribed by AQA.	- Independent revision - Teacher support available via Google Classroom or in school

	requirements of the eventual NEA assessment criteria. Estimated scoring will be used to inform students' forecast grades and to monitor their ability to meet deadlines, with interventions such as detentions and parental involvement where required. • NEA Section A&B: (QMA1) Estimated grade • Students are allowed to make further improvements to their portfolio during the half term break	improvements to their portfolio during the Christmas break.	during the half term break.		• Final NEA grades shared with students leaving time for appeals before submitting to AQA. • Final grades submitted to AQA and completed assessment documents and copies of portfolios for the requested sample sent to AQA moderator • Based on previous grade boundaries and NEA scores, projected scores for meeting different overall grade boundaries to be shared with students • Practice exam questions marked and fed back; highlight opportunities for improvements	
Special Events	• Interim NEA deadline (Section A&B)	• PPE 1 (week 11)	• PPE 2 (week 21)	• Completed portfolio deadline	• Formal NEA results completed,	

		• Interim NEA deadline (Section C&D)	• Interim NEA deadline (Section E&F)	• Portfolio amendments deadline	moderated and recorded • Formal NEA results shared with students • NEA results sent to AQA • Sample portfolios and assessment documents sent to moderator	
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