GCSE DESIGN & TECHNOLOGY YEAR 10 EXPANDED LEARNING PLAN

	TERM 1	**TERM 2**	**TERM 3**	**TERM 4**	**TERM 5**	**TERM 6**
Unit (theory)	Unit 6: Designing Principles	Unit 7: Making Principles	Unit 3: Materials Unit 2: energy + Systems (linked to project 2)	Unit 5B: Timber-based Materials	Unit 5D: Polymers	Unit 4: Common Specialist Technical Principles Unit 1: New & Emerging Technologies
Project (practical)	Project 1: Mixed Material Phone Dock • Idea generation • Modelling and working drawings	Project 1: Mixed Material Phone Dock • Manufacturing a prototype • Evaluation	Project 2: Articulated lighting • Systems approach • Idea generation • Modelling and working drawings	Project 2: Articulated lighting • Systems approach (electrical / mechanical) • Manufacturing a prototype • Evaluation	CAD skills • FPTs on Fusion • FPTs on 2D Techsoft Design • FPTs to enhance traditional graphical communication skills	NEA Coursework Project • Section A: Identifying and investigating design possibilities • Section B: Producing a design brief and specification • Section C: Generating Design Ideas (started)
Threshold Concepts	Design skills Creativity Innovation Health & Safety Dexterity Product analysis Independence CAD/CAM Practical skills	Design skills Creativity Innovation Health & Safety Dexterity Product analysis Processes Independence Practical Skills CAD/CAM Processes	Design skills Creativity Innovation Health & Safety Dexterity Product analysis Independence CAD/CAM Practical skills Sustainability Work of others	Design skills Creativity Innovation Health & Safety Dexterity Product analysis Processes Work of others Independence Practical skills Sustainability CAD/CAM	Independence Graphical communication skills CAD/CAM	Product Analysis Creativity Innovation Processes Independence Work of others *(relevant to individual's NEA project)* Innovation

Assessment for Learning	• End of Unit 6 assessment • Peer assessment *(homework and modelling)* • Teacher verbal feedback • Teacher written feedback (comments on Unit 6 and Project 1 assessment sheets)	• End of Unit 7 assessment • Peer assessment • Teacher verbal feedback • Teacher written feedback (comments on Unit 7 and Project 1 assessment sheets) • End of project 1 assessment and reflection	• End of Units 2 + 3 assessments • Peer assessment *(homework and modelling)* • Teacher verbal feedback • Teacher written feedback (comments on Units 2 + 3 and Project 2 assessment sheets)	• End of Unit 5B assessment • Peer assessment • Teacher verbal feedback • Teacher written feedback (comments on Unit 5B and Project 2 assessment sheets)	• End of Unit 5D assessment • Peer assessment • Teacher verbal feedback • Teacher written feedback (comments on Unit 5D) • End of skills tasks assessment and reflection	• End of Units 1 + 4 assessments • Peer assessment • Teacher verbal feedback • Teacher written feedback (comments on Units 1+ 4 and NEA Project assessment sheets)
Resources (links)	Iterative design - Designing - AQA - GCSE Design and Technology Revision - AQA - BBC Bitesize	Minimising waste - Making - AQA - GCSE Design and Technology Revision - AQA - BBC Bitesize	Systems - Systems approach to designing - AQA - GCSE Design and Technology Revision - AQA - BBC Bitesize Fossil fuels - Energy generation and storage - AQA - GCSE Design and Technology Revision - AQA - BBC Bitesize	Electronic and mechanical systems - Electronic and mechanical systems - AQA - GCSE Design and Technology Revision - AQA - BBC Bitesize	Polymers - Polymers - AQA - GCSE Design and Technology Revision - AQA - BBC Bitesize	Impact on industry - New and emerging technologies - AQA - GCSE Design and Technology Revision - AQA - BBC Bitesize

YEAR 11 EXPANDED LEARNING PLAN

	TERM 1	**TERM 2**	**TERM 3**	**TERM 4**	**TERM 5**	**TERM 6**
Unit (theory)	Link theory to NEA – review topics as required	Review top mark topics associated with Sections B+C of the examination	Exam revision (all units)	Exam revision (all units)	Exam revision (all units)	
Project (practical)	NEA Coursework Project • Section C: Generating Design Ideas • Section D: Developing Design Ideas	NEA Coursework Project • Section D: Developing Design Ideas • Section E: Realising Design Ideas	NEA Coursework Project • Section E: Realising Design Ideas • Section F: Analysing and Evaluating	NEA Coursework Project • Section F: Analysing and Evaluating • Final deadline		
Threshold Concepts	Design skills Creativity Work of others *(relevant to individual's NEA project)* Innovation Product Analysis Independence Practical skills CAD/CAM	Design skills Creativity Innovation Health & Safety Dexterity Analysis and evaluation Processes Work of others *(relevant to individual's NEA project)* Independence Practical skills Sustainability CAD/CAM	Design skills Creativity Innovation Health & Safety Dexterity Analysis and evaluation Processes Work of others *(relevant to individual's NEA project)* Independence Practical skills Sustainability CAD/CAM	Design skills Creativity Innovation Health & Safety Dexterity ACCESS FM Processes Work of others *(relevant to individual's NEA project)* Independence Practical skills Sustainability CAD/CAM	Design skills Creativity Innovation Health & safety Dexterity ACCESS FM Processes Independence Practical Skills CAD/CAM Processes	

Assessment for Learning	• Peer assessment • Teacher verbal feedback • Teacher written feedback (comments on NEA Project assessment sheet)	• Peer assessment • Teacher verbal feedback • Teacher written feedback (comments on NEA Project assessment sheet)	• Peer assessment • Teacher verbal feedback • Teacher written feedback (comments on NEA Project assessment sheet)	• Peer assessment • Teacher verbal feedback • Teacher written feedback	• Peer assessment • Teacher verbal feedback • Teacher written feedback	
Resources (links)	Home – PICAXE Let's code | micro:bit Electronic kits, coding & materials – Kitronik Ltd Design & Technology | Rapid Electronics		GCSE Design and Technology - AQA - BBC Bitesize			