Design Technology
Specification Content Audit

Core Technical Principles (CTP)3.1.1 New and emerging technologies	Industry
	Enterprise
	Sustainability
	People
	Culture
	Society
	Environment
	Production Techniques and systems
	Critical evaluation of new and emerging technologies
CTP 3.1.2 Energy generation and storage	Fossil Fuels
	Nuclear Power
	Renewable Energy
	Energy storage system including batteries
CTP 3.1.3 Developments in New Materials	Modern materials
	Smart Materials
	Composite Materials
	Technical Textiles
CTP 3.1.4 Systems Approach to Designing	Inputs
	Processes
	Outputs
CTP 3.1.5 Mechanical Devices	Different Types of Movement
	Changing Magnitude and Directions of Force **(Levers, Linkages and Rotary Systems)**
CTP 3.1.6 Material Categories	Papers and Boards
	TIMBERS: Natural and manufacturred
	Metals and Alloys
	Polymers
	Textiles
Specialist Technical Principles (STP)	3.2.1 Selection of Materials or Components
	3.2.2 Forces and Stresses
	3.2.3 Ecological and social Footprint
	3.2.4 Sources and Origins
	3.2.5 Using and working with materials
	3.2.6 Stock forms, types and sizes
	3.2.7 Scales of production
	3.2.8 Specialist techniques and processes
	3.2.9 Surface treatments and finishes
Designing and Making Principles (DMP)	3.3.1 Investigation, primary and secondary data
	3.3.2 Environmental, social and economic challenge
	3.3.3 The work of others
	3.3.4 Design Strategies
	3.3.5 Communication of design ideas
	3.3.6 Prototype development
	3.3.7 Selection of materials and components
	3.3.8 Tolerances
	3.3.9 Material management
	3.3.10 Specialist tools and Equipment
	3.3.11 Specialist techniques and processes

Michaelmas 1.1	Year 4 Learning Program DESIGN TECHNOLOGY	

Wk	Topic/Content	Objectives/Skills	Homework	Assessment	Success Criteria	Stretch & Challenge (Thirst for Learning)
1	**Theory:** DMP 3.3.1 primary and secondary data	Learn about industry and enterprise	Theory topic	Short tests and quizzes will be carried out in lessons alongside online tests using my dynamic learning	**Designing Assessment:** • AQA grading criteria	**Designing:** Developing CAD skills **Theory:** Using Technologystudent.com to learn about topics in more depth Research design eras in more depths
	Designing and Making Principles **(DMP)**	Context analysis Design Era storage				
2	**Theory: 3.3.3** The work of others	Learn about Art Deco Design era	Theory topic			
	DMP Project	Investigating to work of others				
3	**Theory:** CTP 3.3.3 The work of others	Learn about De Stijl design era	Theory topic			
	DMP Project	Client profile and interview				
4	**Theory:** CTP 3.3.3 The work of others	The investigate the work of large businesses (Apple/Dyson/Braun)	Completing design ideas and developments	**Designing assessment** Self assessment using success criteria for the contents covered so far.		
	DMP Project	Design strategies (3.3.4) for developing the product Paying particular attention to ITERATIVE designing				
5	**Theory:** CTP 3.3.3 The work of others	The investigate the work of large businesses (Apple/Dyson/Braun)	Evaluating the model	Short tests and quizzes will be carried out in lessons alongside online tests using my dynamic learning		
	DMP Project 3.3.6	Modelling development as part of the iterative design process.				
6	**Theory:** CTP 3.3.2 Environmental, social and economic challenge	To learn about the social and economic challenge of manufacturing products	Theory topic			
	DM Pproject	Iterative designing/modelling and recording of developments				
7	**Theory:** DMP 3.3.7	Learn about materials and components	Revision	Feedback on design and make project		
	DMP Project	Planning of manufacture				

Michaelmas 1.2	Year 4 Learning Program DESIGN TECHNOLOGY	

Wk	Topic/Content	Objectives/Skills	Homework	Assessment	Success Criteria	Stretch & Challenge (Thirst for Learning)
1	**Theory:** 3.3.4	3.3.4 design strategies Access FM and CAFEQUE	Theory topic	Short tests and quizzes will be carried out in lessons alongside online tests using my dynamic learning	**Practical Assessment:** 1. Product manufactured with precision • Marking out • Wastage • Quality of finish • Use of tools and equipment	**Theory:** Using Technologystudent.com to learn about the theory topics in more depth
	Designing and Making Principles **(DMP)**	PRACTICAL: Following a plan of manufacture for their unit				
2	**Theory: 3.3.4**	3.3.4 design strategies User centred design and client based approaches (ITERATIVE)	Theory topic			
	DMP	PRACTICAL: Following a plan of manufacture for their unit				
3	**Theory:** 3.3.4	3.3.4 design strategies Systems approach	Theory topic			
	DMP	PRACTICAL: Following a plan of manufacture				
4	**Theory:** 3.3.8	3.3.8 tolerances (maths link)	Theory topic			
	DMP	PRACTICAL: Following a plan of manufacture				
5	**Theory: 3.3.9**	3.3.9 Material management • Timbers	Theory topic			
	DMP	PRACTICAL: Following a plan of manufacture				
6	**Theory:** CTP 3.1.2	3.3.9 Material management • Plastics	Theory topic and revision	**Making assessment** Teacher and Self assessment using success criteria for the practical.		
	DMP	PRACTICAL: Following a plan of manufacture				
7	**Theory:** CTP 3.1.2	3.3.9 Material management • Metals	Revision	Design Making Principles Short Test **3.1.6**		
	DMP	PRACTICAL: Following a plan of manufacture				
8	**DMP**	Testing and evaluating the product against the specification				
	Theory	Short test		Design Making Principles Short Test		