CURRICULUM MAP Year 10 Students will develop independence and understanding of the:

- Core Technical principles
- Designing and making principle





								EOY Assessment Point
							HT6:	HT1 – HT6
						HT5	Overarching unit	End of Unit Assessments NEA
				HT4:	Assessment Point:	Overarching unit	<u>intent:</u>	
					Summative or AFL	intent:	Students will start their	Key Disciplinary
			HT3:	Overarching unit	HT3 and HT4	Core technical	NEA during this half term.	Knowledge Mechanical devices- End of
				intent:	(with elements of HT1	principles:	term.	unit test
	HT2:	Assessment Point:M	Overarching unit	Core technical	and HT2)	Mechanical devices Types of movement,	Designing and	Materials and their
		Summative or AFL	<u>intent:</u>	principles : Systems approach to designing,	End of Unit Assessments	levers and linkages	making principles	working properties- End of
HT1:	Overarching unit	HT1 & HT2	Core technical	Programming	Assessments	Rotary systems	(NEA): Investigation,	unit test
	intent:	End of Unit	principles :	microcontrollers	Key disciplinary		primary and secondary data, Environmental,	
		Assessments	Developments in new	Input devices	knowledge	Materials and their	social and economic	Key Concepts • Core technical
	Core technical		materials	Output devices	Developments in new	working properties.	challenge, The work of	principles :
Overarching unit	principles :	Key disciplinary	Modern materials	• Designing and	materials – End of unit test	Materials and their properties	others.	Mechanical devices
intent:	Energy generation and	knowledge	Smart materials Composite materials	making principles	Materials and their	Papers and boards		Materials and their
	storage Fossil fuels	New and emerging technologies – End of	Technical textiles	(Project Based):	working properties –	Natural and	Careers	working properties.
Core technical	Nuclear power	unit test		Prototype	End of unit test	manufactured timbers	Discussions into how	
principles : New and emerging	Renewable energy	Energy generation and	• Designing and making	development, Selection		Metals and alloys	the work produced	
technologies-	Energy storage systems	storage – End of unit	principles (Project	of materials and	Key Concepts	Polymers	during the NEA would	Students NEA will be assessed on the following
Industry and enterprise		test	Based): Investigation,	components,	Core technical	Textiles	allow them to gain valuable skills for future	criteria:
People, culture and	Designing and making		primary and secondary	Tolerances, Material	principles :	Caroors	careers.	Researching and
society	principles (Project	Key Concepts	data, Environmental, social and economic	management, Specialist tools and equipment,	Developments in new materials	<u>Careers</u> Guest speaker/ the	careers.	investigating (A)
Sustainability and the	Based): Prototype development, Selection	Core technical principles:	challenge, The work of	Specialist techniques	Systems approach to	STEM Ambassador		
environment	of materials and	New and emerging	others, Design	and processes.	designing,	Program. Mechanical		
Production techniques	components,	technologies	strategies,			Engineering.		
and systems Critical evaluation of	Tolerances, Material	Energy generation and	Communication of	<u>Careers</u>	Project based work			
new and emerging	management, Specialist	storage	design ideas.	Guest speaker/ the	will be assessed on the			
technologies	tools and equipment,			STEM Ambassador	following criteria:			
-	Specialist techniques		<u>Careers</u> Careers videos from	Program. Electronics/ Engineering.	 Researching and investigating (A) 			
 Designing and 	and processes.	Project based work	CAD/ CAM designers	Engineering.	Writing a design brief			
making principles	Careers	will be assessed on the following criteria:	and companies.		(B)			
(Project Based):	Research into the	Researching and			Generating ideas (C)			
Investigation, primary and secondary data,	different careers within	investigating (A)			• Developing ideas (D)			
Environmental, social	energy generation.	Writing a design brief			• Realizing an idea (E)			
and economic		(B)			Reflecting and			
challenge, The work of		Generating ideas (C)			evaluating (F)			
others, Design		 Developing ideas (D) 						

With God all things are possible Matthew 19:26

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strategies,	 Realizing an idea (E) 			
Communication of	 Reflecting and 			
design ideas	evaluating (F)			
Careers				
Research into the				
different careers within				
the manufacturing				
industry.				