

# Long Term Plan: Design Technology (RM) Year 10



	W/C 10/09	W/C 17/09	W/C 24/09	W/C 01/10	W/C 08/10	W/C 15/10	W/C 29/10	W/C 05/11	W/C 12/11	W/C 19/11	W/C 26/11	W/C 03/12	W/C 10/12	W/C 17/12
Term 1						Mid Term Test	Mid Term Test Feed Forward						Mid Term Test	Mid Term Test Feed Forward
	Theory	Theory	Theory	Theory	Theory	Test based on New and Emerging Technologies	Feed forward for Test	Theory	Theory	Theory	Theory	Theory	Test based on New and Emerging Technologies	Feed forward for Test
	Industry and Enterprise; looking at automation and enterprise.	Industry and Enterprise. Students gain understanding of virtual marketing and crowd funding	Sustainability and the Environment; Students look at LCA - Life Cycle Assessment	Sustainability and the Environment; Focusing on finite and non finite resources	People, Culture and Society; Market Pull and Technology Push. Also, ethical design			Production Techniques and Systems; Advantages and disadvantages of CAD CAM	Production Techniques and Systems; Looking at FMS Flexible Manufacturing Systems	Informing Design Decisions; Students gain understanding of planned obsolescence	Energy Generation; Students look at fossil fuels and alternative energy sources	Energy Storage and Modern Materials; Students research pneumatics, hydraulics, kinetic, fly wheel and batteries		
Term 2	W/C 31/12	W/C 07/01	W/C 14/01	W/C 21/01	W/C 28/01	W/C 04/02	W/C 11/02	W/C 25/02	W/C 04/03	W/C 11/03	W/C 18/03	W/C 25/03	W/C 01/04	W/C 08/04
	Theory	Theory	Theory	Theory	Mid Term Test	Mid Term Test Feed Forward	Theory	Theory	Theory	Theory	Mid Term Test	Mid Term Test Feed Forward	Theory	Theory
	Smart Materials; discuss the difference between Smart and Modern Materials. Provide examples materials and their properties	Composite Materials and Technical Textiles. Give examples of materials and their properties	Systems approach to designing; Students attempt to create a systems diagram. Using lamp circuit students gain understanding of input/output	Electronic approach to designing; students gain understanding of Integrated circuits and Microcontrollers	Test based on Energy, Materials, Systems and Devices	Feed forward for Test	Mechanical Devices; Students look at different types of levers i.e. first class lever and linkages. Students cut out and assemble linkages from template on LG	Theory on Materials; Paper and Board; Timbers; Metals; Polymers and Textiles. Students create a research pages on materials stated	Common Specialist Principles ; Forces and stresses. Ecological Footprint; 6 R's and Scales of production	Papers and Boards based materials. Cover the origin, properties, commercial manufacturing and treatments finishes. Set as homework to finish - will take longer than class time to complete	Test based on Materials and their Working Properties	Feed forward for Test	Commercial production and standard components for graphics and resistant materials. Students must know name of component and function	Timber and metal based materials. Polymers and Textile based materials. Create a research page to include images and properties
Term 3	W/C 29/04	W/C 06/05	W/C 13/05	W/C 20/05	W/C 03/06	W/C 10/06	W/C 17/06	W/C 24/06	W/C 01/07	W/C 08/07	W/C 15/07			
	Theory	NEA	Mid Term Test	Mid Term Test Feed Forward	Mid Term Test	Mid Term Test Feed Forward	NEA	NEA	NEA	Mid Term Test	Mid Term Test Feed Forward			
	Commercial Manufacturing and Working with Textile based Materials. Students look at machinery that are used in industry.	Designing and Making Principles. Introduce NEA. Students produce coursework pages in preparation of NEA	Test based on Technical Principals	Feed forward for Mock Exam	Year 10 Mock Exam	Feed forward for Test	Students create a task analysis and write a short Design Brief	Market Research. Students gather images of existing products from the internet and review	Product analysis. Students use ACCESS FM to analyse 4 products similar to what they plan to design	Test based on Designing and Making Principles	Feed forward for Test			

For information on assessments see additional assessment guidance  
 Feedforward Session