

5/7 Year Curriculum Plan: Design & Technology

Half Term	Autumn 1							Autumn 2							Spring 1						Spring 2						Summer 1						Summer 2						
Week	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39
Year 7																																							
	Drawing skills: Oblique Projection Crating Method Rendering to show materials Tone, texture and line weight Organic 3D shapes The work of others Design Eras Famous Designers Companies							DMP: Pencil pot Design process Tools and equipoment Timbers and boards- classifications and working properties Methods of fabrication							DMP: Pencil pot CAD/CAM Timbers and boards specialist knowledge Papers & Boards						DMP packaging project (designing) Die cutting Surface developments and nets						DMP packaging project (making) Packaging standards Product Analysis Design Specifications						Graphic Design Skills project Fonts and tylface Branding, logos and corporate identity Grid method						
Year 8																																							
	Drawing Techniques – Isometric Sketching, crating, tonal rendering, shading and lining in technique							Pop up card DMP- Working properties of paper and card Levers and linkages Mechnaisms (paper and card) World religions/ culture							Design Theory Properties and characteristics of materials Timbers Polymers Papers and Boards Social, economic and environmental issues CAD/CAM						Phone holder ACCESSFM Generating and commiunicating design ideas Timbers Polymers Marking out/ tolerance						Phone holder Tools and Machinery Health and Safety Smart Materials						Phone Holder – Polymers Analysis and evaluations Market forces						
Year 9																																							
	Drawing Techniques Isometric Sketching and crating Tonal rendering, material rendering and lining in techniques 1, 2 and 3 point perspective drawing							Ice scraper- Technical principles- prorties fo materials Design and making principles- working with timber and polmers; workshop tools and equipment.							Timber box- Classification of timber Tools and ewuipkent Adhesives Woodworking joints						Timber box- Classification of timber Tools and ewuipkent Adhesives Woodworking joints QC Ergonomics and anthropometrics Finishes and treatments						Eco village- working for a client Design briefs Specificatins Sustainability Ecology Renewable energy Blue prints and plans Collaboration Modelling Presentign ideas to others						Eco village- working for a client Design briefs Specificatins Sustainability Ecology Renewable energy Blue prints and plans Collaboration Modelling Presentign ideas to others						
Year 10																																							
	3.1 Core technical principles							Communication of design ideas- drawing, sketching and presentation							3.2 Specialist technical principles						3.3 Designing and making principles						AO1 Identify, investigate & outline design possibilities (section A)						AO1 Identify, investigate & outline design possibilities (section B) AO2 Design & make prototypes that are fit						

						for purpose Generating design ideas (section C)
Year 11	A02 Design & make prototypes that are fit for purpose Generating design ideas (section C) A02 Design & make prototypes that are fit for purpose Developing design ideas (section D)	A02 Design & make prototypes that are fit for purpose Realising design ideas (section E) AO3 Analysing & evaluating (section F)	Revision as per QLA of mock: 3.1 Core technical principles 3.2 Specialist technical principles 3.3 Designing and making principles	Revision as per QLA of mock: 3.1 Core technical principles 3.2 Specialist technical principles 3.3 Designing and making principles		
Year 12	Unit 1 Technical Principles: Materials and their applications; Classification of materials; Methods for investigating and testing materials; Performance characteristics of materials. Unit 2 Design & Making principles: Mini project: CAD/ CAM	Unit 1 Technical Principles: Elastomer, polymers, composites, smart material, enhancement of materials, Forming, redistribution and addition processes. Unit 2 Design & Making principles: Mini project: sketching/ visual communication	Unit 1 Technical Principles: The use of finishes, fixings and adhesives, Modern industrial and commercial practice, Digital design and manufacture. Unit 2 Design & Making principles: Mini project: modelling	Unit 1 Technical Principles: Protecting designs and intellectual property, The requirements for product design and development, Health and safety. Unit 2 Design & Making principles: Mini project: CAD/CAM	Unit 1 Technical Principles: Design for manufacturing, maintenance, repair and disposal, Feasibility studies, Enterprise and marketing in the development of products, Design communication. Unit 2 Design & Making principles: NEA: Identify, investigate & outline design possibilities	Unit 2 Design & Making principles: Designers methods and processes; design theory; How technology and cultural changes can impact on the work of designers; design processes; Critical analysis and evaluation. Unit 2 Design & Making principles: NEA: Identify, investigate & outline design possibilities
Year 13	Unit 1 Technical Principles: Revision (Inc. Design & Making principles theory). Unit 2 Design & Making principles: NEA: Identify, investigate & outline design possibilities Design & make prototypes that are fit for purpose	Unit 1 Technical Principles: Revision (Inc. Design & Making principles theory). Unit 2 Design & Making principles: NEA: Identify, investigate & outline design possibilities Design & make prototypes that are fit for purpose	Unit 1 Technical Principles: Revision (Inc. Design & Making principles theory). Unit 2 Design & Making principles: NEA: Design & make prototypes that are fit for purpose; Analyse & evaluate	Unit 1 Technical Principles: Revision (Inc. Design & Making principles theory). Unit 2 Design & Making principles: NEA: Analyse & evaluate		