

GCSE D&T: Curriculum Map

YEAR GROUP:	Year 11								
RATIONALE:	Studying GCSE (9–1) Design and Technology allows pupils to explore both their creative and practical skills as well as theoretical knowledge on all aspects of designing and making. In year 11 pupils will demonstrate and develop their skills and knowledge learnt during year 10 to complete their NEA, choosing from a range of contexts and self-directing their project outcome. They will complete each of the 5 sections of the specification to the highest of their ability in terms of both presentation and creativity. They will ensure their designs are clearly linked to the wants and needs of a client and produce a final prototype of their product, along with a portfolio of development work. Theory continues to takes them through the series of 7 UNITS in preparation for their GCSE written exam covering new and emerging technologies, making principles and further specialist material principles. There will be an emphasis on retrieval practice, revision techniques and exam strategies								
	Autumn Term 1	Autumn Term 2	Spring Term 1	Spring Term 2	Summer Term 1	Summer Term 2			
Topic/Unit	NEA project 4.4.4.2 Section B: Producing a design brief and specification 4.4.4.3 Section C: Generating design ideas	NEA project 4.4.4.4 Section D: Developing design ideas 4.4.4.5 Section E: Realising design ideas	NEA project 4.4.4.5 Section E: Realising design ideas 4.4.4.6 Section F: Analysing and evaluating	NEA project – final submission 4.4.4.6 Section F: Analysing and evaluating					
	THEORY UNIT 7 - Making Principles 3.3 Designing and making principles	THEORY UNIT 1 - New and Emerging Technologies 3.1 Core Technical Principles	THEORY UNIT 5 – Specialist material properties 3.2 Specialist Technical Principles	Revision and exam preparation	Revision and exam preparation	GCSE EXAM – May-June			
Knowledge	4.4.4.2 Section B: Producing a design brief and specification 4.4.4.3 Section C: Generating design ideas	4.4.4.4 Section D: Developing design ideas 4.4.4.5 Section E: Realising design ideas	4.4.4.5 Section E: Realising design ideas 4.4.4.6 Section F: Analysing and evaluating	4.4.4.6 Section F: Analysing and evaluating					
	Selection of materials/ components, tolerances, material management, tools, equipment, techniques, surface treatments and finishes	Industry and enterprise, sustainability, people, culture and society, production techniques, informing design decisions	Specialist material area – sources, origins and properties. Working with material area, commercial manufacturing	Exam style questions, key terms, maths techniques, technical drawing, theory knowledge and retrieval	Exam style questions, maths techniques, technical drawing, theory knowledge and retrieval				
Skills	ACQUIRE, DEVELOP & APPLY Decision making Problem solving skills Technical drawing skills Iterative design process and creative thinking	ACQUIRE, DEVELOP & APPLY • Development skills • CAD CAM knowledge • Prototyping/ testing techniques • Practical and quality control skills	ACQUIRE, DEVELOP & APPLY CAD/CAM skills Problem solving Practical and quality control skills Analytical/evaluation knowledge	APPLY, EXPLAIN & EVALUATE • Analytical and evaluation knowledge • Third party opinions					
	UNDERSTAND, IDENTIFY, APPLY & EXPLAIN • Material choices • Equipment selection • Quality assurance • Range of finishes for materials	UNDERSTAND, IDENTIFY & EXPLAIN • Sociological & sustainability issues • Industrial manufacture techniques • Use of CAD/CAM • Consumer issues/ choice	UNDERSTAND, IDENTIFY & DESCRIBE • Sources and origins of specialist material areas • Material manufacture methods	UNDERSTAND, INTERPERET & EXPLAIN Key exam terminology Links to maths/ science knowledge	UNDERSTAND, INTERPERET & UTILISE • Key terms and information from all units • Exam techniques • drawing techniques				
Assessments Formative	Internal assessment – Design brief/ spec 10 marks	Internal assessment – Generation of ideas/ development 40 marks	Internal assessment - Realising ideas/ testing and evaluation 40 marks	Final internal moderation of NEA – 100 marks					

St Edmund Arrowsmith Catholic High School: Curriculum

1	we let
\/	N
	100

Ot Lamana	7 ti i Owsii ii ti ot	atilono i ngri c	onoon. Ourned	IMIII		-
	Internal classroom based unit test 40 marks	Internal classroom based unit test 40 marks Mock exam 100 marks(combined 50:50 with NEA)	Internal classroom based unit test 40 marks	Trial exam 100 marks (combined 50:50 with NEA)	Externally moderated GCSE exam	
Assessments Summative						
Homework						