reinfo	Curriculum Intent: Students will build upon the skills and activities that they learned in Years 9 and 10, reinforcing their practical and theoretical knowledge. This is achieved through their NEA, theory based lessons					
Subject: Design	and homework. Students will explain and discuss their understanding of what they have read, observed, and					
& Technology testec	practiced justifying the methods and techniques used through their NEA coursework. Their knowledge will be tested through 'POP' tests and their PPE examinations.					
G reemology	Terr	m 1	Term 2		Term 3	
1. N	FA	1. NFA	1. Review of PPF's	Review of PPF's 1 Completion of		1. Course Finished
	273	2. Preparation for	2. NEA	NEA	Preparation	
NEA -	Reviewing	the PPE's		2. Exam		
Sectio	on A and B		NEA – ordering of	Preparation	RAG of exam	
		NEA – final	materials – marking		content.	
NEA –	- Writing a	developed design –	out and double	NEA – further		
desigr	n specification	refer annotation	checking before	modifications – high	General exam	
using	research.	back to the	cutting. Anything	quality drawings and	technique e.g.,	
		specification	that involves CAM –	links to commercial	command words,	
Theor	y – drawing	highlighting	2D design/Fusion	manufacture.	highlighting key	
techni	iques –	innovation and	360.	Detailed and	words.	
isome	etric,	creativity in the		informative		
ortho	graphic.	ideas. Make links	NEA –	annotation.	Selected weak area	
		back to the research	manufacturing the		revision – exam	
Strate	gies for coming	completed.	product, taking	NEA – changes/	questions and	
Topic Titles (in order of up wit	th ideas – using		photos at regular	tweaks to project	exam technique	
delivery) existin	ng products,	NEA – Final isometric	intervals. Ensure	based on feedback.		
mergi	ng ideas,	design using CAD for	quality control	Signing of candidate	Walking/talking	
natura	al forms etc.	presentation.	checks are taking	forms etc.	paper – core	
		Annotation to	place.		technical principles	
NEA –	- initial ideas	include links back to		Theory – sources of		
		specification.	NEA – carry out at	polymers. From oil	Walking/talking	
NEA –	- importance of		least one test of the	to workable	paper – specialist	
annot	ation and	NEA – Final	product and	material. Categories	technical principles	
	g initial ideas to	orthographic design.	complete write up.	of plastic and		
design	h specification	Measurements must	Can it be compared	examples in each.	waiking/taiking –	
	dovelonment	pe accurate and	to an existing	tochniquos for	making principles	
	ac	from modelling	success measured?	nlastic e g injection		
	a3		Success measureu!	moulding		
ΝFΔ	- modelling	NFA - Manufacturing	NFA – testing the			
techni	iques –	specification - step	product and write			

card/straws/play	by step for making	up. E.g., stress tests,	Theory – exam	
dough etc.	the product.	drop tests,	question based on	
		waterproof etc.	sourcing and	
NEA – modelling of	PPE Theory – sources		manufacturing wood	
developed idea. High	of polymers. From oil	NEA – write up of	and plastic. Use	
quality photos and	to workable	third-party	notes and sketches –	
clear outline of why	material. Categories	evaluation with	exam technique for	
modelling is	of plastic and	photos. Comparison	higher end of marks.	
important. Key	examples in each.	to existing products.	Use of key words	
changes based on	Manufacturing		e.g., labelling of	
models – think	techniques for	NEA – evaluation of	injection moulding	
mechanisms,	plastic e.g., injection	product against	process.	
aesthetics etc.	moulding.	specification. Table		
		format with a	Theory – sources of	
	PPE Theory – sources	numerical value to	metal. From ore to a	
	of metal. From ore to	make it comparable	workable material.	
	a workable material.	to an existing	Categories of metal	
	Categories of metal	product.	and manufacturing	
	and manufacturing		techniques e.g.,	
	techniques e.g.,	NEA – evaluation of	casting.	
	casting.	product against		
		specification. Table	Theory – scales of	
	PPE Theory – scales	format with a	production. Link to	
	of production. Link	numerical value to	plastics, wood and	
	to plastics, wood and	make it comparable	metal product. E.g.,	
	metal product. E.g.,	to an existing	would you use	
	would you use	product.	injection moulding	
	injection moulding		for a one-off	
	for a one-off	NEA – evaluation of	product.	
	product.	product against		
		specification. Table	Theory – assessment	
	PPE Theory - Human	format with a	of specialist	
	Factors &	numerical value to	technical principles	
	Environmental	make it comparable	questions. Add to	
	Issues.	to an existing	answers. How can	
		product.	your answer be	
			improved? Show	

			NEA – further	good answers to		
			modifications – high	group.		
			quality drawings and			
			links to commercial			
			manufacture.			
	Delivered Through	Delivered Through	Delivered Through	Reviewing Through	Reviewing Through	
	NEA:	NEA:	NEA:	Question Analysis	Question Analysis	
				and Exam Practice:	and Exam Practice:	
	Core Technical	Core Technical	Core Technical	Core Technical		
	Principles	Principles	Principles	Principles	Core Technical	
	 new and emerging 	 systems approach 	 new and emerging 	 new and emerging 	Principles	
	technologies	to designing	technologies	technologies		
	 developments in 	 materials and their 	 energy generation 	 energy generation 	Specialist Technical	
	new materials	working properties	and storage	and storage	Principles	
	 systems approach 		 developments in 	 developments in 		
	to designing	Specialist Technical	new materials	new materials	Designing &	
		Principles	 systems approach 		Making Principles	
	Specialist Technical		to designing	Specialist Technical		
	Principles	 selection of 	 mechanical 	Principles		
		materials or	devices			
Key knowledge / Retrieval	 selection of 	components	 materials and their 	 forces and stresses 		
topics	materials or	 using and working 	working properties	 ecological and 		
topics	components	with materials		social footprint		
	 ecological and 	 stock forms, types 	Specialist Technical	 sources and 		
	social footprint	and sizes	Principles	origins		
	 using and working 	 scales of 		 scales of 		
	with materials	production	 selection of 	production		
	 surface treatments 	 specialist 	materials or	 specialist 		
	and finishes.	techniques and	components	techniques and		
		processes	 using and working 	processes		
	Designing & Making	 surface treatments 	with materials			
	Principles	and finishes.	 stock forms, types 	Designing & Making		
			and sizes	Principles		
	 investigation, 	Designing & Making	 scales of 			
	primary and	Principles	production	 environmental, 		
	secondary data		 specialist 	social and economic		
	 design strategies 	 prototype 	techniques and	challenge		
		development	processes			

	communication of	 selection of 	surface treatments	 the work of 		
	design ideas	materials and	and finishes.	others		
	• prototype	components		• specialist tools and		
	development	• tolerances	Designing & Making	equipment		
	selection of		Principles	• specialist		
	materials and			techniques and		
	components		 selection of 	processes.		
			materials and			
			components			
			• tolerances			
			material			
			management			
			• specialist tools and			
			equipment			
			 specialist 			
			techniques and			
			processes.			
	Continuation of NEA	AO2:	AO2:	AO4: Demonstrate	Summarise and	
	from chosen topic in	Design and make	Design and make	and apply	review content in	
	Year 10.	prototypes that are	prototypes that are	knowledge and	preparation for	
		fit for purpose.	fit for purpose.	understanding of:	exams.	
	AO1:			 technical 		
	Identify, investigate	AO3:	AO3:	principles		
	and outline design	Analyse and	Analyse and	 designing and 		
	possibilities to	evaluate:	evaluate:	making principles.		
Understanding / Sequence	address needs and	 design decisions 	 wider issues in 			
of delivery	wants.	and outcomes,	design and			
		including for	technology.			
		prototypes made by				
		themselves and				
		others				
		 wider issues in 				
		design and				
		technology.				
	Grade: NEA	Grade: NEA	Grade: NEA	Grade: NEA	Walking / Talking	
Assessment	RAG Feedback for	RAG Feedback for	RAG Feedback for	RAG Feedback for	Mock	
	individuals.	individuals.	Individuals.	individuals.		

Generic Feedback All in line with Exam Board	Generic Feedback All in line with Exam Board	Generic Feedback All in line with Exam Board	Generic Feedback All in line with Exam Board	GCSE questions, marked using mark scheme.	
POP test using past GCSE questions, marked using mark scheme. Grades predicted using 2020 grade boundaries.	PPE Nov/Dec 2020 paper marked, and grades awarded using Exam Board mark scheme and 2020 grade boundaries.	POP test using past GCSE questions, marked using mark scheme. Grades predicted using 2020 grade boundaries.	POP test using past GCSE questions, marked using mark scheme. Grades predicted using 2020 grade boundaries.		