

DT is taught on a carousel which rotates every term. This is a fortnightly lesson therefore we have approx 6 lessons per rotation.

Subject group	Faculty	D&T
	Subject	Resistant Materials

Year 7		Term	Aut 1	Unit	1	Term	Aut 2	Unit	2	Term	Spr 1	Unit	3	Term	Spr 2	Unit	4	Term	Sum 1	Unit	5	Term	Sum 2	Unit	6
		Curriculum / Syllabus coverage				Curriculum / Syllabus coverage				Curriculum / Syllabus coverage				Curriculum / Syllabus coverage				Curriculum / Syllabus coverage				Curriculum / Syllabus coverage			
	Unit title	Lap top stand				Lap top stand																			
	Subject knowledge introduced / revised / developed	Introduced Health and safety in a DT room, analysing a brief, different types of wood, different types of joints				Introduced: use of tools and equipment, Developed Different types of joints, safety when using tools and equipment																			
	skills developed / extended / used	Developed: Designing lap top stand, analysis of feasibility of design, Marking and cutting on wood, cutting finger and comb joints, self evaluation at all stages of the making process. Used: accurate measuring,				Developed: Cutting and cleaning finger joints, Designing feet, finishing and quality points, self evaluation																			
	Opportunities to develop 'respectful attitudes' / Inclusion and Diversity	Peer evaluation of design ideas; sharing tools, waiting turn for help, helping others, use of class experts to support teacher and help peers				Sharing tools, waiting turn for help, helping others, use of class experts to support teacher and help peers, peer evaluation and self reflection																			
	Links to 'Destinations and Employability'	Developing skills for employment - problem solving and evaluating, working in groups, considering and listening to others opinions. Links to specific jobs such as carpentry, product design				Developing skills for employment - problem solving and evaluating, working in groups, considering and listening to others opinions. Links to specific jobs such as carpentry, product design																			
	Enrichment opportunities offered or developed	After school catch up to ensure finished product. Problem solving, working together				After school catch up to ensure finished product. Problem solving, working together																			

Subject group	Faculty	D& T
	Subject	RM

Year 8		Term	Aut 1	Unit	1	Term	Aut 2	Unit	2	Term	Spr 1	Unit	3	Term	Spr 2	Unit	4	Term	Sum 1	Unit	5	Term	Sum 2	Unit	6
		Curriculum / Syllabus coverage				Curriculum / Syllabus coverage				Curriculum / Syllabus coverage				Curriculum / Syllabus coverage				Curriculum / Syllabus coverage				Curriculum / Syllabus coverage			
	Unit title	Bee Hotel				Bee Hotel																			
	Subject Knowledge introduced / developed / revised	Introduced: The bee problem in the UK, tools and equipment needed to make Bee Hotel eg files, different types of woods, Revised: Health and Safety in a DT room/code of conduct. Developed: Access FM re Bee Hotel; Design of Bee Hotel, finger joints				Introduced: Different joints, How to glue, How to create a plan of making, Revised: How to mark																			
	skills developed / extended / used	Developed/extended: Creating a specification; design skills, measuring, lap joint, mitre joint, housing, working together, sharing tools, self evaluation and peer evaluation				Drilling and Gluing, Assembling bug hotel, Finishing, using correct tools and working accurately; self evaluation and peer evaluation																			
	Opportunities to develop 'respectful attitudes' / Inclusion	Peer evaluation of design ideas; sharing tools, waiting turn for help, helping others, use of class experts to support teacher and help peers				Peer evaluation of design ideas; sharing tools, waiting turn for help, helping others, use of class experts to support teacher and help peers																			
	Links to 'Destinations and Employability'	Developing skills for employment - problem solving and evaluating, working in groups, considering and listening to others opinions. Links to specific jobs such as carpentry, product design				Developing skills for employment - problem solving and evaluating, working in groups, considering and listening to others opinions. Links to specific jobs such as carpentry, product design																			
	Enrichment Opportunities offered or developed	After school catch up to ensure finished product. Problem solving, working together				After school catch up to ensure finished product. Problem solving, working together, taking finished product home and putting somewhere for it to be used																			

Subject group	Faculty	D&T
	Subject	RM

Year 9		Term	Aut 1	Unit	1	Term	Aut 2	Unit	2	Term	Spr 1	Unit	3	Term	Spr 2	Unit	4	Term	Sum 1	Unit	5	Term	Sum 2	Unit	6
		Curriculum / Syllabus coverage				Curriculum / Syllabus coverage				Curriculum / Syllabus coverage				Curriculum / Syllabus coverage				Curriculum / Syllabus coverage				Curriculum / Syllabus coverage			
	Unit title	Pendant Design				Pendant Design																			
	Subject Knowledge introduced / revised	Introduced: The process of metal casting Revised: Health and Safety in a DT room/code of conduct, creating design ideas, Developed: writing a specification, responding to a brief				Introduced: Templating design idea Revised: working to scale Developed: writing a specification, evaluating																			
	skills developed / extended / used	Developed/extended: design skills, cutting/finishing manufactured boards, designing				Developed: using a brazing torch and working with pewter ingots, using an iron ladle, casting sand, hacksaw and files with different grits and steel wool Extended: workign with precision and accuracy																			
	Opportunities to develop 'Respectful attitudes' / Inclusion and Diversity	Peer evaluation of design ideas; sharing tools, waiting turn for help, helping others, use of class experts to support teacher and help peers				Peer evaluation of design ideas; sharing tools, waiting turn for help, helping others, use of class experts to support teacher and help peers																			
	Links to 'Destinations and Employability'	Developing skills for employment - problem solving and evaluating, working in groups, considering and listening to others opinions. Links to specific jobs such as carpentry, product design				Developing skills for employment - problem solving and evaluating, working in groups, considering and listening to others opinions. Links to specific jobs such as carpentry, product design																			
	Enrichment Opportunities offered or developed	After school catch up to ensure finished product. Problem solving, working together				After school catch up to ensure finished product. Problem solving, working together, taking finished product home and putting somewhere for it to be used																			

Subject group	Faculty	D&T
	Subject	GCSE D&T

Year 10		Term	Aut 1	Unit	1	Term	Aut 2	Unit	2	Term	Spr 1	Unit	3	Term	Spr 2	Unit	4	Term	Sum 1	Unit	5	Term	Sum 2	Unit	6
		Curriculum / Syllabus coverage				Curriculum / Syllabus coverage				Curriculum / Syllabus coverage				Curriculum / Syllabus coverage				Curriculum / Syllabus coverage				Curriculum / Syllabus coverage			
	Unit title	Design and Technology in our world				Design and Technology in our world				Electronic Systems				Material Areas				Material Areas				NEA Focsed Area and Exam			
	Subject Knowledge introduced / revised developed /	Market pull, technology push, consumer choice, product lifecycle, global production and its effects on culture and people, moral and ethical factors, sustainability (6Rs), Fairtrade, carbon footprint, ecological footprint				Renewable and non renewable energy sources, energy generation and storage, Legislation, consumer rights and protection for consumers when purchasing and using products,				Graphical conventions for communicating concepts, systems approach, principles of a control system, importance of feedback, methods or providing feedback, control devices, analogue and digital sensors				Developed: Categorisation of hardwoods and softwoods, strength, grain structure, surface finish. (covered in KS3 SOW's)				Introduced: How woods can be identified; different finishes, manufactured timbers, and categories, how to protect, scale of production, wastage, absorbency and harvesting.				Dependent on NEA task			
	skills developed / extended / used	Cad/CAM design, selection of timbers, impact offorces, stresses on natural and manufactured timbers, stock forms, types and sizes				Developed:Wood Joints: Mitre, Box and butt and lap and comb Joints. (Basic level wood joints) previously taught through KS3 SOW. Finishing skills: sealants, primers, varnish, wood stains, oils, polishes, and preservative paints. Adhesives: PVA. CAD and CAM skills: basic 2d Design skills could introduce Laser printing.				Developed: Soldering, Tinning, Understanding how to read a schmatic and pictorial drawing, componant symbols. Populating a PCB board using a range of components. Eg: microcontrollers, resistors, LED, Capacitor, Switch ect.				Extended: Frame construction, Wood Joints: dowel, mortise and tenon, halving and bridge joint. (Advance wood joints) Finishing skills: Wood stains. Adhesives: PVA. CAD and CAM skills: 2d Design and Google sketch up. calculating costs invovled in the design of products				Used: Frame construction, Wood Joints: dowel, mortise and tenon, halving and bridge joint. (Advance wood joints) Finishing skills: Wood stains. Adhesives: PVA. CAD and CAM skills: 2d Design and Google sketch up. calculating costs invovled in the design of products				Dependent on NEA project - building on prior skills.			
	Opportunities to develop 'Respectful attitudes' / Inclusion and Diversity	Collaborative working; sharing tools, waiting turn for help, helping others, use of class experts to support teacher and help peers. Creating products to meet the needs of specific target groups				Collaborative working; sharing tools, waiting turn for help, helping others, use of class experts to support teacher and help peers. Creating products to meet the needs of specific target groups				Collaborative working; sharing tools, waiting turn for help, helping others, use of class experts to support teacher and help peers. Creating products to meet the needs of specific target groups				Collaborative working; sharing tools, waiting turn for help, helping others, use of class experts to support teacher and help peers. Creating products to meet the needs of specific target groups				Collaborative working; sharing tools, waiting turn for help, helping others, use of class experts to support teacher and help peers. Creating products to meet the needs of specific target groups				Collaborative working; sharing tools, waiting turn for help, helping others, use of class experts to support teacher and help peers. Creating products to meet the needs of specific target groups			
	Links to 'Destinations and Employability'	Scheme of work includes insights into jobs/careers. Use of icould videos to show careers. Link into apprenticeships				Trip to Harry Potter to see DT in action and jobs it could lead to. Scheme of work includes insights into jobs/careers. Use of icould videos to show careers. Link into apprenticeships				Scheme of work includes insights into jobs/careers. Use of icould videos to show careers. Link into apprenticeships				Scheme of work includes insights into jobs/careers. Use of icould videos to show careers. Link into apprenticeships				Scheme of work includes insights into jobs/careers. Use of icould videos to show careers. Link into apprenticeships				Scheme of work includes insights into jobs/careers. Use of icould videos to show careers. Link into apprenticeships			
	Enrichment Opportunities offered or developed	Students have the opportunity to support introduction of DT club - Wood based?				Trip to Harry Potter see DT in action.				Students have the opportunity to support introduction of DT club - Wood based?				Students have the opportunity to support introduction of DT club - Wood based?				Students have the opportunity to support introduction of DT club - Wood based?				Students have the opportunity to support introduction of DT club - Wood based?			

Subject group	Faculty	D&T
	Subject	GCSE D&T

Year 11		Term	Aut 1	Unit	1	Term	Aut 2	Unit	2	Term	Spr 1	Unit	3	Term	Spr 2	Unit	4	Term	Sum 1	Unit	5	Term	Sum 2	Unit	6
		Curriculum / Syllabus coverage				Curriculum / Syllabus coverage				Curriculum / Syllabus coverage				Curriculum / Syllabus coverage				Curriculum / Syllabus coverage				Curriculum / Syllabus coverage			
	Unit title	NEA				NEA				NEA															
	Subject Knowledge introduced / developed / revised	Generating and developing design Ideas				Generating and developing design ideas				Manufacturing prototype and evaluation				Principle of mechanical devices, analysis of everyday mechanical devices and how they function, input, process, output. Different requirements of mechanical systems. Smart materials. Revision				Revision				Revision and final examination			
	skills developed / extended / used	Dependent on exam task				Dependent on exam task				Dependent on exam task				Calculations involving mechanical systems. Analysis of the function of mechanical products that have pulley systems, gear systems, levers and linkages, rack and pinion, cams											
	Opportunities to develop 'Respectful attitudes' / Inclusion and Diversity	Collaborative working; sharing tools, waiting turn for help, helping others, use of class experts to support teacher and help peers. Creating products to meet the needs of specific target groups				Collaborative working; sharing tools, waiting turn for help, helping others, use of class experts to support teacher and help peers. Creating products to meet the needs of specific target groups				Collaborative working; sharing tools, waiting turn for help, helping others, use of class experts to support teacher and help peers. Creating products to meet the needs of specific target groups				Collaborative working; sharing tools, waiting turn for help, helping others, use of class experts to support teacher and help peers. Creating products to meet the needs of specific target groups				Collaborative working; sharing tools, waiting turn for help, helping others, use of class experts to support teacher and help peers. Creating products to meet the needs of specific target groups							
	Links to 'Destinations and Employability'	Scheme of work includes insights into jobs/careers. Use of icould videos to show careers. Link into apprenticeships				Scheme of work includes insights into jobs/careers. Use of icould videos to show careers. Link into apprenticeships				Scheme of work includes insights into jobs/careers. Use of icould videos to show careers. Link into apprenticeships				Scheme of work includes insights into jobs/careers. Use of icould videos to show careers. Link into apprenticeships				Scheme of work includes insights into jobs/careers. Use of icould videos to show careers. Link into apprenticeships							
	Enrichment Opportunities offered or developed	Students have the opportunity to support introduction of DT club - Wood based?				Students have the opportunity to support introduction of DT club - Wood based?				Students have the opportunity to support introduction of DT club - Wood based?				Students have the opportunity to support introduction of DT club - Wood based?				Students have the opportunity to support introduction of DT club - Wood based?							

Subject group	Faculty	D&T
	Subject	A Level 3 Dimensional

Year 12		Term	Aut 1	Unit	1	Term	Aut 2	Unit	2	Term	Spr 1	Unit	3	Term	Spr 2	Unit	4	Term	Sum 1	Unit	5	Term	Sum 2	Unit	6
		Curriculum / Syllabus coverage				Curriculum / Syllabus coverage				Curriculum / Syllabus coverage				Curriculum / Syllabus coverage				Curriculum / Syllabus coverage				Curriculum / Syllabus coverage			
	Unit title	Skyline Project (4 weeks) Cliff edge Project until half term				Cliff Edge Project				Southend Tram Shelter (Mock)				Southend Tram Shelter (Mock)				Southend Tram Shelter (Mock)				Personal Project (student choice)			
	Subject Knowledge introduced / developed / revised	Developed: Taking the form of bottles and translating them into a skyline. Work as class to add all bottle buildings into a skyline.				Introduced: Form and funtion. Design a building to sit within / on a cliff edge. Create a range of possible outcomes using maquettes. Students will use a breeze block to create their own individual cliff by chiseling away and seeing how the block takes shape.				Design a new Tram station for southen for the proposed tram system that's going to be built following southend's new City Status. Location is the seafront.				Design a new Tram station for southen for the proposed tram system that's going to be built following southend's new City Status. Location is the seafront.				Design a new Tram station for southen for the proposed tram system that's going to be built following southend's new City Status. Location is the seafront.				Unknown until selected by students			
	skills developed / used	Recording / observational drawing of bottles. Shape, form, proportion, tone, shade, tint and shadow. CAD using Photoshop to manipulate images				Developed: Technical drawing, isometric, making skills to create a model and create the cliff edge, digital modelling using Sketch Up				Primary research skills developed as they need to visit Southend Seafront and take photos of the site and explore the surroundings. Use this to then design using the ethos of a chosen architect. This will be undertaken as mock following the timeframes that they will experience in year 13, finishing as a practical make for 15hrs at the end of may.				Primary research skills developed as they need to visit Southend Seafront and take photos of the site and explore the surroundings. Use this to then design using the ethos of a chosen architect. This will be undertaken as mock following the timeframes that they will experience in year 13, finishing as a practical make for 15hrs at the end of may.				Primary research skills developed as they need to visit Southend Seafront and take photos of the site and explore the surroundings. Use this to then design using the ethos of a chosen architect. This will be undertaken as mock following the timeframes that they will experience in year 13, finishing as a practical make for 15hrs at the end of may.				Unknown until selected by students			
	Opportunities to develop 'Respectful attitudes' / Inclusion and Diversity	This project requires the class to work collaboratively as each student will use each others bottle design inspired buildings to create their own unique skyline. Sharing resources, taking care of the equipment in school.				Sharing of tools and equipment, listening to other students advice, guidance and opinions, collaborative working.				Sharing of tools and equipment, listening to other students advice, guidance and opinions, collaborative working.				Sharing of tools and equipment, listening to other students advice, guidance and opinions, collaborative working.				Sharing of tools and equipment, listening to other students advice, guidance and opinions, collaborative working.				Sharing of tools and equipment, listening to other students advice, guidance and opinions, collaborative working.			
	Links to 'Destinations and Employability'	Harry Potter trip to Warner Brother studio to see DT in action				Architects, townplanning, interior designers, planners, urban design, landscape architects, regeneration				Architects, townplanning, interior designers, planners, urban design, landscape architects, regeneration				Architects, townplanning, interior designers, planners, urban design, landscape architects, regeneration				Architects, townplanning, interior designers, planners, urban design, landscape architects, regeneration				Potential trip to New Designers museum, Coal Drops Yard, London based to inspire - maybe guided by their personal projects.			
	Enrichment Opportunities offered or developed	School trip and after school catch up on offer to help progress projects.				School trip and after school catch up on offer to help progress projects.				After school catch up on offer to help progress projects.				After school catch up on offer to help progress projects.				After school catch up on offer to help progress projects.				After school catch up on offer to help progress projects.			

Subject group	Faculty	DT
	Subject	A level 3 dimensional d

Year 13	Term	Aut 1	Unit	1	Term	Aut 2	Unit	2	Term	Spr 1	Unit	3	Term	Spr 2	Unit	4	Term	Sum 1	Unit	5	Term	Sum 2	Unit	6
	Curriculum / Syllabus coverage				Curriculum / Syllabus coverage				Curriculum / Syllabus coverage				Curriculum / Syllabus coverage				Curriculum / Syllabus coverage				Curriculum / Syllabus coverage			
	Unit title	Personal Project (student choice)			Personal Project (student choice)			Personal Project (student choice) / Start preparations for real exam 1st feb contextual challenge is released.			Exam prep			Exam Prep / sit final exam 15hr practical.										
	Subject Knowledge introduced / revised / developed /	Generating deign ideas and development of design ideas			Development of design ideas and final outcome / manufacturing a prototype			Manufacturing a prototype / evaluate. Begin exam prep - contextual challenge released to students on 1st feb. Dependent on contextual challenge			Dependent on contextual challenge			Dependent on contextual challenge										
	skills developed / extended / used	Extended: Design work skills / technical drawing			Extended : CAD skills using sketch Up/ Photoshop - dependent on students personal project brief			Dependent on contextual challenge			Dependent on contextual challenge			Dependent on contextual challenge										
	Opportunities to develop 'Respectful attitudes' / Inclusion and Diversity	Sharing of tools and equipment, listening to other students advice, guidance and opinions, collaborative working.			Sharing of tools and equipment, listening to other students advice, guidance and opinions, collaborative working.			Sharing of tools and equipment, listening to other students advice, guidance and opinions.			Sharing of tools and equipment, listening to other students advice, guidance and opinions.			Sharing of tools and equipment, listening to other students advice, guidance and opinions.										
	Links to 'Destinations and Employability'	Harry Potter trip to Warner Brother studio to see DT in action						students are naturally thinking and discussing their next steps and whether they are going to university or work and what potential career they are interested in. This course can lead to any creative industry from Graphic Designer, Illustrator, Senior Graphic Designer, Junior Graphic Designer, Branding and Advertising manager, Typography Designer, Branding and Corporate Identity, Website Designer, Digital Animation, Drafter, Animator, Multimedia Artist, Logo Designer, Layout Designer, Creative/Art Director, Flash Media Designer, Screen Printer, Photo editing/Photoshop Artist, Product Designer, Interior Designer, Architectural Designer																
	Enrichment Opportunities offered or developed	After school catch up on offer to help progress projects.			After school catch up on offer to help progress projects.			After school catch up on offer to help progres			After school catch up on offer to help progress projects.			After school catch up on offer to help progress projects.										