Design Technology Year 10 Curriculum Map



Pupils will have 5 lessons over two weeks. The lessons are split evenly between I Collings and K Nicol.

YEAR 10	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Curriculum Content	Composite – Communicating design ideas Component 1: Design inspiration. Front cover of portfolio. Component 2: Sketching from secondary sources. Component 3: Portfolio and sketchbook presentation. Component 4: Product design sketching from primary sources. Component 5: Sketch up practice and development. Component 6: Sketch up presentation pages. Component 7: Modelling ideas in 3D.	Composite – Ettore Sottsass lighting project Component 1: Tin can light practical. Component 2: Graphic wrap design. Component 3: Designer research. Component 4: Designer sketches. Component 5: Product analysis. Component 6: Design movement research. Component 7: Initial design ideas. Component 8: Design development. Component 9: 3D modelling. Component 10: Final design.	Composite – Ettore Sottsass lighting project Component 1: Material choices Component 2: 3 rd Angle orthographic Component 3: Manufacture Component 4: Manufacture design sheets Component 5: Evaluation Component 6: Final photos presentation.	Composite – Architecture project Component 1: Architect research Component 2: Architecture study sketches and designs Component 3: Sketch up modelling Component 4: 3D modelling Component 5: Laser cut modelling Component 6: Final evaluation	Composite – Final major project Component 1: Research Component 2: Designs Component 3: Development Pupils will select their own final major project themselves into an area of design that they are interested in. They will work through their final project independently and iteratively to produce a final design this term.	Composite – Final major project Component 1: Manufacture Component 2: Evaluation Pupils will continue to develop and refine their work into their chosen area of interest. They will manufacture and evaluate any outcomes produced this half term.
Prior knowledge and skills (from previous year / key stage)	KS3 DT Curriculum knowledge Health and safety in the workshop Use of tools and machinery Design skills CAD skills	KS3 DT Curriculum knowledge Health and safety in the workshop Use of tools and machinery Design skills CAD skills	KS3 DT Curriculum knowledge Health and safety in the workshop Use of tools and machinery Design skills CAD skills	KS3 DT Curriculum knowledge Health and safety in the workshop Use of tools and machinery Design skills CAD skills	KS3 DT Curriculum knowledge Health and safety in the workshop Use of tools and machinery Design skills CAD skills	KS3 DT Curriculum knowledge Health and safety in the workshop Use of tools and machinery Design skills CAD skills
Core Knowledge Organiser content	Designing from inspiration Sketching skills Aesthetics Sketch up	Practical skills Use of tools and machinery				
Assessment Objectives	AO1: Develop ideas through investigations, demonstrating critical understanding of sources. AO2: Refine work by exploring ideas, selecting and experimenting with appropriate media, materials, techniques and processes.	AO1: Develop ideas through investigations, demonstrating critical understanding of sources. AO2: Refine work by exploring ideas, selecting and experimenting with appropriate media, materials, techniques and processes. AO3: Record ideas, observations and insights relevant to intentions as work progresses.	AO4: Present a personal and meaningful response that realises intentions and demonstrates understanding of visual language.	AO1: Develop ideas through investigations, demonstrating critical understanding of sources. AO2: Refine work by exploring ideas, selecting and experimenting with appropriate media, materials, techniques and processes. AO3: Record ideas, observations and insights relevant to intentions as work progresses. AO4: Present a personal and meaningful response that realises intentions and demonstrates understanding of visual language.	AO1: Develop ideas through investigations, demonstrating critical understanding of sources. AO2: Refine work by exploring ideas, selecting and experimenting with appropriate media, materials, techniques and processes. AO3: Record ideas, observations and insights relevant to intentions as work progresses.	AO3: Record ideas, observations and insights relevant to intentions as work progresses. AO4: Present a personal and meaningful response that realises intentions and demonstrates understanding of visual language.
Vocabulary / Key Subject Terminology	Inspiration Secondary source Primary source Isometric drawing Crating Presentation	Research Inspiration Design movement Product analysis ACCESS FM Initial design ideas	Material choices Manufacture Evaluation Presentation	Research Inspiration Designer study Sketching Personal response Laser cutter	Iterative Research Inspiration Design movement Product analysis ACCESS FM	Iterative Development Manufacture Evaluation Presentation

	Aesthetics CAD Modelling Annotation	Development Annotation		3D modelling Architectural model Evaluation	Initial design ideas Development Annotation Material choices Manufacture Evaluation Presentation	
Assessment 1	Sketching technique	Final product – Tin can light		Architecture research pages	Research into chosen area of design	Quality of manufacture
Assessment 2	Sketch up presentation pages	Whole school AP1 – Final lighting design	Final lighting product and portfolio pages	Whole school AP2 – Final evaluation of architectural outcome	Development so far	Whole school AP3 – Evaluation of final outcome
Cross Curricular Links with other Faculties	Maths – Measuring and marking out. Isometric drawing skills. 3D shapes. Art – Sketching and shading skills. English – Analysis and evaluation of products.	Maths – Measuring and marking out. Isometric drawing skills. 3D shapes. Art – Sketching and shading skills. English – Analysis and evaluation of products.	Maths – Measuring and marking out. Isometric drawing skills. 3D shapes. Art – Sketching and shading skills. English – Analysis and evaluation of products.	Maths – Measuring and marking out. Isometric drawing skills. 3D shapes. Art – Sketching and shading skills. English – Analysis and evaluation of products.	Maths – Measuring and marking out. Isometric drawing skills. 3D shapes. Art – Sketching and shading skills. English – Analysis and evaluation of products.	Maths – Measuring and marking out. Isometric drawing skills. 3D shapes. Art – Sketching and shading skills. English – Analysis and evaluation of products.
Extra- Curricular Offer						
Time Allocation	5 lessons over 2 weeks	5 lessons over 2 weeks	5 lessons over 2 weeks	5 lessons over 2 weeks	5 lessons over 2 weeks	5 lessons over 2 weeks