

Curriculum Mapping: Design & Technology – Fashion & Textiles Year 12-13

	Autumn 1 & 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 12	<p>Technical Principles Materials and their applications, methods of joining and using components, enhancement of materials and the use of finishes</p> <p>Design Principles Technology and cultural changes in fashion, the selection of tools, equipment & processes</p>	<p>Technical Principles Manufacturing systems, design and development of products</p> <p>Design Principles Designers and their styles, responsible design, critical analysis</p>	<p>NEA Section A & B</p> <p>Design Principles Design processes</p>	<p>NEA Section B & C</p> <p>Design Principles Accuracy in design and manufacture, Project management</p>	<p>NEA Section C - Design</p> <p>Technical Principles Feasibility studies, enterprise</p>
	<p>Technical Principles Physical and technical properties of fibres and fabrics, plain seams, overlocking, fusible fleece, fastenings, trimmings, components, e-components, underlining, interlining, interfacing, lining, embroidery, quilting, dyeing, printing.</p> <p>Design Principles Product life cycle, Social, moral and ethical issues, development in fashion from 1900, prototyping, production methods, selection of manufacturing processes, health and safety in commercial settings.</p>	<p>Technical Principles CAD, CAM, Just in time, global manufacture, off shore manufacturing, critical analysis, ergonomic, anthropometric, aesthetic and functional properties, inclusive design</p> <p>Design Principles Art Nouveau, Art Deco, Minimalism, Pop Art, Punk, iconic designers, environmental impact, circular economy, product miles.</p>	<p>NEA Context, client, user, target market, primary and secondary research, product analysis, evaluation & justification.</p> <p>Design Principles Illustration, modelling, planning, iterative design process, collaborative working, cyclical fashions</p>	<p>NEA Design Specification, criteria, justification, design presentation, annotation, additional research, client feedback.</p> <p>Design Principles Accuracy, testing, economy of scale, Quality control, quality assurance, TQM, Critical Path analysis, Scrum, Six Sigma, Labelling, BSI</p>	<p>NEA Design Specification, criteria, justification, design presentation, annotation, additional research, client feedback.</p> <p>Technical Principles brand identity, entrepreneurs, marketing and fashion cycles, colour and fibre trends.</p>
	<p>Justification: Students extend their knowledge of fabric and fibre types including properties, construction and care methods. Theoretical study runs alongside practical activities to allow the students to explore physical and technical properties of both fibres and fabrics.</p> <p>Complex design and manufacturing methods are explored through theoretical and practical application to better understand construction and decorative methods in a variety of products.</p> <p>Knowledge, understanding of how design eras impacted the development of products and its impact on society.</p> <p>Building a greater understanding of the selection of tools and equipment in both the classroom setting and commercially to extend the underpinning requirement of health and safety requirements in both.</p>	<p>Justification: Theoretical study runs alongside practical activities to allow the students to explore the development of products in a commercial setting.</p> <p>Exploring the impact products have on the environment and designer responsibility, how designers work with clients and take influences from a wide variety of society.</p> <p>Study eight key designers and the design movements that were influential to them to gain a deeper understanding of the design eras fashion takes influences from.</p> <p>Regulations and standards that are inherent in design to protect the planet and the consumer.</p> <p>Enabling students to critically analyse existing products so that they can use this technique on their own in the NEA.</p>	<p>Justification: NEA Section A Define a student lead design context, interview a client and research potential design solutions.</p> <p>Design Principles Students will learn about the process involved in industry to investigate and analyse designs, using a variety of methods to communicate ideas and develop a greater understanding of the theory behind the NEA.</p>	<p>Justification: NEA Section B & C Write a design specification outlining the product being designed, produce a range of design ideas to show the concept to the client for approval.</p> <p>Design Principles Students will learn the importance of accuracy in the development of a project.</p> <p>A variety of quality assurance systems from commercial settings will be studied to better understand the benefits of each.</p>	<p>Justification NEA Section C Produce a range of design ideas to show the concept to the client for approval. Review designs and model proposals.</p> <p>Technical Principles Students will learn how commercial enterprises develop products for market and check their viability.</p> <p>They will learn about the impact of fashion on trends and developmental cycles surrounding the introduction of a new product.</p>
<p>Assessment: Feedback on theory work is given to students with the opportunity to revise and perfect their work. Unit tests, exam style questions, practical work is marked formally with a grade. NEA work is given feedback in line with exam board criteria.</p>					

Wider reading/Cultural capital
External speakers are invited to the school to widen students' knowledge of potential careers and opportunities within Fashion & Textiles. Real life examples are built into learning wherever possible to give students access to how the fashion & Textiles course fits into the wider world. **Wider reading includes** AQA A Level Design & Technology Fashion & Textiles by Hodder, Essential maths skills (in DT) by Hodder Fashion: The Definitive Visual History by DK.

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Year 13		<p>Non-Examined Assessment (NEA) Section C - Design Development Technical Principles Digital design & Manufacture</p>	<p>Non-Examined Assessment (NEA) Section D & E Manufacture & Evaluation Technical Principles Inclusive designing</p>	<p>Exam Preparation Revision of all theory topics for Technical, Design and Making principles.</p>	<p>Study leave</p>
		<p>NEA Modelling, iteration, innovation, creative, 2D & 3D, CAD/CAM, prototype, testing, user feedback, research, material properties, material testing, final design, manufacturing specification, production plan, risk assessment, production schedule, costing. Technical Principles Pattern design systems, automated manufacturing systems, production planning and control systems, EDI.</p>	<p>NEA CAD/CAM, Quality Control, Health & Safety, making skills, tolerances, finishing, commercially viable. Testing, analysing, evaluating, modifications, user feedback. Technical Principles Critical analysis, inclusive designs, customer needs including disabilities, gender non conformists, children and the elderly.</p>	<p>Fibre Categorisation, properties, enhancement, manufacture. Mathematics application Environmental considerations Commercial manufacture Design process and responsibility Moral, social and ethical impacts of products Fashion history Standards and regulatory bodies New technological approaches to design</p>	
		<p>Justification: Section D - Development Students develop their chosen design idea through iterative modelling, evaluation, and conducting client feedback throughout. Material research and testing will support their design decisions. They will produce a technical manufacturing specification that includes a final design, production plan, production schedule, costing and risk assessment. Planned quality control will be a significant feature. Technical Principles Students will study a range of commercial systems which focus on the benefits of software programs in the design and manufacture of products.</p>	<p>Justification: Section D - Manufacture Students use a range of practical making skills to manufacture and finish their final prototype to a high quality with use of close tolerances. Section E – Analysis & Evaluation Students test the final prototype to assess fitness for purpose against the design specification, gaining client feedback to establish the overall success of their product and suggest future modifications. Technical Principles Understand the needs of a client for commercial viability to a product. Ensuring that products are inclusive in their designs.</p>	<p>Justification: Students to complete theoretical studies and revise all topics for the two external papers. Mathematical applied skills to Fashion & Textiles contexts. Activities include, mini tests, exam questions, note taking and targeted questioning.</p>	<p>Study leave</p>

Assessment:
External Assessment: A Level Product Design – 50% of A Level
2 x Written exams split over Technical Principles – Paper 1 2.5 hours 120 marks & Design and Making Principles – Paper 2 1.5 hours 80 marks. Extended answer questions and includes 15% mathematics
NEA Internal Assessment: 50% of A Level
Substantial Design and make task completed as a A3, 45-page E-portfolio and completed 3D prototype.

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