|   |  |   | Year 10 DT and Text  | 1   |   |  |  |
|---|--|---|--|---|---|--|--|
| Unit  | Core   |   | Hinterland   |   | NC Coverage   | Assessment   | Whole Education  |
| Madalling/pollaboration                             | <ul> <li>Knowledge</li> <li>To apply understanding of</li> </ul>   | Skills  • Applying prior understanding  | Knowledge  Time management   | • To effectively collaborate  | DESIGN -identify and solve  | Quality of the end product   | Opportunities  • Teamwork  |
| Modelling/ collaboration designing  (Chair project) | <ul> <li>To apply understanding of design limitations/expectations to a specification</li> <li>Investigation into new and emerging technologies</li> <li>To understand the benefits of Rapid Proto typing (3D printing)</li> <li>To apply scale to designs and making effectively</li> <li>To identify the need for modelling before manufacture of a product</li> </ul> | Applying prior understanding of skills used to independent and individual tasks     Ability to design, draw and manufacture a simple 3D product     Ability to work as part of a small team to manufacture a complete working product     To improve communicational skills and teamwork     Accuracy when using a range of tools and processes when modelling     Evaluating designs to improve the end product, considering the brief, spec and client. | <ul> <li>Accuracy within scales</li> <li>Project management</li> <li>Meeting deadlines</li> <li>Scales of production – industry links</li> </ul>   | within a group utilising skill of others Project management   | their own design problems     DESIGN – Develop specifications to inform design     DESIGN – Develop and communicate design ideas using annotated sketches, detailed plans and 3D modelling.     EVALUATION- Investigate new and emerging technologies | Understanding of materials and their properties to select the correct one     Ability to select the right materials and tools for the different processes     Ability to understand design limitations     Accuracy of scale | <ul> <li>Logic building</li> <li>Business studies</li> <li>Maths – scale</li> <li>Careers</li> </ul> |
| Papers and Boards  (Packaging for Perfume bottle)   | To investigate into properties within papers and boards To understand the workings of nets To recognise brand identity To develop greater understanding of iconic design/designers To work accurately and safety with a range of hand tools.   | Developing and creating workable nets through experimentation with different materials     Identifying the correct tools for the different processes     Accurately lining up text/graphics and nets     Transferring a hand drawing idea onto a CAD package     Analysis ideas by taking other opinions into consideration (designing for others)  | Colour theory Gender stereo types Brand identify, looking at successful examples and analysis why they are affective. Understanding scales of manufacture and alternative ways of working.   | Using alternative CAD packages (Photo shop etc)  Matching up nets and graphics using different CAD packages  Creating an iconic brand   | DESIGN – Develop and communicate design ideas using annotated sketches, detailed plans and 3D modelling.     EVALUATION- Investigate new and emerging technologies     TECHNICAL KNOWLEDGE – To understand and use the properties of materials        | Accuracy when using hand tools     The end-product – a workable net     Designing to suit the needs of different users.     Low stakes testing in starters     Ability to make links to industrial processes                 | Geography – deforestation etc  |
| Practice NEA  | To investigate into the work of others to support design decisions To conduct research relevant to the brief To collect and understand the relevance of collecting measurements (anthropometric data etc) to in form design decisions.   | To analyse data collected to make in formed design decisions  To practice a range of communicational techniques to explore design possibilities  To create models using a range of processes and materials  To create a details Specification that reflects analysis of results.  | <ul> <li>Wider range of designers<br/>investigated</li> <li>Modelling techniques used in<br/>industry</li> </ul>   | Presentation techniques   | DESIGN -identify and solve their own design problems DESIGN — Develop specifications to inform design DESIGN — Develop and communicate design ideas using annotated sketches, detailed plans and 3D modelling.  | Marked against the AQA specification and march scheme.   |  |
| Start GCSE NEA A01                                  | Same as above but now completed independently as per the exam board guidelines.  |   |  |   |   |  |  |
| TEXTILES  |  |   |  |   |   | <u></u>  |  |
| Historical Costumes                                 | Learning about the history of textiles and fashion Basic pattern drafting for different shapes Advanced sewing skills Industrial techniques  | Be able to create a garment that has been designed to reflect a period of time. Able to independently use a rang of processes to create a garment to a high standard Able to use finishing techniques suitable to the garment Able to use CAD/CAM to support them in the making of the garment To apply embellishments independently to draft an accurate pattern   | To understand and recognise developments of fashion relating to economic issues  To make links between mass production techniques over time relating to economic developments  To recognise and carry out machine maintenance  To make links between fashion designers and design eras  To recognise how products are made from patterns and templates | <ul> <li>To select and practise a range of sewing techniques independently</li> <li>To set up and operate machines with minimal guidance</li> <li>To independently create CAD designs to support communication and accuracy.</li> </ul> | MAKE- Select from and use<br>specialist tools, techniques,<br>processes, equipment and<br>machinery precisely   | Low stakes tests     Independence and ability to recall information     Accuracy when investigating techniques     Final product accuracy  | History – different periods of fashion, production of materials over time, in ports and exports.     |
| Hand sewing/3D printing and Designers               | Smart materials used in textiles   | Creating a simple 3D product using the correct CAD software   | To understand how garments<br>have developed over time and<br>historical influences  | To independently design a<br>product to be 3D printed with<br>several features to the design  | TECHNICAL KNOWLEDGE – To understand and use the properties of materials DESIGN –3D modelling.   | Low stakes testing     Practise GCSE questions     Q&A   | History – looking at factors that<br>influenced change (War time,<br>women's rights)                 |

|                    | <ul> <li>Nano materials and their functions</li> <li>Wider environmental factors</li> <li>Identifying designers and their styles/influences</li> <li>Polymers</li> <li>CAD/CAM (advantages and disadvantages)</li> </ul>              | Identifying how materials<br>have changed and<br>recognising their visual<br>improvements  | To identify how CAD/CAM is used in industry and to be able to identify examples To consider the future of smart materials in textiles and how it can improve the function — medical supplies | <ul> <li>To independently set up the<br/>3D printer</li> <li>To apply understanding of<br/>environmental and wider<br/>issues within their reasoning<br/>for material choices.</li> </ul> | EVALUATION- Investigate new and emerging technologies  |  |  |
|--------------------|---|--|--|---|--|--|--|
| Practice NEA       | To investigate into the work of others to support design decisions To conduct research relevant to the brief To collect and understand the relevance of collecting measurements (anthropometric data etc) to inform design decisions. | To analyse data collected to make informed design decisions To practice a range of communicational techniques to explore design possibilities To create models using a range of processes and materials To create a details Specification that reflects analysis of results. | Wider range of designers investigated     Modelling techniques used in industry  | Presentation techniques   | DESIGN -identify and solve their own design problems     DESIGN — Develop specifications to inform design     DESIGN — Develop and communicate design ideas using annotated sketches, detailed plans and 3D modelling. | Marked against the AQA specification and march scheme. |  |
| Start GCSE NEA A01 | Same as above but now completed independently as per the exam board guidelines.   |  |  |   |  |  |  |