



PD: Graphics YEAR PLANNER (LTP) – Year 13 **SMH/BWN**



Term	Learning content/skills	Assessment Schedule*	Home Learning Support (How students can extend learning in addition to homework)
Autumn 1	<p>Computer integrated manufacture (CIM) Characteristics, processes, application, advantages/disadvantages and its impact on employment of CIM systems to integrate the processing of production and business information with manufacturing operations.</p> <p>Robotics and Artificial Intelligence (AI) Application, advantages/disadvantages and its impact on employment of complex automated systems.</p> <p>Responsibilities of developed countries The responsibilities of ‘developed’ countries in relation to social, economic and environmental issues for global sustainable development.</p> <p>Biotechnology Characteristics, advantages/disadvantages and the impact on the environment of the following genetic engineering techniques when manufacturing paper and board.</p> <p>Renewable and non-renewable sources of energy Characteristics, comparisons, applications and advantages/ disadvantages of using renewable and non-renewable sources of energy.</p> <p>Minimising waste production The principles and application of minimising waste production throughout the product life cycle using the ‘four R’s</p> <p>Computer Generated Imagery Blue and green screens, applications of modelling methods, advantages and disadvantages.</p>	<p>Regular mini assessments throughout the term will conclude with an end of term assessment on all topics covered in term 1</p> <p>Regular exam questions throughout the term will conclude with an end of term assessment on all topics covered.</p>	<p>Invest in a copy of the Edexcel text book if they haven’t done so in year 12. It will be of great help with the larger more demanding topics within year 13.</p> <p>Download any relevant APPs on phones that will help with revision and research etc...</p>

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	<p>CAD/Modelling Ways and means of start to finish task, CADs application in design industry and communication with client. How CAM is used alongside CAD. Virtual modelling and testing.</p> <p>Floor plans / drawing techniques Accurately drawing out floor plans using correct dimensioning and CAD methods to help presentation. Reflecting back to drawing methods from year 12 theory. Understanding different symbols and their meaning.</p> <p>Portfolio – modelling / 2D element planning / design drawings of architectural model / client interviews</p>		
<p>Autumn term 2</p>	<p>Manufacturing Systems Characteristics, processes, application and advantages/disadvantages of advanced manufacturing technology (AMT) which enable quick response manufacturing (QRM),</p> <p>Life cycle assessment (LCA) Application of LCA to assess the impact of a product ‘from the cradle to the grave’ using a life cycle.</p> <p>Cleaner design and technology Application of ‘cleaner’ design and technology throughout each of the stages of a product’s life cycle in relation to the following sustainable development issues:</p> <p>Revision of topics: There will be a PPE for Graphics the week after we return from the Christmas break. The remaining weeks in this term will be given to revising all previously taught topics.</p> <p>Exam Question Technique – practice for mock</p> <p>Email and ICT Various methods of communication – email, EDI, ISDNs, videoconferencing etc... What they are, how they work, the function etc... Looking at how over time they have developed and changed.</p> <p>Flowcharts What are they? Understanding the different symbols used. The layout of them and</p>	<p>Regular mini assessments throughout the term will conclude with the year 13 PPE sessions. All theory topics taught so far may be on the exam so students should revise all.</p> <p>Regular exam questions throughout the term will conclude with the year 13 PPE sessions. All theory topics taught so far may be on the exam so students should revise all.</p>	<p>Make use of past papers and mark schemes available to you in school and at home and practise answering the questions on all the topics listed.</p>

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	<p>their purpose. Applying them to methods of manufacturing in the real world. Developing the understanding of what a feedback loop is and where to apply it in a flowchart.</p> <p>EPOS Marketing, distribution and retail, how the internet has impacted on EPOS. What are barcodes and their purpose? How management software can be used to support this aspect.</p> <p>Portfolio – work is ongoing. Practical work and CAD/modelling etc...</p>		
Spring term 1.	<p>Finalisation of design ideas; and final testing of modelling techniques before embarking on producing practical work for final piece for controlled assessment.</p> <p>This will require students to use out of lesson time to continue with this work and be in after school if needed to meet the project deadline of the 1st April</p> <p>Portfolio work – includes CAD evidence, ongoing annotation of practical work completed, creation of products/choice of materials, collection of ideas for 2D element, client interview, design ideas/annotation of 2D element</p>	<p>On-going constant feedback and appraisal on development of design work and practical.</p> <p>On-going constant feedback and appraisal on development of design work and practical.</p>	<p>Try to visit a design gallery or exhibition, or even university open days to see the standard of work produced and inspire students with the level creativity on display to help them aspire to achieve high quality results.</p>
Spring term 2	<p>Producing practical work for controlled assessment this will require students to use out of lesson time to continue with this work and be in after school if needed to meet the project deadline of the 1st April.</p> <p>Portfolio work – 2D element – design and development inc. client interview, reflection to industry practice, manufacturing evidence for both 2D and model, practical</p>	<p>End of term 2 assessment on all theory for unit 3: Designing for the future.</p> <p>End of term 2 assessment on all theory for unit 3: Designing for the future.</p>	
Summer term 1	<p>Revise and recap topics highlighted from Assessment during term 2 as weaknesses or in need of recapping.</p> <p>Portfolio work – final production of 2D element and architectural model, photography/evidence of work, bibliography</p> <p>Revision topics and exam questions/technique and</p>	<p>Constant exam style questions and assessments done to check on knowledge throughout the weeks leading up to final exam. Date to be confirmed.</p>	

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	practice dependent on what students wish to cover.		
Summer term 2	<p>Students will have left on study leave at this point so should be revising all year 13 theory to prepare for their final exam.</p> <p>Students will have left on study leave at this point so should be revising all year 13 theory to prepare for their final exam.</p>	<p>Final Edexcel exam date still to be confirmed.</p> <p>Final Edexcel exam date still to be confirmed.</p>	