



Curriculum Overview 2019-20: Design and Technology – Visual Communication: GCSE Ed-Excel

Year Group	Autumn Term	Spring Term	Summer Term	Useful information / websites
Year 9 Visual Communication	<p>Development of basic but technical drawing skills followed by a mini-drawing project, incorporating these skills with real life objects/products</p> <ul style="list-style-type: none"> • One point/two-point perspective • Isometric projection • 3D drawing from 2D shapes • Mini-skills based project highlighting drawing skills related to products 	<p>Understanding brand design. Producing a brand name and logo linked to the theme of creating their own drink bottle brand.</p> <ul style="list-style-type: none"> • Typography • Logo development • Creative wording • Slogan design • Use of images and wording to gain personification • Colour/shade/tone • Analysing existing brands/logos • CAD/CAM design a & development 	<p>Understanding complex net developments and design related to a theme of creating a chocolate box or perfume/aftershave box</p> <ul style="list-style-type: none"> • 2D shapes • 3D shapes • Construction methods • Design development • Branding / logo design • Links to industrial machinery • Use of CAD/CAM for design, development and construction. 	<p>www.technologystudent.com</p> <p>www.BBCbitesize.com</p> <p>www.designtechnology.info/home</p> <p>www.design-technology.org</p> <p>www.mr-dt.com</p> <p>www.edexcel.com/designandtechnology.com</p>
Year 10 Visual Communication	<p>Design and Technology core content: Learning key areas that are required for the GCSE exam and the non-examined assessment (project).</p> <ul style="list-style-type: none"> • The impact of new and emerging technologies • How the critical evaluation of new and emerging 	<p>Core content is continued thorough the spring term.</p> <ul style="list-style-type: none"> • The functions of mechanical devices used to produce different sorts of movements, including the changing of magnitude and the direction of forces • How electronic systems provide functionality to 	<p>Core content is continued through the summer term.</p> <ul style="list-style-type: none"> • The categorisation of the types, properties and structure of papers and boards • The categorisation of the types, properties and structure of thermoforming and 	<p>www.technologystudent.com</p> <p>www.BBCbitesize.com</p> <p>www.designtechnology.info/home</p> <p>www.design-technology.org</p> <p>www.mr-dt.com</p> <p>www.edexcel.com/designandtechnology.com</p>



ASTON MANOR ACADEMY



	<p>technologies informs design decisions; considering contemporary and potential future scenarios from different perspectives, such as ethics and the environment</p> <ul style="list-style-type: none"> • How energy is generated and stored in order to choose and use appropriate sources to make products and power systems • Developments in modern and smart materials, composite materials and technical textiles 	<p>products and processes, including sensors and control devices to respond to a variety of inputs, and devices to produce a range of outputs</p> <ul style="list-style-type: none"> • The use of programmable components to embed functionality into products in order to enhance and customise their operation • The categorisation of the types, properties and structure of ferrous and non-ferrous metals 	<p>thermosetting polymers</p> <ul style="list-style-type: none"> • 2 The categorisation of the types, properties and structure of natural and manufactured timbers • Investigate and analyse the work of past and present professionals and companies in order to inform design 	
Year 11 Visual Communication	<p>Design & make project – 50% of qualification. Students pick a contextual challenge provided by the exam board. Students will produce a project, based on their specialism, which consists of a portfolio and prototype.</p> <p>Part 1 – Investigate</p>	<p>Design & Make project completed, moderated and submitted. Revision on core content is revisited from year 10. Revision is more focused on exam style questions.</p>	<p>Examination – 50% of qualification. Core content is revisited and implemented into the teaching. Subject specific content is covered for the exam.</p> <p>Section A: Core This section is 40 marks and contains a mixture of different question styles, including open-</p>	<p>www.technologystudent.com</p> <p>www.BBCbitesize.com</p> <p>www.designtechnology.info/home</p> <p>www.design-technology.org</p> <p>www.mr-dt.com</p>

ALL DIFFERENT · ALL EQUAL · ALL ACHIEVING



	<p>Part 2 – Design Part 3- Make Part 4 - Evaluate</p>		<p>response, graphical, calculation and extended-open-response questions. There will be 10 marks of calculation questions in Section A. Section B: Material categories This section is 60 marks and contains a mixture of different question styles, including open-response, graphical, calculation and extended-open-response questions. There will be 5 marks of calculation questions in Section B</p>	<p>www.edexcel.com/designandtechnology.com</p>
--	---	--	---	---