ASTON MANOR ACADEMY

Curriculum Overview: Design and Technology –Textiles: GCSE Ed-Excel

Year Group 7 Textiles	**Autumn Term / Spring Term / Summer Term** **Mini Monster**: During this 9-week project students will design and make a 'mini monster'. Throughout the project pupils obtain knowledge and understanding of natural and man-made fibers. They will also develop practical skills to create surface decoration using techniques such as applique and embroidery. The practical element is extended further by pupils' ability to use a sewing machine independently and to create a product which meets the brief.	**Useful information / websites** www.technologystudent.com www.BBCbitesize.com www.designtechnology.info/home
Year Group 8 Textiles	**Autumn Term / Spring Term / Summer Term** **Zippy Project:** This builds upon knowledge and understanding acquired in year 7. The 'Zippy' project focuses on sewing machine skills and inserting a high skilled fastening such as a zip or the production of buttonholes. Throughout this project pupils develop design and making skills, to create a high-quality product. Pupils also apply literacy skills developed in English to write instruction texts and evaluations to a high standard. These skills are particularly important and easily transferable between subjects	**Useful information / websites** www.technologystudent.com www.BBCbitesize.com www.designtechnology.info/home

Year Group	Autumn Term	Spring Term	Summer Term	Useful information / websites
Year 9 Fashion	• **Construction Techniques:** Seams/seam finishes, Curved seams, Fastenings: insertion of a zip, press studs, Velcro etc. Piping • **Decorative Techniques:** Sublimation printing, Hand Embroidery, Appliqué, Quilting, Beading, Printing,	• **Mini GCSE project:** Each pupil to produce a small product that is suitable for a child based on their own themes. • **Paper pattern skills** Understanding the uses and development of paper patterns. Developing knowledge of key terminology associated with patterns.	• **Mini GCSE project:** Each pupil to produce an education toy for a child. Pupils may work in small groups or independently. The project will be encouraging pupils to consolidate the skills learned from the start of the year into a single product. • **Paper pattern skills**	www.technologystudent.com www.BBCbitesize.com www.designtechnology.info/home www.design-technology.org www.mr-dt.com www.edexcel.com/designandtechnology.com

	Machine Embroidery, Stencilling etc. • **Tools/Equipment:** The sewing machine, over locker, iron and iron board etc. Measuring and cutting and hand sewing tools.	• **Drawing Skills:** Introduce CAD to design textile products. Also, develop hand drawing skills, annotation and justification methods etc. • **Research skills**: Plan and produce an image board. This image board can then be used to inspire the development of decorative techniques that will be taught, e.g. choice of shape, colour and texture.	Developing their own paper patterns and demonstrating their understanding of the key terminology associated with patterns. • **Drawing Skills:** Continuing the development of using CAD to design textile products, hand drawing skills, annotation and justification methods etc.	
Year 10 Fashion	Design and Technology core content: Learning key areas that are required for the GCSE exam and the non-examined assessment (project). • The impact of new and emerging technologies • How the critical evaluation of new and emerging	Core content is continued thorough the spring term. • The functions of mechanical devices used to produce different sorts of movements, including the changing of magnitude and the direction of forces	Core content is continued through the summer term. • The categorisation of the types, properties and structure of papers and boards • The categorisation of the types, properties and structure of thermoforming and	www.technologystudent.com www.BBCbitesize.com www.designtechnology.info/home www.design-technology.org www.mr-dt.com www.edexcel.com/designandtechnology.com

	technologies informs design decisions; considering contemporary and potential future scenarios from different perspectives, such as ethics and the environment • 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	• How electronic systems provide functionality to products and processes, including sensors and control devices to respond to a variety of inputs, and devices to produce a range of outputs • 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	thermosetting polymers • 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 1St June – GCSE begins, with contextual challenges released and students begin to select their preferred challenge to design and make. This leads into the Year 11 NEA.	
Year 11 Fashion	**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. Part 1 – Investigate	Design & Make project completed, moderated and submitted. Revision on core content is revisited from year 10. Revision is more focused on exam style questions.	**Examination – 50% of qualification.** Core content is revisited and implemented into the teaching. Subject specific content is covered for the exam. **Section A**: Core This section is 40 marks and contains a mixture of different question styles, including open-	www.technologystudent.com www.BBCbitesize.com www.designtechnology.info/home www.design-technology.org www.mr-dt.com

	Part 2 – Design Part 3- Make Part 4 - Evaluate	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	www.edexcel.com/designandtechnology.com