AAN CURRICULUM MAP Design & Technology

Curriculum rationale & design	In Design and Technology, scholars develop their understanding of the world around them through designing new and evaluating existing products, scholars consider a range of socio and environmental issues to help them make smart design choices this takes place at both KS3 through the design of their products but also at KS4 through their investigations through the OCR GCSE Engineering. Our aim is to develop problem solving minds that think laterally about how humans engage in and use products as well as how we can minimise our damage through smarter design and manufacture choices. We aim to achieve this by; • Giving students firsthand experience of a range of materials, students investigate their strengths and weaknesses. • Using a range of design and technical drawing techniques, students can realise their design intentions. • Deconstructing and analysing existing products to evaluate their effectiveness. • Interweaving design philosophies used by award winning designers and their teams, such as 'Democratic design' Phillipe stark and 5 Dimensions of Democratic design- IKEA.
Curriculum aims	To foster creative problem-solving skills with technical knowledge to encourage the engineers and designers of tomorrow.
Assessment	Scholars are assessed twice per rotation, their first assessment is usually design focused. The second assessment phase takes place at the end of their module and focuses on their practical outcome.

2025 2026	**Autumn 1** **Unit 1**	**Autumn 2** **Unit 2**	**Spring 1** **Unit 3**	**Spring 2** **Unit 4**	**Summer 1** **Unit 5**	**Summer** **Unit 6**
Year 7	**Mobile phone holder:** Assessment focus:	**Mobile phone holder:**	**Stress Chicken Project:**	**Stress Chicken Project:**	Food Rotation	Food Rotation

	Oblique projections.	This project is based in the wood workshops and explores a range of 'hard' manufacturing skills such as; forming, shaping and joining.	Assessment focus; Fluency Quiz	This project is based in the textile classroom and explores a range of hand and machining techniques.		
Year 8	**Lamp Project:** Assessment focus: Oblique and isometric projections.	**Lamp Project:** This project is based in the wood workshops and explores a range of 'hard' manufacturing skills such as; thermoforming, standard components and soldering.	**60's style bunting:** Assessment focus: Designing the bunting.	**60's style bunting**: This project is based in the textile classroom and explores a range dying, embellishing and joining techniques.	Food Rotation	Food Rotation
Year 9	**Technical drawing module:** Assessment focus: Isometric and orthographic projections	**Technical drawing CAD:** Onshape, computer aided design module.	**African inspired plant pot:** Assessment focus: Print design inspired by African 'Kente' cloth.	**African inspired plant pot:** This project is based in the textile classroom and explores a range printing and joining techniques.	Food Rotation	Food Rotation

Year 10	Module RO39 R039: Communicating designs- Portfolio of design ideas, brief set by OCR.	Module RO39 R039: Communicating designs- Portfolio of design ideas, brief set by OCR. This term requires a range of technical and CAD design skills.	Module RO38 Scholars revise section A & B in preparation for their mock exam.
Year 11	Module RO40 R040: Design, evaluation and modelling- Portfolio of designs including CAD, brief set by OCR.	Module RO40 R040: Design, evaluation and modelling- Portfolio of designs including CAD, brief set by OCR.	Module RO38 **Section A** **Core Technical Principles (10 marks)** Section A is made up of 10 multiple choice questions, each worth 1 mark. **Design processes** • Communication of designs • Drawing methods **Section B** **Specialist Technical Principles (60 marks)** Section B requires you to use a range of responses; short, closed or extended responses. Use the marks to check how much information is required. **Design requirements** • Human factors • Types of manufacture • Manufacturing processes and limitations **Communicating Design Outcomes** • Conventions of drawing • CAD • Modelling