Curriculum Map	Subject	Design Technology	Year	10 and 11

Unit	Summary / Skills	Assessment	Career links	Cross-curricular links
Core technical principles	In order to make effective design choices students will need a breadth of core technical knowledge and understanding that consists of: New and emerging technologies Energy generation and storage Developments in new materials Systems approach to designing Materials and their working properties	Internal assessments, bookwork, modular tests, exam question answers.	Applied and job-related learning links – graphic design, fashion styling, art and design media, engineering photography, construction and building services, motor vehicle – technology and repair. Apprenticeships – junior product designer, theatre set carpenter, farrier, service technician, civil engineering technician, plumber, design and draughting technician, engineering model maker. Careers using design technology – Aerospace engineer, Architect, Bricklayer, Carpenter, Costume designer, Locksmith, Plasterer, Quantity surveyor, Signwriter and many more careers.	Links to maths – Arithmetic and numerical computation, Data handling, Graphs, Geometry and trigonometry Links to science – Use scientific vocabulary, terminology and definitions, Life cycle assessment and recycling, Using materials
Specialist technical principles	In addition to the core technical principles selection of materials or components, forces and stresses, ecological and social footprint, sources and origins, using and working with materials, stock forms, types and sizes, scales of production, specialist techniques and processes, surface treatments and finishes.	Internal assessments, bookwork, modular tests, exam question answers.		
Designing and making principles	Students will demonstrate and apply knowledge and understanding of designing and making principles in relation to the following areas: Investigation, primary and secondary data, environmental, social and economic challenge, the work of others, design strategies, communication of design ideas, prototype development, selection of materials and components, tolerances, material management, specialist tools and equipment, specialist techniques and processes.	Non-exam assessment - The non-exam assessment (NEA) for this specification is made up of a single design and make task. Identify, investigate and outline design possibilities (20 marks), Design and make prototypes that are fit for purpose (60 marks), Analyse and evaluate (20 marks).		