Year	Autumn	Spring	Summer
7	Drawing skills: • Oblique Projection Crating Method Rendering to show materials Tone, texture and line weight Organic 3D shapes. The work of others: • Design Eras Famous Designers Companies • DMP: Pencil pot Design process Tools and equipment Timbers and boards classifications and working properties Methods of fabrication.	DMP: Pencil pot: • CAD/CAM Timbers and boards specialist knowledge Papers & Boards • DMP packaging project (designing) Die cutting Surface developments and nets	DMP packaging project (making): • Packaging standards Product Analysis Design Specifications Graphic Design Skills: • Project Fonts and tylface Branding, logos and corporate identity Grid method
8			

	Drawing Techniques: • Isometric Sketching, crating, tonal rendering, shading and lining in technique • Pop up card DMPWorking properties of paper and card Levers and linkages Mechnaisms (paper and card) World religions/ culture	Design Theory: • Properties and characteristics of materials- Timbers Polymers Papers and Boards Social, economic and environmental issues CAD/CAM • Phone holder ACCESSFM Generating and communicating design ideas Timbers Polymers Marking out/ tolerance	Phone holder: • Tools and Machinery Health and Safety Smart Materials • Polymers Analysis and evaluations Market forces
9	Drawing Techniques: • Isometric Sketching and crating Tonal rendering, material rendering and lining in techniques 1, 2 and 3-point perspective drawing	Lighting project: • Design briefs and specifications. • Technical principles- priorities of materials Design and making principles working with timber; workshop tools and equipment. Electronic components and PTM circuits	Lighting project: • Evaluating design briefs and specifications. • Technical principles- priorities of materials Design and making principles- working with timber; workshop tools and equipment. Electronic components and PTM circuits • Smart material key fobSmart and modern materials Polymers Jigs and formers Forming plastics
10			

	• 3.1 Core technical principles • Communication of design ideas- drawing, sketching and presentation	• 3.2 Specialist technical principles • 3.3 Designing and making principles	• AO1 Identify, investigate & outline design possibilities (section A) • AO1 Identify, investigate & outline design possibilities (section B) • A02 Design & make prototypes that are fit for purpose Generating design ideas (section C)
11	• A02 Design & make prototypes that are fit for purpose Generating design ideas (section C) • A02 Design & make prototypes that are fit for purpose Developing design ideas (section D) • A02 Design & make prototypes that are fit for purpose Realising design ideas (section E) • AO3 Analysing & evaluating (section F)	Revision as per QLA of mock: • 3.1 Core technical principles • 3.2 Specialist technical principles • 3.3 Designing and making principles.	Revision as per QLA of mock: • 3.1 Core technical principles • 3.2 Specialist technical principles • 3.3 Designing and making principles
12			

	• Unit 1 Technical Principles: Materials and their applications; Classification of materials; Methods for investigating and testing materials; Performance characteristics of materials. Unit 2 Design & Making principles: Mini project: CAD/ CAM • Unit 1 Technical Principles: Elastomer, polymers, composites, smart material, enhancement of materials, Forming, redistribution and addition processes. • Unit 2 Design & Making principles: Mini project: sketching/ visual communication.	• Unit 1 Technical Principles: The use of finishes, fixings and adhesives, Modern industrial and commercial practice, Digital design and manufacture. Unit 2 Design & Making principles: Mini project: modelling. • Unit 1 Technical Principles: Protecting designs and intellectual property, The requirements for product design and development, Health and safety. • Unit 2 Design & Making principles: Mini project: CAD/CAM	• Unit 1 Technical Principles: Design for manufacturing, maintenance, repair and disposal, Feasibility studies, Enterprise and marketing in the development of products, Design communication. • Unit 2 Design & Making principles: NEA: Identify, investigate & outline design possibilities. • Unit 2 Design & Making principles: Designers methods and processes; design theory; How technology and cultural changes can impact on the work of designers; design processes; Critical analysis and evaluation. Unit 2 Design & Making principles: NEA: Identify, investigate & outline design possibilities
13			

	• Unit 1 Technical Principles: Revision (Inc. Design & Making principles theory. • Unit 2 Design & Making principles: NEA: Identify, investigate & outline design possibilities Design & make prototypes that are fit for purpose.	• Unit 1 Technical Principles: Revision (Inc. Design & Making principles theory. • Unit 2 Design & Making principles: NEA: Design & make prototypes that are fit for purpose; Analyse & evaluate	• Unit 1 Technical Principles: Revision (Inc. Design & Making principles theory. • Unit 2 Design & Making principles: NEA: Design & make prototypes that are fit for purpose; Analyse & evaluate

Curriculum Overview – Design and Technology- Hermitage.