KS5 and more!













**KEY PRINCIPLES OF THE GCSE** 

PROBLEM SPOTTING

**ITERATION** 

**EVALUATION** 

**PROTOTYPING** 

**USER LED DESIGN** 

PRIMARY RESEARCH

**CLIENT FEEDBACK** 

PROBLEM SOLVING

**EXAM** 

Revision

Non-Exam Assessment, Self Directed Project, User Led Design, Primary & Secondary Research, Creative Idea **Generation, Sketching, Prototyping, Evaluation,** Iteration, Material Testing, Prototype Testing, CAD, CAM

NEA

Year 11

Research Methods, Iconic Designers, **Creative Strategies, Material Selection,** Material Management, Workshop Processes, Health & Safety

Designing & **Principles** 







Extraction, Stock Forms **Specific** Poymers, Properties, **Uses, Forming** and Finishing

Sources,



**Polymers** 

**CAREERS AND CROSS** 

**CURRICULAR** LINKS

**SCIENCE MATHEMATICS BUSINESS PHYSICS ENGINEERING** PROJECT MANAGEMENT **MARKETING** PRODUCT DESIGN RESEARCH





**Energy Storage &** Generation, Modern, Smart & Composite Materials, Sytems, **Electronics, Mechanical Devices** 

Design Competition

Live Design Competition, Responding to a Brief, Design Generation, Prototyping, Iteration, **Pitching Ideas, Group Working** 

**Specialist Technical Principles** 



Forces & Stresses,

Improving, Functionality,



**Systems** and Devices



Papers & **Boards, Woods Metals Polymers Textiles** 



Wood **Joining Project**  Industry, Sustainability, People & Culture, **Production Techniques, Design Decisons** 

New and **Emerging** Tech

**Polymer Properties,** Techsoft (CAD), laser cutting (CAM), **Accuracy & Precision** 

Acrylic Ruler **Project** 

Year 10





**Materials &** properties

Marking Accuracy, Cutting, Kerf Allowance, Comb Joint, Routing, Sanding, Finishing, CAD, CAM









