TECHNOLOGY CURRICULUM MAP

GCSE EXAM

Students prepare for the exam using revision and exam practice.

REVISION

UNIT 5 - MATERIAL CATEGORIES & PROPERTIES
Select one material in depth.

UNIT 5

Students use their design brief, specification and customer feedback to evaluate their solution.

NEA EVALUATION

The final prototype is manufactured independently and documented in making diary.

NEA MAKING

Students conduct a range of testing, modeling, sketching and evaluation tasks to develop a solution to the design brief.

NEA DEVELOPING

Generation of initial ideas

Students investigate the context of their choice to identify a problem, customer, design brief and write their specification.

NEA DESIGNING

On June 1st in Year 10 AQA release the Contextual Challenges. Students begin to explore the context and prepare for further research.

NEA CONTEXT

UNIT 6 – MATERIAL CATEGORIES & PROPERTIES covers design strategy, communication techniques and the work of others.

UNIT 6

Year 11

UNIT 4 – SYSTEMS APPROACH TO DESIGNING covers forces, functionality, environmental issues and scales of production.

UNIT 4

UNIT 3 – DEVELOPMENTS IN NEW MATERIALS covers materials and their properties. The main categories are papers and boards, timbers, polymers, metals and textiles

UNIT 3

UNIT 2 – ENERGY GENERATION & STORAGE covers energy, smart, modern and composite materials, systems and mechanisms.

UNIT 2

UNIT 1- NEW & EMERGING TECHNOLOGIES covers Industry and enterprise, sustainability, industry, customers and design decisions.

UNIT 1

Year 10

Unit 1- MINI FURNITURE –
Students will learn about the importance of H&S in the workshop. Students will develop their skills of using a range of hand tools when making a mini chair and a mini table.

RESISTANT MATERIALS

Unit 2 – Clock project
Students will follow the iterative design process to design and make a clock inspired by a design movement.

RESISTANT MATERIALS

Unit 3 – Storage box
Students will learn about different joints used to join products together. Students will then make a storage box using finger joints. Students will finish their box using wood stains and fabric on the lid.

RESISTANT MATERIALS

PAST & PRESENT DESIGNERS
Students carry out a research project investigating the work of three key designers and companies to inform their own designing. Students will make a cushion inspired by a designer.

DESIGNERS RESEARCH

Year 9

UNIT 4 – CAD/CAM
Students learn how to use 2D Design to draw out design ideas. They then move on to use 2d design to design and make a key ring.

CAD/CAM

Unit 2 – H&S
Students are introduced to timbers and plastics. They learn the properties of both materials. During a FPT students will make a mould out of MDF, students will use the vacuum former to make a chocolate mould. Out of plastic.

WOODWORK

Unit 3 – CAD/ CAM
Students will learn how to program a micro:bit. They will program their micro:bit for different uses. During a FPT students will make a model out of cardboard to house their there micro:bit..

CAD/CAM

Unit 1 – Paper / card
Students will learn about the properties of paper and card. Students will learn how to make a range of pop-up mechanisms. During a FPT students will make either a pop-book or pop-up card.

GRAPHICS

Year 8

Unit 2 – Materials and their properties
Students will learn about the properties of different fabrics. During a FPT, students will learn simple hand stitching techniques and will produce a tie dye sample. students are introduced to fabrics and surface decoration and gain an understanding of the properties of materials

TEXTILES

Unit 1 – H&S
Students will learn how to work safely in the workshop. During a FPT, Students will use hand tools to make a flat pack toy.

RESISTANT MATERIALS

Year 7