DESIGN TECHNOLOGY

Beechwood
Inspiring Success

YEAR 11

FINAL GCSE EXAM

Core content and Focused specialist knowledge: Revise and practice exam papers in preparation for your final exam in DT.

EXAM REVISION

AO3: Evaluate & Test: Gain feedback throughout your project, and test your final product – have you met your brief?

AO2: Realise Design ideas: Manufacture your product using skills and processes used throughout your DT journey.

AO2: Generate & Develop Design Ideas: Develop your sketches and communicate ideas. Developing them using modelling techniques

NEA

AO1: Specification & Brief: Clarify the needs and wants of the project writing your own brief & specification

AO1:Research & investigation Follow on from your summer task to further understand the context. Client interviews, product, site analysis and designer research.

Initial Concept Sketches: What ideas do you have already? Can you visualize them?

Investigate the design possibilities: What is the design context? What research can you carry out to gather ideas?.

GCSE NEA CONTEXTS

Design: Designing for children. How do we make a product fun, educational and safe?

Materials: What materials will be appropriate for your product? What materials are sustainable?

FPT – scraps – Timbers specialism

Testing / Modelling: Use various testing and modelling methods to develop your product

Make: Use a wide range of tools and processes to produce your final product. You decide!

Skills for success, CAD, CAM, manufacturing.

Design: Reference key design movements top to develop a stylish functional product.

Mini NEA

Materials / Make: Use materials you have not combined before such as concrete, acrylic and timber to develop a unique stylized product.

YEAR 10 KS4

Iterative designer Clock project

Component 1 50%
: 5 Core units
: Timber specialist unit

Component 2 :NEA – 50%.

Make: Use a wide range of skills, materials and processes to develop your unique product.

Design: Focus your idea on the work of famous designers, use architecture or product design as inspiration.

Structures, forces Chairs: & Designer response

Make: Develop your design through iterative processes and modelling, testing & evaluating before making a final product.

Design: Using removal techniques to develop an organic shaped product based on iterative considerations..

SOMA Iterative design challenges.

Make: Addition processes & wood joints. Using skills to develop high quality craftsmanship products.

Food & Nutrition

Design: Practicing Isometric Projection and rendering skills. Orthographic projection.

Materials: Working with hardwoods and specialist timbers. Working properties and recognizing materials.

After choosing options in year 8, focus your studies in GCSE DT in years 9 - 11, through exciting, real life projects. Deepen your understanding of DT in the world around us whilst developing products that help various needs and users.

YEAR 9

Materials: Timbers - hard woods and softwoods, why do we use them?

Electronics: Circuits and components.

Design: Isometric projection, CAD development

Testing / Modelling: Will my product work? What can I do to improve it?

Make: Can you make an accurate product using machines and tools independently?

Evaluate: What skills have you developed? Test your product and consider how you would improve it.

Food & Culture, textiles

Love box project – RM, PD, CAD/CAM

Evaluate: At each stage of making, how can you improve your product? Would you change any thing?

Make: Develop independence in CAD using 2D design software to make complex design ideas.

Design: Designing for a user and client. What is an isometric projection? Develop design ideas using CAD.

Materials: Working with acrylics and circuitry to develop a working night light.

Sleep depravation – EP, PD, GP.

CAD & CAM development - Iterations

Work in more depth on projects, honing your practical skills, improving your resilience & problem solving whilst developing independence in the workshop.

YEAR 8

Make: Thermo - Forming Shaping manufactured boards

Evaluate: Does your product work? How can you fix problems?

Materials: Working with acrylics, cutting and finishing techniques.

Design: CAD What is computer aided design? Learn to use the basics of 2D software to design products

Make: What is CAM? Use the laser cutter to produce your final product!

Evaluate: How has CAD / CAM helped you make a product?

Design: Designing with restrictions Orthographic Projection & Rendering

Materials: Polymers Classification. What is a polymer?

Food & nutrition

Introduction to iterative approaches in design

Mechanical systems

Cams / motions & movements: What do cams do? How do they work?

Toy Robot Project – GP, RM, CAD

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YEAR 7 KS3

Evaluate: What makes a good picture frame? How can you improve your skills?

Make: Wood joints Use of hand tools and machines

Design: Designing for users Rendering CAD design development

Materials: Wood classification. Where does timber come from?

Baseline Assessment: What do you already know about DT?

Introduction to the workshop: Health and Safety

Experience a wide range of fun and exciting projects that teach you valuable skills in the workshop, understanding different materials and how they work.