

Learner Journey: Design Technology



Entrepreneurship

DIY Skills

Employment Opportunities

Engineering

Study DT related course at College



Personal Development Opportunities:

OT Strategies	Fine Motor Skills	Independence	Health and Safety Awareness	Environmental Awareness
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AIM Awards

Qualifications:

The Design Technology Journey at Dawn House School...

KS4/5 Option D13 - D16

Topics: Woodwork Hand Tools, Woodworking Joints, Constructing Timber Products, Carpentry and Joinery Skills

- Understanding the physical, aesthetic and technical properties of a wider range of materials.
- Gaining proficiency in using more advanced tools and machinery safely and accurately.
- Enhancing skills in technical drawing and using computer-aided design (CAD) software.
- Encouraging original thinking / innovation in design.
- Developing advanced skills in creating prototypes.
- Applying basic engineering principles and techniques to build structurally sound and functional designs.
- Deepening understanding of the environmental impacts of materials and processes.
- Managing projects from conception to completion.
- Conducting thorough research to inform design choices.
- Developing the ability to critically evaluate.
- Meeting the needs and wants of target audience.

KS4/5 Option D10 - D13

Topics: Woodwork Hand Tools, Woodworking Joints, Constructing Timber Products, Carpentry and Joinery Skills

- Safely and effectively using a wider range of tools.
- Investigating and evaluating a broader range of materials.
- Developing detailed design ideas using annotated sketches.
- Enhancing skills in precision cutting, assembling and finishing.
- Building more complex mechanical devices.
- Designing and constructing products that include electrical and electronic systems.
- Creating strong, effective and durable structures.
- Conducting research into existing solutions and historical contexts to inform design.
- Considering the ergonomics and usability of products.
- Making informed decisions about the environmental and ethical impacts of design choices and materials.

KS3 D7-D10

Topics: Resistant Materials, System and Control, Textile Technology

- Gaining proficiency in using more advanced tools and equipment safely and accurately.
- Deepening understanding of the properties of materials and choosing materials based on their suitability for specific tasks.
- Beginning to explore simple electrical systems and circuits.
- Applying basic principles of strong structures,
- Improving skills in measuring, marking out, cutting and shaping with increasing precision.
- Ability to follow a design process including planning, designing, making and evaluating.
- Developing skills in sketching designs.
- Expanding technical vocabulary related to DT.
- Introducing concepts of sustainability.
- Balancing functionality and aesthetics in design.

KS1/2 D1-D7

Topics: Resistant Materials, System and Control, Textile Technology

- Recognizing and exploring different materials and their properties.
- Learning to use simple tools safely.
- Building simple structures or models.
- Encouraging creative thinking through open-ended design.
- Beginning to solve problems through designing and making.
- Learning basic methods of joining materials together.
- Recognising and using basic shapes.
- Cutting, shaping, and manipulating materials.
- Following simple design briefs or instructions.
- Drawing or painting to represent ideas or plans.
- Enhancing fine motor skills through activities.
- Understanding that objects and products are designed and made with a purpose in mind.