

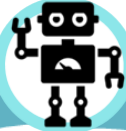


Technology: Construction

KS3- KS4/5 Subject

Year 7

Graphics
3D drawing practices and presentation skills



Mechanisms
Linkages & cams. Wood tools and safe working practices.

Nutrition
Healthy food choices: Knife and hob skills



Electronics
Components, soldering, CAD

Material Properties
Plastics/Metal properties, workshop practices; components & sustainability

Year 8

Skills Learnt: KS3

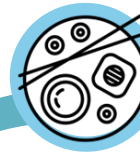
- ❖ Drawing skills: 2D, 3D & Computer Aided Design.
- ❖ Safe working practices and safety legislation.
- ❖ Working properties of Ingredients, Wood, Metal and Plastics. Analysis & problem solving.
- ❖ Innovating solutions.
- ❖ Dexterity- Working with care and precision using tools & equipment.
- ❖ Control using CAD/CAM and Micro bit.
- ❖ Planning a sequence of operations:
- ❖ Quality Control & Assurance Systems.
- ❖ Resilience:- Overcoming a problem using a wide range of strategies.

Year 9

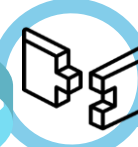
Programming
CAD & 3D Printing. Teamwork to Innovate solutions



Dietary Needs
Creating Healthy dishes; Adapting recipes to meet needs.



Planning
Sustainability and Presentation.



Timber
Joinery skills; Properties, Scales of Production, Health and Safety

Engineering
Using lathes; Casting, heat treatment and metal properties.

Specialist Knowledge
Woodworking tools & equipment. Care and accuracy to create a high quality timber product

Year 10

Skills Learnt: KS4/5

- ❖ Carpentry skill
- ❖ Research skills
- ❖ Statistical Skills
- ❖ Graphical Skills
- ❖ Health and safety
- ❖ Numerical Skills
- ❖ Literacy Skills
- ❖ Independence Skills

Year 11

Careers:
Trades, employment, progression.



Sustainable construction methods:
Materials: Life cycle.



Technologies and materials used in the construction industry



Sectors of Construction
Residential, commercial, industrial



Carrying out practical tasks:
Carpentry; Plumbing; Painting Decorating; Electronics.



BREEAM
An understanding of the accreditation process



Legislation:
Health and Safety



Material Specification
Interpreting technical sources



Building Specifications

The life cycle of the built environment

Year 13



RIBA
Client, Architect relationships.



BIM Collaboration
Understanding of the relationships between the client, consultants and other professionals



Planning and sequencing



BIM case studies



Year 12