DT Learning Journey
KS1 – Y11

YEAR 11

Go to college

Start an apprenticeship

Go to Sixth Form

Exam

REVISION of all papers and units

NEA
Analyse and evaluate

Diet and health

NEA
Design and make prototypes that are fit for purpose

NEA component 2

NEA
Identify, investigate and outline design possibilities to address needs and wants

Food commodities

NEA

Mock NEA for Resistant materials and textiles

Food Science

Food Science NEA component 1

YEAR 10

Specialist units in Resistant Materials, Textiles and Food and Nutrition

Materials and their working properties

Food safety, storage and manufacturing

New and emerging technologies, Sustainability, Forces and stresses, using CAD/CAM

Principles of nutrition

Energy, materials, systems and devices. Ergonomics and anthropometrics

Food provenance

Evaluation
Evaluating prototype

Developing making skills
Making of a Prototype using specialist materials, tools and equipment

Design Skills
Initial designs
Design development, CAD/ CAM

Understanding a design brief
Analysing a brief, Writing a specification , Target market, user needs

YEAR 9

Research and Analysis
Researching and analysing existing products, materials and designers to inform design decisions

Mini NEA style projects in Subject Specialisms:
- Textiles
- Mixed Media
- Resistant Materials
- Food and Nutrition

Bridges
- Types of bridges / recognizing shapes
- Construction skills, forces, compression, tension, torsion, shear
- Making and testing structural prototypes

Futures
- Product lifecycle
- Planned obsolescence
- Market pull and technology push
- Smart materials

Energy sources and electronics
- Systems
- Sources of energy
- Inputs/ outputs
- Batteries
- Series circuit

Sustainability
- 6R's
- Energy sources (finite & non-finite)
- Packaging
- Designing a renewable energy product

Humans in design
Ergonomics and anthropometrics

YEAR 8

Using specialist tools, materials and equipment specialist subjects:
- Textiles – mobile phone case
- RM - nightlight
- Mixed media – 2D design keyrings
- Food – various dishes

Biomimicry
Influence of nature in design
Analysis of existing products

Using specialist tools, materials and equipment specialist subjects:
- Textiles – produce bag
- RM – mechanical toy
- Mixed Media – 3D printed totem
- Food – cooking various dishes

YEAR 7

Inspired by Design
Iterative design
Model making
Designing to a brief

KS2

Designing labels, designing and making animal enclosures

Superfoods mask making

Sign making
Designing buildings

Building structures
Woodland habitats

KS1

Design and make space themed vehicles, evaluating toys, using mechanisms

Making picnic foods.
Celebration cards
Making a memory box

Models of towers, bridges and tunnels