



Year 9
Term 1, 2 and 3: Building key skills
 Graphical communication - How can we present our ideas
 Polymers - Working with plastics
 Timbers - Working with timbers
 Fabrics - working with fabrics
 Prototyping - Prototyping ideas in materials
 Researching - Outdoor spaces

Year 10
Term 1 and 2- Demonstrating key skills
 Designer furniture - Looking at past designers for inspiration
 Lighting for a teenager - Using lighting as a focus for a project
 Slot together toy - Design, prototype and develop a 2d design into a 3d object.
 What's the problem? - Looking for design problems and working towards solving them

Term 3
 GCSE NEA begins

Year 11
 Coursework: NEA
 Recap of all theory areas and revision

Year 9
Term 1, 2 and 3: Subject Content & Practical Skills
 Engineering materials - Materials and their properties, Material costs and supply, Metals, Plastics, Composites
 Engineering manufacturing processes – Material removal, shaping, joining and assembly, surface finishing
 Systems – Mechanical, pneumatic, structural
 Testing and investigation - Modelling and calculating, testing
 The impact of modern technologies – CAD, CAM
 Practical engineering skills - Engineering drawing, CAD/CAM, mathematical calculations

Year 10
Term 1 and 2- Subject Content & Practical Skills
 Engineering materials - Factors influencing design of solutions, renewable energy sources
 Engineering manufacturing processes - Casting and moulding, heat and chemical treatment
 Systems – Electronic and electrical
 Testing and investigation - Modelling and calculating, testing, aerodynamics
 The impact of modern technologies - New and emerging technologies, impact of engineering industries
 Practical engineering skills - Block diagrams and flowcharts, production plans, quality control techniques

Term 3
 GCSE NEA begins

Year 11
 Coursework: NEA
 Recap of all subject content and revision

Year 9
Term 1: Food Nutrition & Health
 Why do we eat food? Eat well guide Menu planning
 Protein Fats Carbohydrates Micronutrients
 Energy balance & nutritional needs
 Nutritional analysis, meal planning
 Meal planning task. Sensory evaluation

Term 2: Food commodities, food safety & food choice
 Cereals, potatoes and vegetables, fruit, milk, cheese and yogurt, meat, poultry, Fish, alternative protein
 Temperature control and bacteria
 Labelling, allergens, Food choice, meal planning, costing

Term 3: Food provenance, food science, food skills
 Food miles, seasonal food, food waste
 Heat transfer and cooking methods
 Shortening Aeration Short crust pastry Denaturation
 Coagulation Use of Equipment Caramelisation
 Raising agents Sauce making
 Planning and recipe research
 Doughs – bread, pasta, flaky pastry, choux pastry

Year 10
 Food, nutrition and health - macro and micro nutrients, fibre and water
 Dietary needs
 Food science
 Food preparation skills 1-12
 Recipe modification
 Mini NEA tasks

Year 11
 Coursework: NEA 1, NEA 2.
 Recap of all theory areas and revision

A' level Design Technology

Degree courses in 3D Technology

A' level Engineering

Degree courses in Engineering

A' level Biology
Hospitality and catering

Degree courses in Nutrition, Food Science and Food Technology

- Graphic designer
- Fashion designer
- Product designer
- Automotive designer
- Architect
- Carpenter
- CAD operative

- Software engineer
- Electrical engineer
- Mechanical engineer
- Civil engineer
- Environmental engineer
- Software engineer

- Chef
- Nutritionist
- Food Scientist
- Dietician
- Home Economist
- Health Services Manager
- Catering Manager

