## Systems & Control

Investigation into Electronic Components and Circuit Symbols Ohms law, Resistance and Resistor Colour Code Soft Solder Process and safe working practices Systems Approach - Input / Process / Output Digital vs Analogue Inputs and how to program them High and low power outputs Microcontroller - Purpose, pinout and uses Programming - Flowcharts common command boxes Fault diagnosis and remedies

## **Resistant Materials**

Evaluation of similar product How to create a Specification Finishes to protect and preserve metals Mechanical and physical properties Metalwork hand tools and uses Heat forming processes - metals Permanent and temporary joints Ferrous and non-ferrous metals

