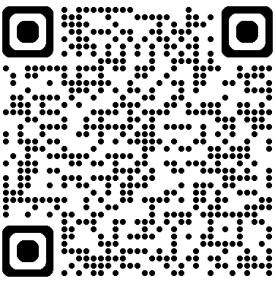
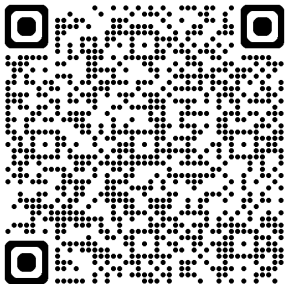
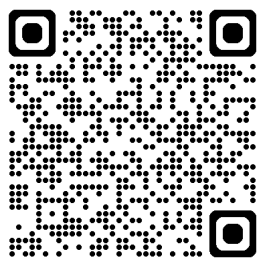
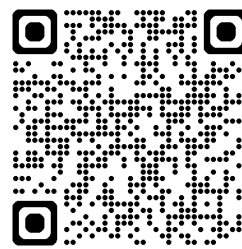


What will I study?	The study of Electronics will enable you to develop an understanding of electronic components, systems, processes and methods. The contents of the course will help you answer questions about practical circuits and solve practical engineering tasks. The theory covered will be reinforced by practical investigations, including design and make tasks, throughout the course. You will study a course with 20 topics areas divided between a common core and two components. Each topic you will study the theory and put the theory into practice by carrying out practical investigations wherever possible. The common core consists of the following topics: 1. System synthesis 2. DC Electrical circuits 3. Input and output sub-systems 4. Energy and power This knowledge will help you solve practical engineering problems and understand real-world electronic circuits.
Who teaches this course?	Lee Kelham, Elaine McHardy and Jane Kendrick
What resources or equipment will I need?	A scientific calculator (e.g. Casio FX range (old style preferably))
Reading List	Online:   Eduqas Questions Electronics explained All QR codes can be scanned or clicked on

How can I extend my learning?



1. Research possible future careers



2. See how you do with these ohms law questions.

Induction Activity:

Resources needed to complete the activity:

Access to the internet

Estimated time to complete the activity:

1 One Hour – Three questions

1. Use the following GCSE resource to research the symbols for

Diode	Transistor (bipolar, NPN)
Resistor	Light emitting diode
Thermistor	Light dependent resistor
NOT gate	Capacitor (electrolytic)



2. A lamp is marked with the following maximum ratings: 5V 0.2A. What is the resistance of the lamp if it is operated at these maximum values?

3. An engineer is installing an automatic outside light. The light should come on when conditions are dark and cold.

Explain, in no more than fifty words, why the light sensor is normally placed on top of the light.

Also explain why the engineer should be careful about the choice of location for the temperature sensor.

To be completed and brought to your first lesson