



## ELECTRONIC PRINCIPLES

Electronic principles is vital for everyone involved in the installation, repair, maintenance and commissioning of all electronic security systems.

### COURSE CONTENT

- ▶ Understanding Ohm's Law
- ▶ Electronic symbols and components
- ▶ Recognising resistor colour codes: practical exercises
- ▶ Alternating and Direct Current (AC/DC)
- ▶ Resistance
- ▶ Using the multimeter to measure, voltage, current and resistance - practical exercises
- ▶ Practical work with series and parallel circuits
- ▶ Calculating power (Watts)
- ▶ Batteries and power supplies
- ▶ Safety devices
- ▶ Health and Safety
- ▶ Transformers
- ▶ Regulated and unregulated power supplies

### COURSE COST, DURATION AND AWARD

#### BTEC ADVANCED AWARD



#### **BTEC Level 3** (optional)

Electrical and Electronic Principles  
in Security Systems



1 Day



£215 + VAT includes

Tavcom Certification. \*\*BTEC Certification is optional at an additional cost of £95 + VAT\*\*

## PAT TESTING

Portable Appliance Testing (PAT) is used to ensure that electrical equipment is safe and meets the requirements of the Electricity at Work Regulations 1989.

### COURSE CONTENT

- ▶ Regulations and Responsibilities
- ▶ Electrical Safety
- ▶ Classes of appliance
- ▶ Preliminary inspection of equipment
- ▶ Precautions during testing
- ▶ Using a portable appliance tester
- ▶ Essential and optional tests
- ▶ Documentation and labelling
- ▶ Practical and written assessments
- ▶ Practical reports and testing
- ▶ Fault protection
- ▶ Insulation resistance

### COURSE COST, DURATION AND AWARD



#### CERTIFICATE



#### **Tavcom Certificate**

PAT Testing



2 Days



£450 + VAT