



## City & Guilds 2318 – Digital Aerial Installations

This 3 day accredited course provides the technical knowledge and vital practical experience needed by a competent technician working in a digital aerial and systems installation job role.

### Digital Broadcasting & Systems

- Understanding digital television broadcasting systems and features.
- Examining various types of connecting leads including SCART & S-Video
- Examining various types of digital set top boxes

### Site survey & assessment at the subscriber's home

- Identify local frequencies & signals
- Identify TV channels used in local area
- Describe Band II, through to Band V channels & frequencies
- Describe methods of locating the most effective transmitter
- Use test equipment to determine signal strength
- Avoid local obstructions and interference sources
- Identify appropriate aerials and mounting positions
- Identify possible planning permission requirements

### Aerial mountings & cable fixings

- Describe procedures for mounting & securing aerials in domestic buildings & commercial premises.
- Safe mounting & installation of aerials using appropriate tools & procedures
- Identify the effects of adverse weather and methods of dealing with them.
- Understand earthing arrangements and connections
  - Routing of cables to minimise losses and optimise performance.

### Aerials and feeders

- Understand practical use of decibels and describe power gain, power loss antenna gain, feeder loss.
- Identify and describe different antenna systems and their associated feeders including frequency, wavelength, isotropic radiator, dipole, folded dipole, loss ratio, carrier to noise ratio, dBi and dBd.

### Noise & Interference

- Describe noise sources and means of reducing noise, e.g filters
- Lightning & static protection
- Describe how climate affects the received signal and noise

### Customer Care

- Demonstrate the ability to work with customers to identify their requirements & supply the appropriate products & services to exceed their needs.

### Health & Safety

- Describe appropriate statutory regulations and safety requirements
- Describe safe working practices for working at height and the use of electrical equipment.
- Describe use of PPE and understand environmental procedures for disposal of waste.