



Electrical Courses

Support Material Brochure

City And Guilds *Approved Centre*

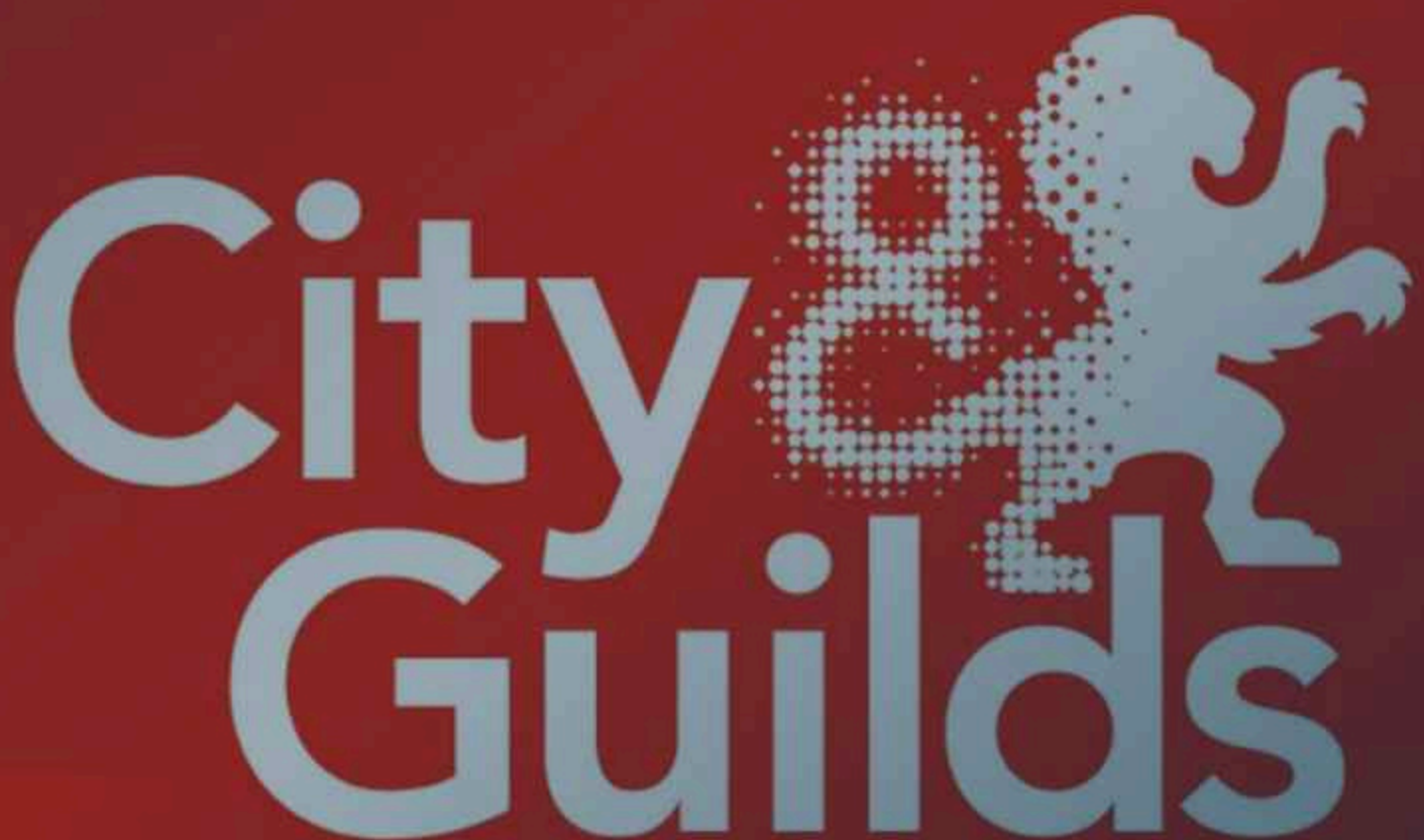
Most employer-recognised route to your ECS JIB Gold Card:

The 2365-02 → 2365-03 → 18th Edition (2382-22) → 2357 NVQ → AM2 pathway is what many contractors expect as standard.

Internationally portable: City & Guilds certificates are recognised in 80+ countries, so your credentials travel well.

Industry-led content: Technical Qualifications are co-developed with employers to match current site practice and standards.

Clear, end-to-end progression and verification: A well-defined route with strong ECS/AM2 alignment and a wide network of approved centres, making completion and employer checks straightforward.





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I signed up for the NVQ with Elec Training based on their promise to help me find employment to complete my qualification - and they delivered exactly as they said they would! Not only have I secured a new job after my hours were reduced with my previous company, but I'm now working with a company that will support me in completing my NVQ. Big thanks to Josh from recruitment for making it happen! Highly recommend Elec Training for anyone looking to get into the electrical industry.

★ Trustpilot



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UNIT 318: FAULT FINDING GUIDE

Strategic Evidence Planner & Troubleshooting Roadmap

1. The Investigation Stage (Phase 1)

Before touching any tools, you must demonstrate professional liaison and safety protocols. This counts for a significant portion of your "soft skill" evidence.

Client Liaison Checklist

- Identify the client's concerns: "What exactly stopped working?"
- Establish timeline: "When did it happen? Was there a specific event (e.g., a storm or a pop)?"
- Impact assessment: "Are any other circuits affected?"
- Gain permission to isolate: "I need to turn off the power to investigate safely."

Safe Isolation Procedure (MANDATORY)

You must document this for **every** fault. Use the "Prove-Test-Prove" method:

- **Identify:** Locate the correct point of isolation.
- **Isolate:** Turn off and lock out (keep the key on your person).
- **Prove:** Test your voltage indicator on a known supply (Proving Unit).
- **Test:** Check the circuit is dead at the point of work.
- **Re-Prove:** Check your voltage indicator again to ensure it still works.

2. Fault Selection Matrix (Pick 3)

Choose your three faults strategically to show a range of testing techniques.

Fault Type	Key Instrument	Evidence Needed
Loss of Supply e.g. Blown fuse, tripped RCD	Voltage Indicator / Multimeter	Photo of tester showing 0V at load vs 230V at source.
Short Circuit / Earth Fault	Insulation Resistance / Continuity Tester	Photo of 'Low' reading (e.g. 0.00MΩ) on the MFT.

High Resistance Joint
e.g. Charred terminal

Visual + Continuity Tester

Macro Photo: High-res shot
of the burnt/loose
connection.

Pro-Tip: Transient Voltage is best handled via a "Professional Discussion." You can explain the theory of surges without needing to physically find a surge on site!

SAMPLE ONLY – DO NOT COPY

3. Correcting & Documenting the Fault

Once the fault is located, the rectification and the subsequent re-testing are vital for your portfolio.

The Rectification Process

- 1. Locate:** Pinpoint the exact cable/accessory failure.
- 2. Correct:** Replace the damaged part or re-terminate the joint.
- 3. Test:** Perform the relevant Dead/Live tests to confirm the fault is cleared.
- 4. Document:** Issue a Minor Works Certificate or a detailed Job Sheet.

Witness Testimony Requirements

Your supervisor must sign a statement confirming:

- You communicated professionally with the client.
- You followed Safe Isolation perfectly.
- You used a logical diagnostic sequence (didn't just guess).
- You re-tested the circuit to ensure safety before handing back.

4. The "Electrical Detective" Summary

Use this summary for your portfolio write-up to impress the assessor.

"Upon arrival, I liaised with the client who reported an intermittent loss of power to the kitchen sockets. Following Safe Isolation, I performed a visual inspection which revealed high-resistance thermal damage at a socket terminal. I re-terminated the conductor using a new socket, verified continuity and Zs results were within BS 7671 limits, and issued a Minor Works Certificate."