

# Power Quality Training Course

At PASS training we are committed to delivering training to the highest standards. We value customer feedback and use it to continually refine our courses. Having trained hundreds of candidates, our programs are designed to be professional and led by experienced tutors. Our goal is to equip our customers with the knowledge and skills to achieve officially recognized qualifications across a range of disciplines.

Our trainers deliver courses in a clear, approachable, and enjoyable way, ensuring you have the best possible learning experience. Every trainer is fully qualified and accredited, and they work closely with you throughout the course to ensure you gain the knowledge you need.

## Course Overview

This comprehensive training course provides knowledge and practical skills of Power Quality measurement such as how to monitor and manage Power Quality issues in electrical power systems and how to use and interpret a Power Quality analyser.

Participants will gain knowledge of topics such as Electrical theory, Power Quality surveys, harmonic distortion, power factor, and transient overvoltage, among others.

City & Guilds | Accredited Programme

## Key Information

**Duration:** 2 Days

**Price:** £1250.00 + VAT

**Booking Code:** POWQUAL1

**Location:** Stockton

  
**PASS**™

# Course Details

## Course Aim

Participants learn how to identify Power Quality issues using test equipment and develop strategies to mitigate them.

## Who is this Course Suitable For?

You should be interested in discovering the consequences of poor energy quality, especially in systems sensitive to electronically induced effects.

## What Does the Course Cover?

- ▶ Typical Power Quality measurement equipment
- ▶ Power Quality Standards
- ▶ Power Quality measurement parameters
- ▶ Typical connection/configuration arrangements
- ▶ Understanding the hardware/components
- ▶ Downloading the Power Quality Analyser measured data (Wi-Fi, USB & Remote Access)
- ▶ Analysing the data and creating a report and standard compliance checks

## Course Outline

### Day 1

- ▶ Introduction to Power Quality
- ▶ Power Quality Standards (IEC 61000 Series, EN 50160, CBEMA, ITIC, Harmonics Theory)
- ▶ Voltage & Current Harmonics & Direction
- ▶ Voltage Disturbances
- ▶ Current Inrush
- ▶ High-Speed RMS Chart Recording
- ▶ Loads that generate harmonics
- ▶ Effects of harmonics
- ▶ Sample Standards Compliance Report

### Day 2

- ▶ Power Quality Surveys
- ▶ How to use a Power Quality Analyser
- ▶ Harmonic Measurement and Standards
- ▶ Solutions to Harmonic Distortion
- ▶ Causes of unbalance
- ▶ Voltage Fluctuations – Flicker, RVC

## Entry Requirements

To attend this course, you should be an electrical engineer or technician with prior electrical experience, ideally in the use and operation of electrical, high voltage systems, power systems and their associated equipment, and the methods used to mitigate effects.

## Assessments

You will be expected to complete a 20 question multi-choice examination and take part in a practical examination during this course.

## Course Certification

Upon the successful completion of this course participants will receive a certificate of competency accredited by City and Guilds in Power Quality Analysis.

For candidates who decide not to undertake the assessments or are unsuccessful when taking the assessments, you will receive a certificate of attendance instead.



## Find Out More

If you are interested in this course and would like to find out more about the content, or the facilities available to you, then contact the training centre. We are always happy to answer all your questions. Or visit the course pages on our dedicated electrical training website:

[www.electricaltrainingcourse.co.uk](http://www.electricaltrainingcourse.co.uk)

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## About Us

PASS Training and Development is a fully accredited training provider of City & Guilds, LCL and MCA training courses in Electrical, Gas, PAT Testing and Thermography.

